

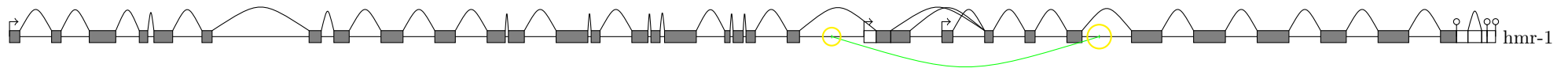
C.Ele	cggaggat	ctgatgtgagta...616...---	tctgtaatcatctgataaac	FGTTGAATATCATTGTGTTTTTTT	a----	aatTTTgacaagacaacat...169...	cgcttctt-tttc	tacaggtg
C.Bri	cggaggat	ctgatgtgagta...605...---	acgtaatcatctgataaac	GTTTGAATATCATTGTGTTTG	----	aatcaatTTTcacaaaaaa...205...	gcttcttttctc	tacagatg
C.Bre	cggaggat	ctgatgtgagta...650...---	tctgtaatcatctgataaac	GGTTTGAATATCATTGTG	-----	ttgaaTTTtacaaaaaa...195...	gcttcttcttc	tacaggtg
C.Rem	cggaggaa	atgatgtgagta...530...cacatctgtaataatcggat	AAACGgTTTGAATATCATTGTGTTG	-----	a----	aatTTTcattgcacatcca...161...	tcttatttttc	tacagatg
	*****	*****	*****	*****	*****	*****	*****	*****

id=44705 gene=D1054.9 name=D1054.9 segment=chrV_10787939_10788813_-1 type=IN

C.Ele	cggaggat	ctgatgtgagta...688...-acaattctttaactacaag	AAAGta	AAAAACACAATGATATTCAAACA	-----	cttactatttcctgtgctt...95...	cgcttctt-tttc	tacaggtg
C.Bri	cggaggat	ctgatgtgagta...695...caagaatagaata-gagaaa	-----	CAGACACAATGATATTCGAAC	-----	ctatccTTTccttcttctc...115...	gcttcttttctc	tacagatg
C.Bre	cggaggat	ctgatgtgagta...735...-actatTTTgaaaaaatcgtt	-----	CACAATGATATTCAAAC	---	tacaaaaatcaatc-----	cttct...110...	gcttcttcttc
C.Rem	cggaggaa	atgatgtgagta...595...-aagaagaagcaccacaga	-----	CAACACAATGATATTCAAACGTTT	-----	ctttatatattttctgctc--...97...	tcttatttttc	tacagatg
	*****	*****	*	*****	*****	*****	*****	*****

id=44705 gene=D1054.9 name=D1054.9 segment=chrV_10787939_10788813_-1 type=IN VIEW

Figure 1: CS=3.84



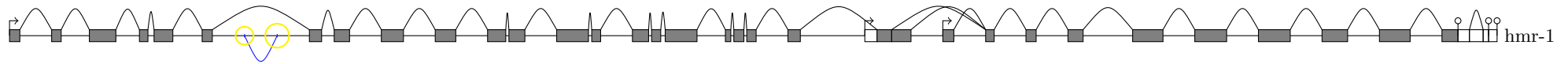
C.Ele	ttaagcag	gtatgtttttt...1186...aacagacagtc-----acttttaca-----	ACTTTT	GCTCAGAAATGT	-----tctgctgattcacttttaca...3720...cattttttacag	tagaagtt			
C.Bri	ttaaacag	gtagttttttg...907...ttcaaattttctaaaaaact-----	GTITT	TTAGAAATTT	tcCCTT-----TttTTG	cctttttttccaactttata...3990...ctgttttttcag	tagaaagt		
C.Jap	ttaaaaag	gtgtgtttcctt...1012...-cgaaatttc---agaccgttctc	TCAATTT	TGCTg	AATTT	ttCCTT-----TTT---	cgcatatttttccttttgc...3887...tcgcattttcag	tagagtgc	
C.Rem	ttaaacag	gtatgtttcgtt...3402...-----ttccacgtggcttttcgagt---	TTTT	---	caTCTCaATT	---	TTT--aaagaaaagttttgaattct---...1506...tttctttttcag	tagaaagt	
	**** **	** ****			** * *	**	* **	*** **	****

id=924 gene=W02B9.1 name=hmr-1 segment=chrI_11094518_11112635_-1 type=IN

C.Ele	gagatttg	gtaagaaaaaac...223...acatttctcgaaaatcaat	GTATTTT	TGAGC	AAAAGT	-----gatttgagcagtaaaaattgt-----...2354...atttatgttcag	aatgacaa		
C.Bri	gagacttg	gtttgtcctttt...179...-tgtagttttagtttgat---c-----	CAAAA	AGGGAAAA	caTTTGA	CAAT	ttcgagccaaaaacgatcga-----...2399...cattgttttcag	aatgacaa	
C.Jap	gagacgtg	gtgagtgaaaag...1902...---cacttttggaatagatgagc-----	AAAAA	GGGAAAAA	---	TGCAAAA	TTGA	---atgtgaacgatggaacggaa...203...tctttgttacag	aatgacaa
C.Rem	gagatttg	gtaaggaaaagg...282...-----agtatagggggaatcccga-	AAAAAT	gGAGAA	---	AAA	---	tgagctg-aaatgagtgatt---...1335...catttctttcag	aatgacaa
	**** **	** *		****		AAA	---	tgagctg-aaatgagtgatt---...1335...catttctttcag	aatgacaa
		*					** * *	** * **	*****

id=936 gene=W02B9.1 name=hmr-1 segment=chrI_11084059_11086718_-1 type=IN VIEW

Figure 2: CS=5.52



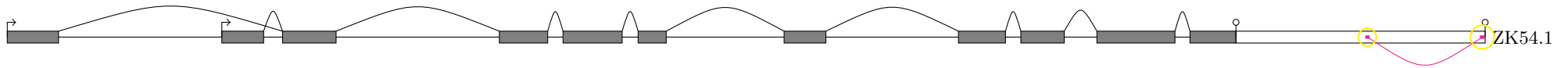
C.Ele	gcagagta	gtgag---	ttttgaaaatattacaagaat:::caaaaattgtgcatattaatcaacacttggttgaggctgt	GCAAa	CATTGTAGTTTGTAGTCTCCC	-----	cgtaa--tcacgttagggcca...	4179...	aatattttcag	cccgacc	
C.Bri	tcagagca	gtag---	ttt-----	-----	TTTGTAGTTTtTAGTTTca	GAAAAATT	ggaaaaacctga-aaaa-----	ttc--...	4908...	gtaattcttcag	gtcgcacc
C.Bre	acagagca	gtaag---	tt-----	-----	TITGGTTTGTAGTTTGTAGTCTAAG	-----	cctctacaaaaactaggaa--...	4914...	ataatttccag	cccgacc	
C.Rem	gcagagta	gtgagttttttttt	gaaaaattttgaaaaa:::aaataa-----	-----	AAAAGTGTAGTTTGTAGTT	-----	tcctcga-ataaagtttgtc--...	4701...	aactatttcag	gccgcacc	
	**** *	** **	**		***** **		* ** *	*	** **	*****	

id=894 gene=W02B9.1 name=hmr-1 segment=chrI.11123071.11127798_-1 type=IN

C.Ele	gcagagta	gtgagttttga...	2256...	atcggggttggttgaggctca-----	GGGACTACAACTACAGTGTGT	--	tttttttcaaatcccta--...	2385...	aatattttcag	cccgacc		
C.Bri	tcagagca	gtagttttcat...	3234...	ttttgtctcaccatggtgca	AATTTTCAGACTcAAACTACAAA	--	ctacgcatacctgtatctgt-----	1666...	gtaattcttcag	gtcgcacc		
C.Bre	acagagca	gtaagtttttt...	1197...	--gaattcaatgagcttcaagt--	CTTGGACTATAAACTACAAA	at	TCTAA	--	gcacctaataatcctaaaac...	3701...	ataatttccag	gccgcacc
C.Rem	gcagagta	gtgagtttttt...	4314...	-ttgga--ggaagaggcttcat-----	GACTACAACTACACTTTT	cg	ggaaattttcagtacac-----	592...	aactattttcag	gccgcacc		
	**** *	** *****		*	***** *****	*		* ** **	*****			

id=894 gene=W02B9.1 name=hmr-1 segment=chrI.11123071.11127798_-1 type=IN VIEW

Figure 3: CS=5.6



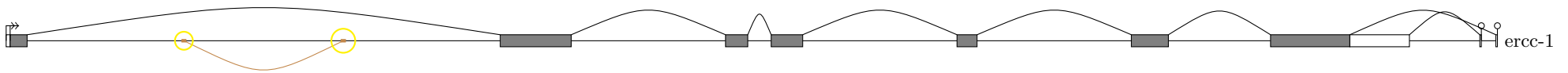
C.Ele	tgctggac	agctggaataga...356...agcgagaaaaagaag-gaaa--	AACCATTTGGAGTG	atagaagtgtgtacgcgcag...329...ggttgcaattgc	ttgtgggc
C.Bre	tgttggac	agcttgaataga...307...aaagatgagcagagaaa-aaaa--	AACCATTTGGAGTG	atagaagtgtgaacgcgcag...329...ggttgcaattgc	ttgtgggc
C.Jap	tgctggac	aactcgaatagt...390...-gtgagaaatagaatgaaa--	AACCATTTGGAGTG	ataggagtgtgcacgcgcag...325...ggttgcaattgc	ttgtgggc
C.Rem	tgctggac	agcttgaataga...313...-aaaatggcgcagaaattaa	GTAACCATTTGGAGTG	atagaagtgtgaacgcgcag...329...ggttgcaattgc	ttgtgggc
	*** **	* ** *****	* ** *****	***** *****	***** **

id=295159 gene=ZK54.1 name=ZK54.1 segment=chrX_17460089_17460851_-1 type=E3

C.Ele	tgctggac	agctggaataga...707...ttctagaataacgttgacgc	CACTc	CCAAA	TGGTT	gcaattgc	ttgtgggc
C.Bre	tgttggac	agcttgaataga...658...gtctagaatattgttgacgc	CACTc	CCAAA	TGGTT	gcagttgc	ttgtgggc
C.Jap	tgctggac	aactcgaatagt...737...ttctagagtatcgttgacgc	CACTc	CCAAA	TGGTT	gcagttgc	ttgtgggc
C.Rem	tgctggac	agcttgaataga...666...ttctagaataacgttgacgc	CACTc	CCAAA	TGGTTGC	agttgc	ttgtgggc
	*** **	* ** *****	*** **	*****	*****	*****	*****

id=295159 gene=ZK54.1 name=ZK54.1 segment=chrX_17460089_17460851_-1 type=E3 VIEW

Figure 4: CS=2.4



C.Ele	aaagcagg	tttgtgatccct...1511...	ttctcgtctttgccgtcgtc-----	TTCTTCTTTT	-----cTTTCG	-----	tttcctcaaaaaagaacc...3396...	tcttgttcaga	agaagatg		
C.Bri	aaagcagg	tttgtgatcccc...505...	---aacatttggcaccctctgt-	CTTCccTCTTTTcCTTCTaCTTCTaTTTCaTCTTC	-----	-----	gggtatcccagattctatat...4384...	gaacttgcagg	aggagatg		
C.Bre	aaagcagg	tttgtgatccct...128...	-----	ttgttactcaacaaggaaaa	-----	GAGTAAAA	TAGAAGAGtGAAA	-----	agggtgtgtacggggtag...4776...	acttgtgcagg	agaagatg
C.Jap	gaggcagg	tttgtgatcccc...86...	---agagagttacgggaatagg	-----	-----	CGAAAGAAGAAGAAGAGGAGGAGGAGGAGG	-----	aaaagtgtatgaagaataa...4809...	attgcaggcagg	ggaaggcg	aggagaag
C.Rem	aaagcagg	tttgtgatccct...1059...	---cagattgtgcttctccagt	TTCGcGTCTTCTTCTTCTTT	-----	TCTTC	-----	tcccccttcgaaaaaaag...3837...	tgttcagcagg	aggagaag	*** * ** *
		* ****	*****	*							

id=291175 gene=F10G8.7 name=ercc-1 segment=chrI_10030230_10041899_1 type=IN

C.Ele	aaagcagg	tttgtgatccct...2545...	---ttatcggttttcacctgact	-----	TGA--AGAAGAAGAtgAGGAA	-----	cttatatgagttgagaaaat--...2361...	tcttgttcaga	agaagatg	
C.Bri	aaagcagg	tttgtgatcccc...2922...	-----	agccagtgccggactagaa	-----	GAAGAaGAAGcAGAAGaAGAAGAAGAaGAAG	tagcacatgccatacacaca-...1969...	gaacttgcagg	aggagatg	
C.Bre	aaagcagg	tttgtgatccct...599...	---atcctctttcacttttttgc	-----	TTTCTTCTTCTT	TTTTttGCTC	-----	aaaaaagaaccatttttga--...4304...	acttgttcagg	agaagatg
C.Jap	gaggcagg	tttgtgatcccc...4851...	gttctcataattttca---ata	CCTCCTTCTTCTTCTTCTTCTTCTTCTTC	TTTCG	-----	---aaaaccttactctctttt...45...	attgcaggcagg	ggaaggcg	
C.Rem	aaagcagg	tttgtgatccct...1185...	---aaaagacgacggaaaaagat	-----	GAAGAAAaa--AGAAGAAGAAGaAGGACcCGAAA	-----	aggaggcgttaatggtccg...3708...	tgttcagcagg	aggagaag	
		* ****	*****				*		***	* ** *

id=291175 gene=F10G8.7 name=ercc-1 segment=chrI_10030230_10041899_1 type=IN VIEW

Figure 5: CS=3



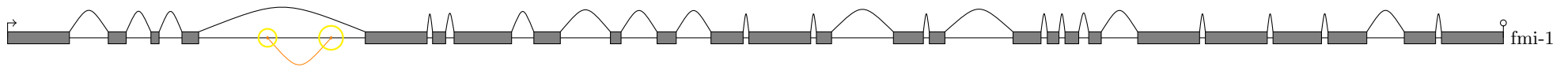
C.Ele	aaatgtac	gtcttctc	TTTTtc	GGTTC	TTCTTGcc
C.Bri	acatgtac	gtcttctc	TTTTtc	GGTTC	TTCTtccc
C.Bre	ccatgtac	gtcttctc	TTTTtc	GGTTC	TTCTcctt
C.Rem	taatgtac	gtcttctc	TTTTtc	GGTTC	TTCTttcc
	*****	*****	*****	*****	****

id=322910 gene=C23G10.2 name=C23G10.2 segment=chrIII.6208139.6208157.1 type=IN

C.Ele	aatct--tat	ttctaaaga-----aaa-----	ctgactaatacaactgtt	CAGGAGA	ACCAAAGt
C.Bri	cttca--aat	ttcccgaaa-----aaattgatattctttctagaattttcaatttct-	AGGAGA	ACCAAAGt	
C.Bre	-ttcaataat	ttcacaata-----aa-----	ccgagttt-----	AGGAGA	ACCAAAGt
C.Rem	-tttt--ggt	tccttaaaatgtggagaaattatgaaacctaataatgagtaa--ccaattc--	AGGAGA	ACCAAAGt	
	* * *	* * * *	**	** *	*****

id=322913 gene=C23G10.2 name=C23G10.2 segment=chrIII.6208324.6208360.1 type=AN VIEW

Figure 6: CS=3.12



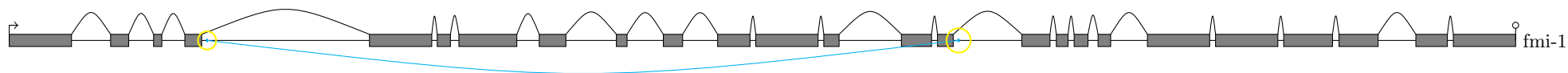
C. Ele	ccggtgag	tcttctattcaa---...1078...ttgaatgcta--cctcatccaa--	ATGACCATC	TGTCAT	caga---cgacggcttcacagag...892...ctttcagattgg	caccactg	
C. Bri	ccggtgag	---tctattcaattc...890...tataacacta--tcgcatccga--	ATGACCATC	TGTCAT	caga---cgacggcttcacccat...1020...ctttcagattgg	tactactg	
C. Bre	ccggtgag	---tctattcaattc...1031...tttaatacat--tttagtccaa--	ATGACCATC	TGTCAT	caga---cgacggcttcaccgca...846...ctttcagattgg	aactactg	
C. Rem	ccggtgag	---tctattcaattt...820...ctccgaattacttcgctttt	TGGT	TAAAT	TCCATTTC	tttatttcaccggctcccc---...1465...cttccagattgg	taccactg
	*****	*****	*	** * * * *	* * * * * * *	*** *****	** ****

id=323070 gene=F15B9.7 name=fmi-1 segment=chrV.13020624_13022672.1 type=IN

C. Ele	ccggtgag	tcttctattcaa---...1726...---ttgccttctcacaccaata	ATGAGATG	-----	GTCGT	gtcgtttcttcgaatcgtaa---...245...ctttcagattgg	caccactg	
C. Bri	ccggtgag	---tctattcaattc...1645...---tcgccttctcacaccaata	ATGAGATG	-----	GTCGT	gtc-ttccttcgaatcgtaaa...266...ctttcagattgg	tactactg	
C. Bre	ccggtgag	---tctattcaattc...1619...---tcgccttctcacaccaata	ATGAGATG	-----	GTCGT	gtcgtttcttcgaatcgtaa---...259...ctttcagattgg	aactactg	
C. Rem	ccggtgag	---tctattcaattt...1164...caggcgaattattagagtc---	GAAA	TGGA	GTTTG	ccGTCG	gtcccgtcaggaagaagg...1119...cttccagattgg	taccactg
	*****	*****	* * * * *	* * * *	* * * *	* * * * *	*** *****	** ****

id=323070 gene=F15B9.7 name=fmi-1 segment=chrV.13020624_13022672.1 type=IN VIEW

Figure 7: CS=3.84



C.Ele	cggtgag	tcttctattcaattcat-tcttacacca-----	TTCCaTTTTCATTTCATTTCATTTA	-cactctgcgtatcttgtaac--...1966...ctttcagattgg	caccactg
C.Bri	cggtgag	---tctattcaattcctcttttacaccattt:::accagtcagagaaggctgacactcaaaaaagagaagtGACGCAACATTGTT	GCACGCAACATTGTT	-ccagccgagagagtgtctaa--...1086...ctttcagattgg	tactactg
C.Bre	cggtgag	---tctattcaattcctcttttacaccatt-:::actcgcttttg--gtataaatttcatt-----	GCACGCAACATTGTT	cagg--ggaaaagtgtctgaat...910...ctttcagattgg	aactactg
C.Rem	cggtgag	---tctattcaattcactcct-----	GCACGCAACATTGTT	-ccagtcgtgtggatgaaagg--...1269...ctccagattgg	taccactg
	*****	***** * *	** ** * * *	*** *****	** ****

id=323070 gene=F15B9.7 name=fmi-1 segment=chrV_13020624_13022672.1 type=IN

C.Ele	taggtacg	taattcagctaattgac-----	TAAATGGGatTGAGagTGAAAAgGGAG	agaaggaacactcgtaaaat-----...528...attgcaggtcgt	cactgtga
C.Bri	taggtacg	taattccactaattgactaaaggaaagcacag:::cctagtaagactataccgtgcaagaacctgagcaacgcacaAGCAATTTGCGTGT	GAGCAATTTGCGTGT	-----cactt-cagacttctcccgt---...156...ttttcaggtcgt	cactgtga
C.Bre	taggtacg	taatttgctaattgactgactcgatagagaa:::-----	GAGCAATTTGCGTGT	-----cactt-caacct---ccggtgctt...150...ttttcaggtcgt	cactgtga
C.Rem	taggtacg	taattcggctaattgactaagactgactg-----	AGCAATTTGCGTGT	-----cactt-caacct---ccggtgctc...146...tttataggtcgc	cactgcga
	*****	*****	* ** * **	*** * *	** ***** **** *

id=323092 gene=F15B9.7 name=fmi-1 segment=chrV_13027614_13028217.1 type=IN VIEW

Figure 8: CS=3.84



C.Ele	attaaat	G	GCAaCGAAAAGAGAGA	aAGTAT	agta--attcacaattaatat...59...-atTTTTtagcaa	tta--aacat-
C.Bri	gtaacatg	gaaa	CGGAaAGAGAGA	aAGTAT	agtaaacactctaaaatcact---.62...ctgttcatagcat	tgatcaa----
C.Bre	ataaaat	G	GCAGCGAAGAGAG	agAGAAaGTAT	agta--atTTgatggtgtcggg...43...---tcaaaacat	ccacgaaccta
C.Rem	gtaaagt	G	GCAGCGGAaAGAGAGA	aAGTAT	agta--atatgaaaattaattg...62...taagtcagtcaaa	ctagtat----
	* * **		* * * * *	*****	* * * * *	* * *

id=140730 gene=C56E6.3 name=toe-2 segment=chrII.6517668_6517780_-1 type=IN

C.Ele	attaaatg	gcaacgaaaagagagaaagt	atagtaattcac-aaattaa-tattgTTTTg---	ttcgga	ATGCTTCTCTCTg	TTTGca	TGCC	TTTTTTcctgTTTgaaattgt-attTTTTtag-caa	ttaaacat---
C.Bri	gtaacatg	gaaacggaaagagagaaagt	atagtaaacactctaaaatcactattgTTTTg-gtctTTTg	ATGCTTCTCTCTg	TTTG	-catggtatctatcaccttcaaattatctgttcatag---		-cattgatcaa	
C.Bre	ataaaatg	gcagcgaagagagagaaagt	atagtaatttga-----tggtgtcggg---TTTTga	ATGCTTCTCTCTg	-t	TTGC	TGTC	---ttt-----gttattataatcaaaacat	ccacgaaccta
C.Rem	gtaaagtg	gcagcggaaaagagagaaagt	atagtaaatatga-aaattaattgTTTgTTTgTTTcttga	ATGCTTCTCTCTg	-	TTGC	TGTC	---tttcacaacttaaattgtcataagtcagtcaa	actagtat---
	* * **	* * * * *	*****	* * * *		* * * * *	****	* * * * *	* * *

id=140730 gene=C56E6.3 name=toe-2 segment=chrII.6517668_6517780_-1 type=IN VIEW

Figure 9: CS=3.84



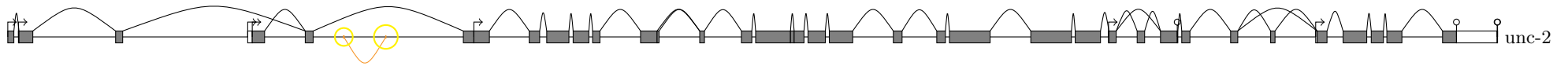
C.Ele	tcaatact	tgaagaaggtat...87...taa	atcgttatccg----gtacag	GCGCATTCTCACTGAAGGAAA	tctggaagcagcaaatcagt-----	...1658...atg	tttttattt	gatttcag	
C.Bri	ccagtact	tgaagaaggtga...78...t---	actggaaaagtcattca	GCGCATTCTCACTGAAGG	aaagctggaagcagcaaacg-----	...1700...cta	attattcgg	aatttcag	
C.Bre	tcagtact	tgaagaaggtga...110...tag	tatactgttca---cattca	GACGCATTCTCACTGAAGAAA	ag TGGAAG caacaaagcagcggctagcg...	...1679...taa	atcctcctt	gatttcag	
C.Rem	ccagtact	tgaagaaggtga...109...aatt	gtctttattg----tattca	GCGCATTCTCACTGAAGG	aaagctggaagcagcaaacg-----	...1682...agt	atctgtttt	gatttcag	
	** **	****	*****	*	* ** *	*****	**** *	*	****

id=122950 gene=T27F7.3 name=eif-1 segment=chrII.4991437_4993266_-1 type=IN

C.Ele	tcaatact	tgaagaaggtat...153...cca	aatctcgt-tttgtacct	TTTCaCTTTTCAGTGAGAATGCGC	actacacttcg	tttgttggc-...1589...atg	tttttattt	gatttcag	
C.Bri	ccagtact	tgaagaaggtga...149...-ta	agcttcgaatccattcaa-----	TTTTTCAGTGAGAATGCGCC	ctcacttcgcacattggcc...	...1629...cta	attattcgg	aatttcag	
C.Bre	tcagtact	tgaagaaggtga...176...agc	gtttcccgttagtacc	TTTTCATTTTTTCAGTGAGAATGCGTC	ctctcttcg	tttctggcc...1617...taa	atcctcctt	gatttcag	
C.Rem	ccagtact	tgaagaaggtga...182...-a	actcacagtatctttacca-----	TTTTTCAGTGAGAATGCGCC	cagtcttcg	tatgctggcc...1609...agt	atctgtttt	gatttcag	
	** **	****	*****	*	* ** *	*****	**** *	*	****

id=122950 gene=T27F7.3 name=eif-1 segment=chrII.4991437_4993266_-1 type=IN VIEW

Figure 10: CS=4.8



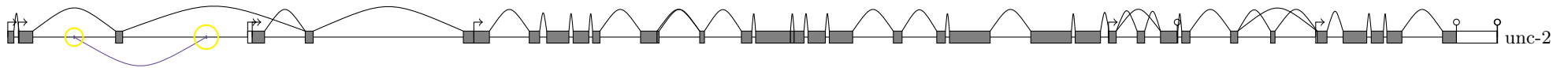
C.Ele	gaaaaggt	agg--atccttagatgttctttttccggttc:::gct-cgagttgtggtcctggaagcgttagaagacggctct	TCTCaGTTTTTTTCTggCATT	-----tcaatntttgcccgcgctg-----	...4364...	ctatnttcaggg	tccgtcgt
C.Bri	-agaaggt	gagtattactgtaataaaatnttttaggctt:::cttacatgccttctgctccagagcaagagcac-----	-----AAAACggGAAAAGG	-----tcccggagcacgatggact...3758...	ttttttgcaggg	gccgacct	
C.Bre	gaaaaggt	gag-----tcctggaatggg-----	TT-----TTTTGTTTTCaTGTC	-----tgaagtattggccagtccgt-----	...4073...	ctnttttcaggg	tccgtcgt
C.Jap	gaaaaggt	atg-----ttttacgggtc:::tcaccccatcattggtttggagcccc-----	-----TTCATTCActAATGaCATG	-----ccggtccgtacattgntttg-----	...4255...	acatnttcaggg	tccgtcat
C.Rem		-----:::-----	-----TCTTTTTCCGTTTTT	-----acgctatntttcaaaaaatc-----	...4069...	aatgnttcaggg	tccgtcgt
				*		** *****	*** * *

id=190498 gene=T02C5.5 name=unc-2 segment=chrX_2725755_2730530_-1 type=IN

C.Ele	gaaaaggt-	aggatccttaga...1048...-----atctaga-atttagaattttc-----	AATGAG--AAAAGGAGAC	-----gagtttctggtttgacttgg-----	...3648...	ctatnttcaggg	tccgtcgt
C.Bri	-agaaggtg	agtattactgta...1837...-----ttaggtagtcgagacctct	CCTTTTTTTTCGTTTT	-----ttttctatntttcctaccgg-----	...2373...	ttttttgcaggg	gccgacct
C.Bre	gaaaaggtg	agtgttactgt...361...---gactacatgtccccgctatc-----	GACAGA--AAaACGAAAGA	aaaggtccccggagcacaga-----	...3752...	ctnttttcaggg	tccgtcgt
C.Jap	gaaaaggtg	tgnttttacggg...1460...-----ccggcgttgacaacttgc---	TATGCATTGAAaTGAG	-----ccaagtccacggaactcgtt-----	...3345...	acatnttcaggg	tccgtcat
C.Rem	-tagttata	cagatccttgac...2697...ttgaaatctagg-agaagaaa-----	GA--A--AACGGGAaGAGA	-----aaaaaagaacgaaaaggga...1353...	aatgnttcaggg	tccgtcgt	
	*	*				** *****	*** * *

id=190498 gene=T02C5.5 name=unc-2 segment=chrX_2725755_2730530_-1 type=IN VIEW

Figure 11: CS=4.8



unc-2

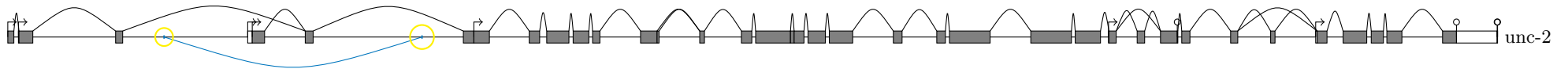
C.Ele	tagacggt	aagtgt----ttattt...2459...tgaactgacaatttgaaac-----	AAAGAAATGGGtGGAAAAGA	agagcaagtggcgcgctgta-----	...1522...ttgatttcagag	tagtcgat
C.Bri	tagacggt	tagtgc---tttttg...572...gcctttctcattttgttct	CATTTTCTTGAAAAAGA	-----tataatgaagaaattcgaac--	...2598...cctatttcagag	tagtcgat
C.Bre	cgggaggt	tagttgggggat-----...206...-aaatttaacattgagaagga--	GATGAAAaATGGG	-----gggagttttcacggattatt-----	...3503...caaatttcagag	tagtcgat
C.Jap	tagaaggt	cagtt----tttcaat...664...cggattggtgcattgacaaa	TGGAAGcAAGAAaATGGGAGAAAAGTG	-----gcgcgcggaatcccgccgt...506...atagtttcagag	tcgtcgat	tcgtcgat
C.Rem	-----gt	tagttcaagcgttttaga...1442...-aatttcacattgacaaattt	GAAGcAAGAAaATGGgaAAGAAGAGC	-----aagtggcgcgcggaatccc-----	...693...acaatttcagag	tagtcgat
	**	*** * *	* ** *	* *	*****	* ** **

id=190491 gene=T02C5.5 name=unc-2 segment=chrX_2743735_2747799_-1 type=IN

C.Ele	gagccagt	gagttattcctt...2244...aacgagttagtcagcggca-----	TCTTTTCtTCCATTTTTT	-----tctcctctctccttcactta...2661...agtggctccaag	cctaatgg	
C.Bri	gaaccagt	aagtcctcgaaa...68...-----aaagcaaagtgttctgtct	-----TCTTTTTCAGGAGAAaAATG	tacgaacaaaaaaggagc--	...4838...gcctcatcacag	cggaatgg
C.Bre	tagccagt	aagtccttgaca...1054...ctcctctttttcacgcaata-----	TTcATaTTTcTcATC	-----caatatctcaaaaacaatta...3856...agttagctccaag	cctaatgg	cctaatgg
C.Jap	tagccagt	aagtcctttaac...779...-----tctcagcg-cgacgacgcata	CGTTTTCTTCCGTTTCTTTTCCGG	-----caatcttcaaaaacgaacca...4122...ggtggcggaaag	cctaatgg	cctaatgg
C.Rem	tagccagt	aagtcctttttt...1039...-----acaacgacgacgacgaatac	GTTTTCTTCCGTTTCTTTTTC	-----cggcaatcttc-atacgaacc...3739...agtggctccaag	cggaatgg	cggaatgg
	* *****	*** *	* *	*	**	** *****

id=190493 gene=T02C5.5 name=unc-2 segment=chrX_2736271_2743647_-1 type=IN VIEW

Figure 12: CS=5



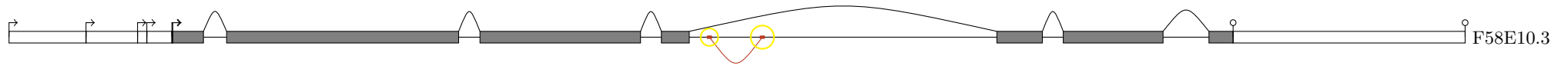
C.Ele	gagccagt	gagttattcttt...880...-----cgaagacgacgattaatacag--TTTtCTCCgTTCttTTTC	cggaatcttcatgccaacc--...4025... agtggctccaag	ccaaatgg
C.Bri	gaaccagt	aagtctctgaaa...3733... ttttttc---tgccttctcgggaAAACATGCATTTTGA	-----gaattgaattgttctctggcc--...1175...gcctcatcacag	ccgaatgg
C.Bre	tagccagt	aagtctttgaca...59...tattttg-----tcttgggaccata-GTGTCTT--TCTtCTT	--tcaaaaaagaactagagatg--...4850... agtagctccaag	ccgaatgg
C.Jap	tagccagt	aagtcttttaac...138... tttttttgttgctcttctc-----GTTTtCTTCgTCTTcTTTTC	-atagtttggttggtggcgt...4766... ggtggcgaaag	cctaattgg
C.Rem	tagccagt	aagtctttttt...1041...-----aacgacgacgacaatacgt--TTTCTCCGTTCTTTTTC	ggcaatcttcatacgaacca-...3738... agtggctcaaag	ccgaatgg
		* *****		** ** *

id=190493 gene=T02C5.5 name=unc-2 segment=chrX_2736271_2743647_-1 type=IN

C.Ele	gaaaaggt-	aggatccttaga...1491...-----gacaactggct-----tatgcatttGAAAtGAGAGGAAaAGAA	gtccttcctcttttagccat-----...3203...ctattttcaggg	tccgtcgt
C.Bri	-agaaggtg	agtattactgta...1495...-----gacgacgtgttcttt-----tgta-----TTCAAAAATGTGTacGTTT	-----cgacacatgggatgccgctg...2712... ttttttcaggg	gccgacct
C.Bre	gaaaaggtg	agtgttactgt-...1953...aaagagaccgactgcataat-----AGAG-AGAAAGAACAT	-----ccggtatt-gaagtgaattc...2162...cttttttcaggg	tccgtcgt
C.Jap	gaaaaagta	tgttttacggg-...1513...-----cgtttttttttctctgaga---GGAAAAaaAGGAAaGGAGAAAC	-----agatctcaggagacaattc...3287...acattttcaggg	tccgtcat
C.Rem	-tagttata	agatccttgac...2687...-----gcgttttcgggt-----tgaaatctaGGAGAAGAAAGAAaCGGGAaGAGA	-----aaaaaagaacgaaaaggga...1353...aatgttttcaggg	tccgtcgt
		* * * * *		** *****

id=190498 gene=T02C5.5 name=unc-2 segment=chrX_2725755_2730530_-1 type=IN VIEW

Figure 13: CS=3.9



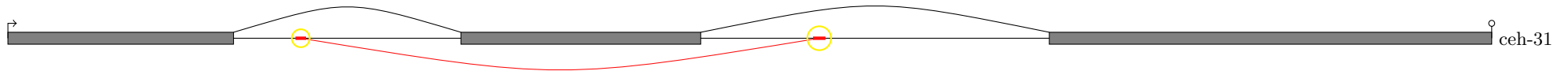
C.Ele	ccg	cgcggt	ggattgggtagttt	cgcg-ccaac	-----	ctag	-----	AAAGGGTCAAAT	-----	tttagatgtcacatattaga	---...672...	ttaatttaaca	at	ttttaga
C.Bri	ctg	ctcgt	ggattgggtagtat	atgcgcg	-----	cta	-----	AGTTtagAAAGGGTCAAAT	ttGAGATGTCACATG	atcagaaagatcgataagag	---...655...	cgtaaacctaat	at	tttcaga
C.Jap	ccg	ctcgt	ggtcttggttagttt	-tgcgcgctaata	accgactg	tttagaatagaacgg	AAAGGGTCAAATG	-----	cgcttatcacatgtctcgt	-----	...731...	tccaatacaaat	tt	tttaaga
C.Rem	ctg	cacgt	ggattgggtagtata	cgcgctttcac	-----	ctag	-----	AAAGGGTCAAAT	ttGAGAcGTCACATGTT	tagtaacatcggttacagga	...638...	ataatttttaa	tt	tttcaga
	* * *	**	* * *	*****	*	***		*****		* * *		* *		*** **

id=259695 gene=F58E10.3 name=F58E10.3 segment=chrV_14009594_14010339_-1 type=IN

C.Ele	ccg	cgcggt	ggattgggtag	...112...	ttcagccatatt	gtgatt	-----	ATTTGACCCTTT	acagttacaccaactgatt	-----	...558...	ttaatttaaca	at	ttttaga
C.Bri	ctg	ctcgt	ggattgggtag	...110...	-atggcctgttg	gccatgtaa	TATGTGATTTTTATTTGACCCTTT	acAGTT	gcaccaacatgattgccgt	...542...	cgtaaacctaat	at	tttcaga	
C.Jap	ccg	ctcgt	ggtcttggttag	...131...	-ccgctccaac	gtgat-caa	-----	TATTTGACCCTTT	acagttgaaccaactgatt	-----	...622...	tccaatacaaat	tt	tttaaga
C.Rem	ctg	cacgt	ggattgggtag	...109...	tcttgctaatt	gcatgc	AATATGTGATTTTTATTTGACCCTTT	acagttgcaccaacatgact	-----	...532...	ataatttttaa	tt	tttcaga	
	* * *	**	* * *	*****	*	* * *		*****	*****	* * *		* *		*** **

id=259695 gene=F58E10.3 name=F58E10.3 segment=chrV_14009594_14010339_-1 type=IN VIEW

Figure 14: CS=5.6



```

C.Ele aaccaggt aa-----tcca--ttttgccaccattt-tcctaaagttattgcattattgtatgttcgttcaaccatctCTAACACTTTAATctACATAGAc---ttccatgagaatgttgaat--...141...gttattgtagat ccatctcc
C.Bri aaccaggt aaatactaaaattccattta--ttttccattcatttctcctcatccaactgaagttattgtacgtccgttcaaccatcaCTAACACTTTAATctATATAacagcagtcctatgaaaatgt-----...134...tttgttaaagat ccatctcc
C.Jap aagcaggt gaa-----tcaa---gtgtaccattt-ttcaaag-----ttattgtatgttcattcaaccatctCTAACACTTTAATTATACA-----tccatcagaatgtacaacta...130...atTTTTgtagat ccatcgcc
C.Rem aaccaggt aaatactcactcattttccactttttgccaccattt-tcaaaag-----ttattgtatgtccgttcaaccatctCTAACACTTTAATctACATAcac---atctatgagaatgttga----...147...ttcattaagat ccatctcc
** **** * * * * **** * * * ***** * * ***** * * * ***** * * * ***** * * * **** ** *

```

id=324200 gene=C33D12.1 name=ceh-31 segment=chrX_3069875_3070131_-1 type=IN

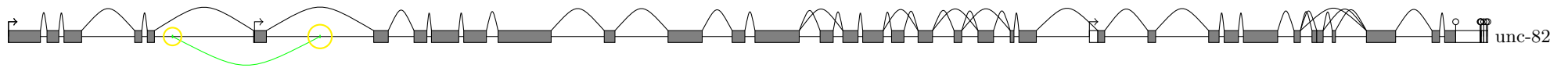
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C.Ele tagaaggt tggtc---ggctata...78...attgagtctaaacacgccacTTGTGTtaATTGtAGTGcaTTAGcgagaagct-tcaccgccatc...228...gtactttcagaa ccaaatgg
C.Bri tagaaggt tagtcatgggat---...75...--tgagtctaaacacgccacttTGTGTtaATTGtAGTGcaTTAGcgggagcgcctccaccgccg-...225...ttttttcagaa ccaaatgg
C.Jap ccggaggt tggtagcagag---...83...--tgagtctaaacacgccacttTGTGTtaATTGtAGTGcaTTAGcgggaagcg-ccatcgaaatt...206...attctttcagaa caaagtgg
C.Rem ccggaggt tggctaagatt---...87...--tgagtctaaacacgccacttTGTGTtaATTGtAGTGcaTTAGcgggaagcgcctcgcgaaat-...207...tactttcagaa ccaaatgg
* **** * ** ***** * * ***** * * ***** * * ***** * * * ****

```

id=324202 gene=C33D12.1 name=ceh-31 segment=chrX_3069210_3069603_-1 type=IN VIEW

Figure 15: CS=2.4



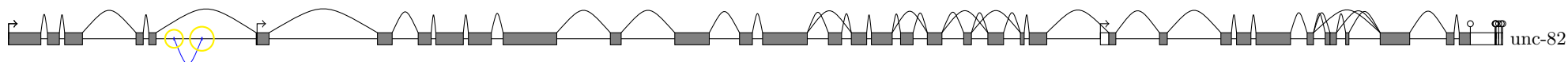
C.Ele	caggtaaa	ttatacgtctcg-----	...116...	---tttgtaatatgtcatcaca-----	GTTT	TCACTTTCTC	ttTTTATT	gaccagacactgattcaatt-----	...2845...	atttcaggtgga	cgaatgcc	
C.Bri	caggcaag	tgattctcaat-----	...392...	---gatgaagaagaaccactcc-----	-----	TTCTT	tTTTCTTCT	tctcggcccttcagcagcaa-----	...4519...	tttcaggagga	cgaatgcc	
C.Bre	ctggtaag	tg---ttcaaaatg--a...	...36...	---gtgagacaagcttcttcttt-----	-----	TGTTTTCTCT	TCGCATT	aaTTG	cgtgtgctcctgggaaaag-----	...3259...	attcaggagga	cgaatgcc
C.Jap	ctggtaa-	g---ttcaaaatacca...	...299...	---cctgtgctgttcaggacctt-----	GAAGAGAAGAAGAG	-----	-----	aagcactcgttttcttttg-----	...4612...	gttcaggagga	cgaatgcc	
C.Rem	ctggtaa-	g---ttcacgtcattt...	...349...	---gggtggaagggaccttgatg	AAAGAGAGAAGAAGAG	AAGA	cGAAG	-----tat-----	aagaaaagaaccactc...	...2535...	tttcaggagga	cgaatgcc
	* ** **	*		*						** **** **	*****	

id=265278 gene=B0496.3 name=unc-82 segment=chrIV_7425867_7428914_1 type=IN

C.Ele	ccggttag	tagtgtcaaaaagaga----	tttt-----	:::::--actc-----	-----	cacctcaaagtaataagt-----	-----	AATGAAGAGAGAGTGA	AGAT	cctccaactcgtcgaaga----	...1188...	tttcaggaacc	catcca
C.Bri	ctggttag	ttgtttc-----	:::::--	-----	-----	-----	-----	AGAAGAAAGAGAG	-----	agcagggtgagaattgagtg...	...3281...	ttttaggtact	catcca
C.Bre	ctggtag	t---ta-aagagaaatcccttttcttact:	:::::--	aat-----	-----	tgttcttt-----	-----	CAAAAATGAAGAAGAAGATG	ctccctg---	agcaaagaagttt...	...1074...	tttgaggtact	catcca
C.Jap	ccggtgag	tc---tttgaaagaca-----	:::::--	cccgattctatggctgtttgccgttt-----	-----	-----	-----	CTCTTCTTCTTTTC	-----	cttcttcttcttactcac-----	...898...	tattcaggcaca	catcca
C.Rem	ccggtgag	tagtgtc-aaaagata-----	ttttctgagt:	:::::--	aatctcagacatatatactctttgaaggtgtaccgaa	CTTCTTTTTCTTTTC	TCTTT	-----	-----	gaaagtttgctcagaggcga...	...715...	ttttaggtacc	catcca
	* ** ** *	*		*								* * ** **	*****

id=265281 gene=B0496.3 name=unc-82 segment=chrIV_7429035_7431853_1 type=IN VIEW

Figure 16: CS=3.9



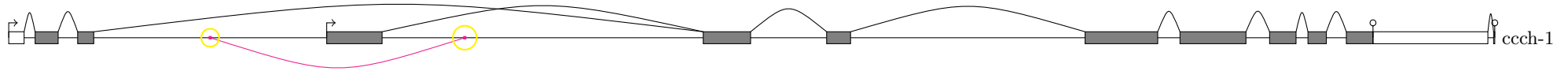
C.Ele	caggtaaa	ttatacgtctcg-----...123...-----	atatgtcatcacagttt	atc-----	ACTTCTCTTTTATT	-----	gaccagacactgattcaatt-----..2845...atttcaggtgga	cgaatgcc	
C.Bri	caggcaag	tgattctccaat-----...341...-----	agaaggacctttttgatga	AAGAGAGAAAGAGAA	-----	-----	tgaaaagtgtgagatgatg-----..4569...tttcaggagga	cgaatgcc	
C.Bre	ctggtaag	tg---ttcaaatg--a...27...-----	aaagaactgtgagacaagc	-----	TTCTCTTTTGTTCTCTTCG	-----	cattaattgctgtgctcc-----..3269...attccaggagga	cgaatgcc	
C.Jap	ctggtaa-	-g---ttcaaatacca...298...acctgtgctgttcaggacct	-----	TGAAGAGAAGAAG	-----	-----	agaagcactcgttttcttt-----..4614...gtttcaggagga	cgaatgcc	
C.Rem	ctggtaa-	-g---ttcacgtcattt...350...-----	ggtggaaggacc	-----	AAGAGaGAAGAAGAAGAC	-----	-----	gaagtataagaaaagaacc...2539...ttttcaggagga	cgaatgcc
	* ** *	*	*				** **** **	*****	

id=265278 gene=B0496.3 name=unc-82 segment=chrIV_7425867.7428914.1 type=IN

C.Ele	caggtaaa	ttatacgtctcg-----...377...gaa--aagaataagaagaaga--	AGTA t AAGAGAGA aa GAGT	-----	-----	-----	ccccactcttctttttgtg--..2588...atttcaggtgga	cgaatgcc
C.Bri	caggcaag	tgattctccaat-----...392...gatg--aagaagaaccactcc	-----	-----	TTCTTT t TTCTTCTT	-----	ctcgccccttcagcagcaat...4518...tttcaggagga	cgaatgcc
C.Bre	ctggtaag	tg---ttcaaatg--a...378...ggca--aaggacctcgataagt	CGAGAGAAATAAGA a GAAGAA	-----	-----	-----	aaagaagaagaaccactct-----..2919...attccaggagga	cgaatgcc
C.Jap	ctggtaa-	-g---ttcaaatacca...643...gaaattcacaactacctatc	-----	-----	CTTC g TTTTCTTCA	-----	ttaatcctcttcttttca...4268...gtttcaggagga	cgaatgcc
C.Rem	ctggtaa-	-g---ttcacgtcattt...517...acga--gatgatagctacaca	-----	-----	GTTTTTCTTCTT	-----	gcggtcttctctccccttt...2374...ttttcaggagga	cgaatgcc
	* ** *	*	* *				** **** **	*****

id=265278 gene=B0496.3 name=unc-82 segment=chrIV_7425867.7428914.1 type=IN VIEW

Figure 17: CS=3



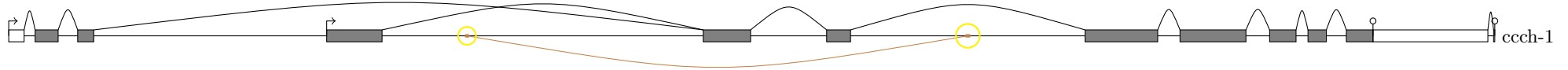
C.Ele	caagtgta	gcagttttcaa...1357...-----taacagtatgcttctgaca- TTCTC ----t TTTCCTTC tgcccgacttttcactttg...2931...agaatcaggaga	caggcaaa
C.Bri	ccaggtaa	gcctaagttcag...3220...-----taggcattgtttagtatgag CTTCTC ---- CTTCTTTTC ctatgctcatcaccatgtcc...519...agaatcagaaga	caggcaga
C.Bre	ccaggtag	gtgtagacccta...2575...-----ctgccagttctctgtctggtc AGTCAGCTGACGACGTTG --acaaccaaccccgaagttg...1018...agaatcagaaga	caggcaaa
C.Rem	tatggtaa	gcaagtgcgcgc...1070...cgcgccaaaggca--tgccagc---- CTTCcCTTCTTTCTgTTTC tatatgaatgcgtcaaggca...3835...agaatcagaaga	cgaggacg
	***	* * * * *	***** ** * * *

id=118346 gene=F38B7.1 name=ccch-1 segment=chrV_11528183_11532549_1 type=IN

C.Ele	caagtggtg	gttttagatt...313...ggcatcgtcgttgcgcaatc----- GAAAGtGAAAG -- AGAA -aggaga-tgaa---agttttgat-----...2855...ctttcagagtc	tctgcagt
C.Bri	caagtggtg	gttttcagtttc...484...-----cgtcgtttccgaatcatttt---- GAAAAGAAGG -- AGAAG -aaag-tgac---agtattgaaaga-----...2747...tatttcagagtc	tctacagc
C.Bre	caagtggtg	gtttcacttct...876...-----cttctctctggcgattggtc---- TAGTGTCaCAGCTcGATT -----tcaa---agaattcaagcaacga...2072...ttttcagagct	tatacagc
C.Rem	caagtggtg	gtctcacttctc...674...-taacaatagttt----gttatgcg AGAAAaAGAAGaAGA -- AGAAG acgtgcttgaattcagaatt-----...2830...atttcagagcc	tctacagt
	*****	** * * * *	** ***** * * **

id=118348 gene=F38B7.1 name=ccch-1 segment=chrV_11532791_11536037_1 type=IN VIEW

Figure 18: CS=3.6



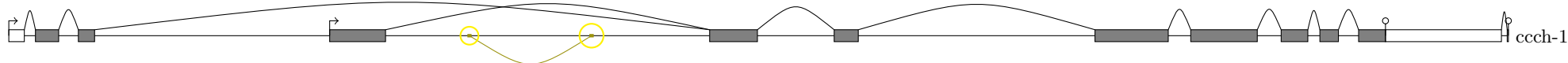
C.Ele	caaggtgg	gtttttagattt...321...-----cgttgcgcaatcgaaagtga	AAGAGAAAGGAGATgAAAG	-----t	ttttgattgggttttcacc-----..2843...ctttcagagtc	tctgcagt
C.Bri	caaggtgg	gttttcagtttc...483...-----tcgtcgtttccgaatcattt--	TGAAAaGAAGGAGAAGAAAG	tgacagtattgaaagag-----aac-----..2743...tattcagagtc	tctacagc	
C.Bre	caaggtgg	gtttcacttctt...348...cgccatcgctggtgcgcaat	TGAAAGTGAAGAGAAAGcAGATG	-----aaagttttgattgggttttc-----..2594...tattcagagtc	tatacagc	
C.Rem	caaggtgg	gtctcacttctc...615...ccccagtaacactgaaaagt-----	GAAAAAAGGGAGAAGAAGA	-----aaagaaaacaacaacaacac...2890...atttcagagcc	tctacagt	
	*****	** * * *	* * * * * *	*	** *****	* * **

id=118348 gene=F38B7.1 name=ccch-1 segment=chrV_11532791_11536037.1 type=IN

C.Ele	attggtat	gttattgctttt...1177...ccctccaatacact---ctcctt---	CTTTGTTTTCTaTTTCatTCTT	--ctgaactttgagtagtaata...972...aatttcagatc	acaacatc-----
C.Bri	atcggtat	gtctttttttgt...863...---cacatacgtactactact---	CTTTCCTTCTCTTTTTTCG	----cattgttcacttcgggaccc...836...tcttcaggctc	ccaacatc-----
C.Bre	atcggatga	gtattttgttca...813...---cacgcgacctctttctccc	CATTTctTTTTCTtCTTTtCATTgTTCA	ctcggaccctattagcacta...921...attttagactc	acaacacc-----
C.Rem	attggttaa	gcgatTTTTGGG...3008...gaggagaagaagtTTTgaca-----	TCTTTTTCTTCTTTTTTTC	----ctgctcccggagcagagctc...1898...-----gatc	ccaacagcaacaaca
	** ** *	* ** *	* * * * *	*	** ***** *

id=118352 gene=F38B7.1 name=ccch-1 segment=chrV_11536679_11538913.1 type=IN VIEW

Figure 19: CS=4



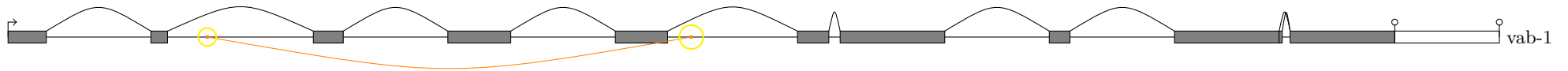
C. Ele	caaggtgg	gtttttagattt...312...	-aggcatcgtcgttgcgcaat-----	CGAAAGtGAAAgAGAAAGGAGATG	aaagtttttgattgggtttt...2847...	cttttcagagtc	tctgcagt	
C. Bri	caaggtgg	gttttcagttc...484...	-----cgtcgtttccgaatcattt	GAAAAGtGAAAGAgAAAGC	----aagtgcagtttgaagag-----	...2746...	tatttcagagtc	
C. Bre	caaggtgg	gtttcacttctt...349...	---gccatcgtcgttgcgcaatt-----	GAAAGtGAAAGAgAAAGC	-agatgaaagttttgattggg-----	...2599...	ttttcagagct	
C. Jap	caaggtgg	gtaacggtttt...1706...	...aaaacaacacaatagtaaaa-----	AAGAAGAAGAAGAAGAGGA	-ggaggaggaagaagaaaaa-----	...2673...	ttttcagagtc	
C. Rem	caaggtgg	gtctcacttctc...624...	-----cactgaaaagtgaaaaagg	GAGAAGAA-GaaAAGA	----aaacaacaacaactaaca-----	...2885...	atttccagagcc	
	*****	**	*	***	* * *	*	** *****	* * ***

id=118348 gene=F38B7.1 name=ccch-1 segment=chrV_11532791_11536037_1 type=IN

C. Ele	caaggtgg	gtttttagattt...2196...	----gactcccgggaaaga----ttcgc---	TGTCcTTCTgtTTCTaTTTCTTTTCG	-----tggacaactgtctaagag...961...	cttttcagagtc	tctgcagt	
C. Bri	caaggtgg	gttttcagttc...1322...	tcttgacttttgagaagga-	TCTTCTTC	-----TTCTTTTC	-cac---cccctccctatcggtt-	...1908...	
C. Bre	caaggtgg	gtttcacttctt...1203...	-----gagaaagaactttcatgaa	GCTTTCTT	-----TCcTTTTC	tctattctgaaccaataag-----	...1747...	
C. Jap	caaggtgg	gtaacggtttt...1904...	-----aatgaagacatcccctatcg-	TTTTCTT	-----TCTTTCTT	-gagctagctcaacttggcgc----	...2478...	
C. Rem	caaggtgg	gtctcacttctc...2563...	.gtgtgtgtatgtcagaattg-----	TCTTC	-----TTCTTCTC	-gacgacgacccccctgtcgc-----	...948...	
	*****	**	*	***	* * *	*	** *****	* * ***

id=118348 gene=F38B7.1 name=ccch-1 segment=chrV_11532791_11536037_1 type=IN VIEW

Figure 20: CS=3



C.Ele	tgagtctc	ctt-----ccaatcttctagagtacacttga:::::-----	-----TG-----	GAaGAAGAAAAG	-----aaaa--a---	gaagcatagcggcct...3697...	cagtggatggaa	gaaacttg
C.Bri	ttcgtctt	ctt-----ccaatcttctagagtacacttga:::::agcatatgttgcacacacatacatat	tttgggtggcGGGGTA	TTGAAATTGGGgGAAAaAATG	-----aaaa--gttttgaattgggag-----	...4084...	cagtggatggaa	gaaacttg
C.Bre	gactactt	ctt-----ccaatcttctagagtacacttga:::::-----	GGGG--TTcGAAAtTGAA	-----	-----aagatgaggccggagtagag-----	...3851...	cagtggatggaa	gaaacttg
C.Jap	cttttctt	cttcgtctgccaatcttctaagtagacttga:::::-----	AGGA-----	GAAGAAGAAGAAGG	cacggacac--atattcaatta-----	...4319...	cagtggatggag	gaaacttg
	**	***	*****	*****	*	*	*	*****

id=74194 gene=M03A1.1 name=vab-1 segment=chrII.4574199.4578117.1 type=IN

C.Ele	tgagttaa	tttgtttgtaga--...66...-gcggaggtatgcacacacac-	CTTTcTTCTTC	-----TCCA-----	gagtggggggggggtcctc-----	...3390...	caggctgtccaa	cgaacacg
C.Bri	tgagttaa	tttgtttgtaga--...714...aatttgggtcatttctagcg--	CATTTTCgTCCAATTTTCGG	tttTATTT	-----ctgctcatttttagtcattt...	...3807...	caggctgtccac	cgaacacc
C.Bre	tgagttaa	ctgagttttctg--...708...agtattaaaagattctaatac	TTCATTTCAACTTC	-----	-----ctcctgatgttcatctcttt...	...2943...	caggctgtccac	cgaacacc
C.Jap	--agtttc	gttttgtttctgct...34...-tcttgtgtgtatacaccttt-	TTTTTgTTCTTC	-----TTCTTCTC	ggaagaagggtcctcctc-----	...3999...	caggctgtccat	caaacacg
	****	*	*	*	***	*	**	*****

id=74200 gene=M03A1.1 name=vab-1 segment=chrII.4582720.4586255.1 type=IN VIEW

Figure 21: CS=4.32



C.Ele	gtaagttg	ga-----tacttgaaaaga-----:::gtcaaattttgtgcttctttaaaataagaaaattgac--CTTCTtCTTTTCT
C.Bre	gtaagttt	aactattgggacataactacttgagaaaatcg:::gtcacatcttccttctc-----gtttactt-CTTCgTTTTcctCT
C.Rem	-----	caccactgggccaacaccacttgagaagatca:::-----TCTTCTTCTTCTTcT
P.Pac	gtaagtaa	ta-----ta-----:::atcatatt-----ggaaactatttgatccTTCTTaTCTTCTTCT
		* * * * *

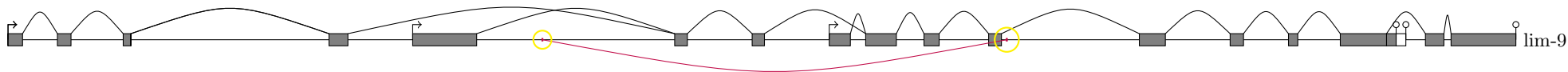
C.Ele	TTTgAATtctCTCgagCTCTctCTCTatTTTCaaAATtcaaaagaaaacgagtcctct-----...939...tcagaatcgcaa	gcatctcg
C.Bre	TC-----cgattccttcatatgatatg...1284...tcagaatcgaaa	acatttgg
C.Rem	TTC-----tttctttc-----acaatcgtctt-----...1550...tcagaatcgaaa	gcatctca
P.Pac	TCT-----tatagtttatccc--agataga...314...taagaatcgctg	tcattctca
	* * * * *	*** *

id=134532 gene=B0001.1 name=lin-24 segment=chrIV.12129617.12131924.1 type=IN

C.Ele	gtaagttg	gatacttgaaaa-----...1557...cacacacatcacccagaggcGATTaGAAGAGAGAGAGTGAGGGTTGGAAGAAGAAGAAG	-----aacgaaattagaagtgggat...648...tcagaatcgcaa	gcatctcg
C.Bre	gtaagttt	aactattgggac-----...1048...ttgatatgagaggcaaaaat-----GAAGGAAAAaGAA	-----Gtgagaggacggacatattta-----...708...tcagaatcgaaa	acatttgg
C.Rem	-----	caccactgggccaacaccac...1087...ttgaaatgggaatatagag-----GAAAAaaAGAAaa	-----GAGAAGG-ac-gacatatttacatacatt---...475...tcagaatcgaaa	gcatctca
P.Pac	gtaagtaa	tataaaataata-----...368...ctc-tattggttgtctagtcc-----AGAGaAAGAGAGAA	-----ggca-gtttacagtagtcgtc...57...taagaatcgctg	tcattctca
		* * * * *	* * * * *	*** *

id=134532 gene=B0001.1 name=lin-24 segment=chrIV.12129617.12131924.1 type=IN VIEW

Figure 22: CS=5.6



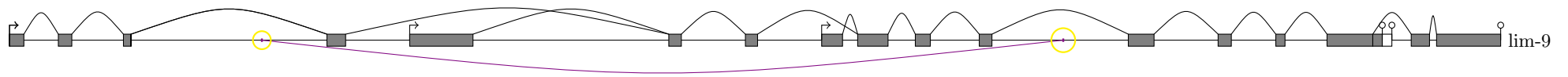
C.Ele	tttgctg	tgtaagttttt...1071...	----ttgat-----	agttttgacaaccg-----	GAAAGGAA	-----AACGAAAGGG-----	-----	gaccttgaatgaagtggaa...2531...	taatattttaca	gaaaagtc		
C.Bri	tttgccg	tgtgagttttg...872...	ttgagcctagt-----	tatctcggc	TCCTGTGAAAGATATCAAAAAGTTGTCAA	CGATAAAAATGTT	tat---	cacattatcagcaat-----	..4011...	tatatatttcca	gaaaagtc	
C.Bre	tttgctg	tgtgagtccttt...2717...	gagccacagt---	gatgatgttt-----	TAGAAAAGAGAAAAA	AacGGACGGA	cggaacaaaaaaactttt-----	..2183...	attcgtttcca	gaaaagtc		
C.Jap	tctggcca	tgtaagttttc...4322...	----aaatcgcg	ttgaattgga-----	GTGAGaTTCAGAGAA	ATCAGAGAAAA	atatacggccaagctctctca-----	...577...	atctgctttgca	gaaaagtc		
C.Rem	tttgctg	tgtgagttttt...3321...	----cataatcc	gctccgtgttc-----	CAGCtAAA	AACGAAA	-----aacgtacaaatc	tttc-----	gt-----	..1588...	ttctcttttca	gaaaagtc
	* ****	*** ** *		*	**	* * *		*			*** **	*****

id=234927 gene=F25H5.1 name=lim-9 segment=chrI_9195118_9198801_-1 type=IN

C.Ele	tgtgatgaggt-----	atattgt-----	:::::-----	-----	CTT	-----TTCtGTTTTCTtTTC-----	-----	aacttgacattctatgggac...4915...	tatcttttttca	gttaatc	
C.Bri	tgtgatgaggtacgttc-----	ttttgt-----	:::::-----	-----	AACATTTTATCA	TTGACAGCTTTTTGATATCTTTTACAGGA	-----	accagataaattgggtgag--..4742...	ataatttttga	gctaato	
C.Bre	tgtgatgaggttaagactcactgactcttctctttgt-----	:::::---	tctaattttttccactcaaa-----	-----	TTTG	TCTcTTTTTCTCTcTTTCTA	-----	tctctcttcttttttgggtg---..2074...	cctttattttca	gttaato	
C.Jap	cgaggtatggt-----	atattgtatt:::::	ctctcgaaaatTTTTTtTTCgaaatttagtcccccaacgcTTTT	-----	TTGCTGGT	ATTCTGGAagTCGT	ctctctctctctctctctt-----	..1597...	atcctttttgca	gctcatc	
C.Rem	tgtgatgaggtacgtt-----	ctctgcccatttgt-----	:::::---	ttcgataaagtgacactct-----	-----	TTCtGTTTTTTTGTG	-----	gaaaatacagagaatgagca...2982...	aatggaattgca	gttaato	
	* * * **	*****				* * * * *				** **	* * **

id=234939 gene=F25H5.1 name=lim-9 segment=chrI_9185060_9191549_-1 type=IN VIEW

Figure 23: CS=4.8



C. Ele	tcttac	ag	agttagttttca...1404...---aaaattaatggccatttca-----	-----	GAAAAAAGGAAaAAAG	---tgtatttaaactgttaggat...2173...ttataagtttca	gatgccaa
C. Bri	gcctac	ag	agtgagtcttg...381...-ttaaactttcgaaatattt-----	-----	TTCAAAATTTcGAATTtcTGAA	---ttctgaatttctgaattgt-----...4520...ggtccatttca	gatgccaa
C. Bre	tcatac	ag	agtgagtattcc...3785...nnnnnnnnntggtgactac-----	-----	CTGAaGAAAACAAA	acccccctgtg---aaactt---cat...1126...atccaacttaca	gatgccaa
C. Jap	tcgtat	ag	ggtgggttaaag...1390...-aaaaatcctcagtgaaaacgAAACTcTTTCtTTCTTTTGTGTTT	-----	-----	tcttttggattaaaaatcg-----...3146...tacgaatttga	gatgccaa
C. Rem	tcatac	ag	agtgagttcctt...436...ggaaaacctattgtaaaaaa-----	-----	TGGATTaTTTAAGAAAAAGAGAaAAAGGT	-aactttgacttttgcctcaat...2385...tcataacttaca	gatgcccga
	* * *	**	** *	*		*	* * * * ***** *

id=234923 gene=F25H5.1 name=lim-9 segment=chrI_9205726_9209382_-1 type=IN

C. Ele	tgtgatga	ggta-----	tttgt-tc:::::ttgaaaatgcaataatTTTTTgattggacagaaca-	CTTTTCTTTTcTTTC	-----	cgtccttcccgccgcccgtc-----...1838...tatcttttttca	gttaatct
C. Bri	tgtgatga	ggtacg-----	ttcttttgt-ta:::::cggatggcgccaatggc-----	TTCCAAATTTcGAAAaTTTTGAA	-----	tttttaaggattctgagatt...2329...ataatTTTgca	gctaatct
C. Bre	tgtgatga	ggtaagactcactgactcttcttcttgt-ta:::::ctgatggaatgtctaatTTTccactcaa	-----	TTTgTTTTCTCGG	-----	ccgaaaatccgtcgtctt-----...3618...cctttatttca	gttaatct
C. Jap	cgaggat	ggta-----	tttgtattgtacc:::::ctctcgaaaatTTTTTtcgaaatttagtcccaacgcAAACgAATGgtAGAAAGAAGAAAAGTTTgcaaaatacacag---tgaaaag...3177...atcctttttgca	-----	-----	-----	gctcatct
C. Rem	tgtgatga	ggtacg-----	ttctct-----	ACCTTTTCTTTTcTTTCtTTGAGAGTCTG	actcttttgacacttttga---	...4892...aatggaattgca	gttaatct
	* * *	****	*	*		** **	* * ****

id=234939 gene=F25H5.1 name=lim-9 segment=chrI_9185060_9191549_-1 type=IN VIEW

Figure 24: CS=4.8



```

C.Bri  gacgccgtgctttttctat...379...-----ccgaaaaaacctagtttaTCCTTTTCCTTTCC-----tgtctattgtattgaaaatt...1591...atTTTTctagcaccgatcgcg
C.Bre  gacgccgtgctttttctatt...406...ggcgacaacaaaaagaatc-----TCTTtcTTCCTTTTGGCTTATGcttccttcccacttgccagg...1102...tcattttcagcatcgatctg
C.Jap  ggccccgtgctttttctttt...121...-gcctcaacaaagagagccc-----TCTTTTCCcTTTCTTT-----cagtctctctaatgaattc...1307...ccaattacagcaccgatcag
C.Rem  gacgccgtgctttttctatt...423...ggcgacaacaaaaagaatc-----TCTTtCTTCCTTCT-ccttatgcttccttcctctt-----...1009...tgTTTTgcagcatcgatcag
* * ***** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

```

id=61304 gene=AH9.6 name=AH9.6 segment=chrX.2265833.2267426.-1 type=IN

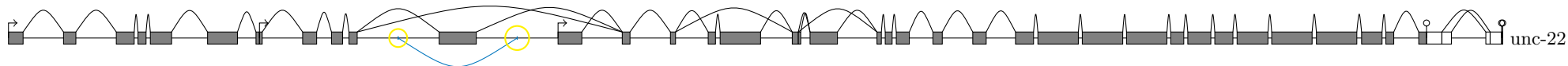
```

C.Bri  aaacaaattggtc---caatatgtgtgccaaagtGGAACA---GGAAGAGGAA-----ctcggttattacgaaacat...998...gagTTTTcaggtttattcct
C.Bre  agagagtttagtc---caaat-----TGTGGtGCAAAGtGGAACAGGAaaaggaactcaatcattatg-----...445...tgTTTTcagattattcct
C.Jap  ttgatatttagttgagtaagatctcca--AAAGtGGAAta---GGAaAGGA-----actcaatcattataaagcaa...117...cctcttacagattactcat
C.Rem  aaagtgtttagta---taaaatgtggagtaagtGGAACA---GGAAGAGGA-----acccaatcattttctattcc...173...attcctatagattactcct
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

```

id=61308 gene=AH9.6 name=AH9.6 segment=chrX.2264335.2265378.-1 type=IN VIEW

Figure 26: CS=9.88



```

C.Ele cctgatcc agatgaggaag...714...----acgtcggcctactattccacCCGACAAAAGTGACA-----aacggtactcgaaacagacacaagtacctcagaagctct:::::-----tcaactaattg-----
C.Bri ccggatcc agatgaggttag...573...----aagtcggcttactattcctcCCGACAAAAGTGACA-----aacggtactcgaaaaagacacaagtacctatgaagctct:::::-----tcaact-----aa
C.Bre ccggatcc agatgaggaat...613...----aagtcggcttactattcctcCCGACAAAAGTGACA-----aacggtactcgaaaaagacacaagtacctcagaagctct:::::tagtatttggttcaacttttttcgagttcaggctgaaag
C.Jap ccggatcc agatgaggttag...440...ctctcacgtcggcctgctat---TCCGACAAAAGTGAC-----aaacggtactcgaaaatgacacaagtactcgacaa-----:::::-----ctaacccc-----
C.Rem ccggatcc agatgaggaag...1755...----gtgactaacgaatagtctgTCAAGatGAACtACACgCCTGgatcg-----:::::-----
** *****
***** *
* *
**
* * * * **
* **

```

id=26690 gene=ZK617.1 name=unc-22 segment=chrIV_12003050_12005238_-1 type=IN

```

C.Ele aactccag cagtaatgtag...1410...----gaagtagaataaccacggggTGTCGTTTTTTGG--atatcccctcccgaatgag-----...1456...gtgtgttt--gtgc ccactgtg
C.Bri aattcaag cagtaatgtag...1083...----gaagtagaataaaaacggggTGTCGTTTTTTGG--atatcc-----aatgagaaaagaaa...1448...--cgactcgtgtgc ccactgtc
C.Bre aattcaag cagtaatgttcg...904...----gaagtgaataaccacggggTGTCGTTTTTTGG--atatcc-----aatgagaaagaga...1065...cccgactc--gtgc ccactgct
C.Jap aattccaa cagttgtgtag...1945...----gagaagcagaataaccattc--GTCGTTTTTTGGAtatatcc-----acgagcgggtgga...2286...tcgctct--gccac ccacttg
C.Rem aattccag cagtaatgtag...915...taagagaagtagaataaccaCGGGGTGTcGTTTTTTGG--atatcc-----aatgagaaaagaga...958...cccgactc--gtgc ccactgct
** * * *
**** * * * *
**** * * * * *
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* * * *
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****

```

id=26692 gene=ZK617.1 name=unc-22 segment=chrIV_11999648_12002590_-1 type=IN VIEW

Figure 27: CS=6.5



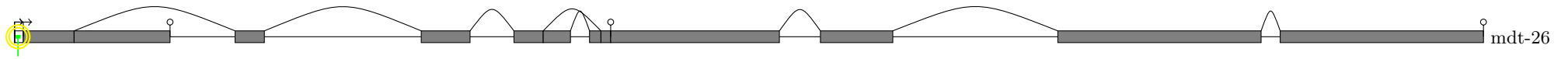
C.Ele	ttgggtac	t-----gaaaatacgtgtttcaattgt-----gttcccatcaaa-----ttttcagggtctcatc-----	ACGATCTACCGTAAT	--c--ccaatattgtgcctattta-...268...	gttgttttacag	gttgaaga
C.Bri	ttgggtgt	t-----tttttaattgtcttttaaagt-----ctttt--atca-----ttttcaggggcccctgattata	ACGATCTACCGTAATC	-ctatcataatttcttttctg---...261...	cgtattttacag	gttgaaga
C.Bre	ctgggttt	t-----tgTTTTTgttttcaattgt-----atttc--taa-----attgcagggtccctttt	TAACGATCTACCGTAATCTTAT	ttgtcattttcctatgatgc...268...	cgtattttacag	gtcgaaga
C.Rem	tgaaatat	tatgtgaagaccggtggtggcctaactttcgcaaaaattcgccaccaccgatctctggtgaaaacgcttttcagggtccc-----	GTAACGATCTACCGTAAT	--c--ccattgctttttctcatt-...291...	ttacattttcag	gttgagga
	*	*			*	
		** *				** ** *
		*				*
		** ***** *				*****
						** ** **

id=116272 gene=K04F10.4 name=bli-4 segment=chrI.6353609_6353973.1 type=IN

C.Ele	ttgggtac	tgaaaatacgtg...308...-----atttacgaaacgcagtagat-----	ATTACGGTAGATCGT	-tgttttacag	gttgaaga	
C.Bri	ttgggtgt	tttttaattgt...304...tggaacttttttagaaagaa-----	GATTACGGTAGATCGT	--attttacag	gttgaaga	
C.Bre	ctgggttt	ttgtttttgtt...309...aaagtctctt-----gaaatttct	ATAGG	ATTACGGTAGATCGTTA	--ttttcag	gtcgaaga
C.Rem	tgaaatat	tatgtgaagacc...365...ttagaaaattaatacaaaaa-----	ATTACGGTAGATCGTTAC	atttttcag	gttgagga	
	*	*			** ** **	
		** *			** ** **	
		** ***** *			** ** **	

id=116272 gene=K04F10.4 name=bli-4 segment=chrI.6353609_6353973.1 type=IN VIEW

Figure 29: CS=6.24



```

C.Ele  gtcGCCCAGCTcGGGct
C.Bri  gtcGCCCAGCTcGGGct
C.Bre  gtcGCCCAGCTcGGGct
C.Jap  gtcGCCCAGCTcGGGct
C.Rem  gtcGCCCAGCTcGGGct
*****

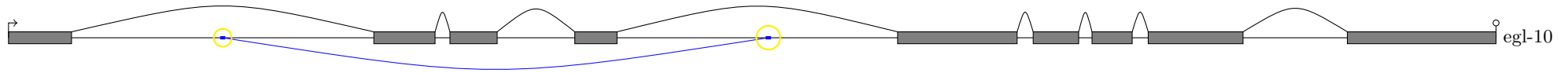
```

id=50366 gene=C25H3.6 name=mdt-26 segment=chrII_5661149_5661149.1 type=E5

C.Ele	tcGCCCA	GCTcGGGct	gtg	aatggatgg	cgcttgcg
C.Bri	tcGCCCA	GCTcGGGct	gtg	aatggatgg	cgcttgcg
C.Bre	tcGCCCA	GCTcGGGct	gtg	aatggatgg	cgcttgcg
C.Jap	tcGCCCA	GCTcGGGct	gtg	aatggatgg	cgcttgcg
C.Rem	tcGCCCA	GCTcGGGct	gtg	aatggatgg	cgcttgcg
*****	*	*****	*****	*****	*****

id=50367 gene=C25H3.6 name=mdt-26 segment=chrII_5661150_5661170.1 type=E5 VIEW

Figure 30:



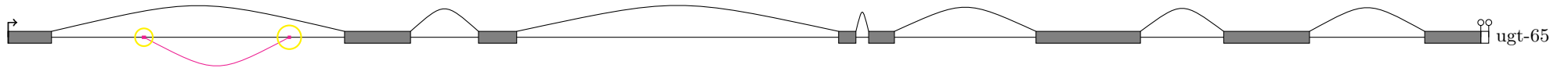
C.Ele	accaagat	tgaggtagatt...1789...----	taatat-tttatgttcctcat	CCTTC	-----	TCTT	tCTTCGTTTTTCT	tCTGTTTCTTGT	-----	gttgtgtcatc	cggtg	-----	gta...719...cgtgacgggtt	acagggta	
C.Bri	tccaagac	taaggttggtt...497...--	agctgacatattcatatccg	-----	-----	-----	CTTCTCTTTTTT	-----	-----	ataattctga	acggctc	-----	att...2872...catcaatcatt	tcagggtg	
C.Bre	tccaagat	tgaggtagttc...2451...----	taatat-tttatgttcctctt	CCTT	caTCTT	gtCTTTCTTCTTCGTTTTTC	atCTGTT	ttCTTG	tTGTGT	tgTCGT	aTATTC	tttccgccgg	tccagc	---ttt...816...aatcttcatt	ttagggtg
C.Rem	tccaagat	tgaggttgttc...1193...tt	cattaaaagtgtcataca	-----	-----	TTCG	tATTaTATG	cTTCATCTTCT	tTTCT	-----	ccgaacaaat	cactaaaat	...1459...tcgcatattgtt	tcagggta	
	*****	* ***** *	* * * * *				** *** ***** *				*		**	*****	

id=252772 gene=F28C1.2 name=egl-10 segment=chrV_12460169_12462777_-1 type=IN

C.Ele	agctcaat	acaagtttgtga...762...---	aggggtgtagatagatcgag	-----	AGTAAGGA	agAATAAGAAA	aAAAC	GAAGAAGA	aGAAG	-----	cgtgctttccc	cttttgatt	...401...aatccaggacac	tcagggtc	
C.Bri	ggctcaat	acaagtttgtga...1638...--	aataagaaaaaataagaag	-----	-----	-----	-----	GAGAAGAAGA	AAG	-----	aagaagaact	ggccataag	---...768...aatccaggacac	tcagggtg	
C.Bre	ggctcagt	acaagtttgtga...107...ct	catccacttacattgtgt	GAATG	cGTGAATGACG	tCAAGAACGGG	AAAAACGGG	AAGAAGA	AAGGAAGG	-----	-----	-----	---cagttagtgtatgtgtcttg	...1408...aatccaggacac	tcagggtg
C.Rem	ggctcaat	acaagtttgtta...668...---	agtgagaagcagtaggaaaa	-----	-----	-----	-----	AGAAGAAGA	AGATGGATGTGAATGTGG	Agg	cgccg	cgagagccaatc	---...688...aatctaggacgc	tcagagtc	
	***** *	***** * *	* * *					***** * * *					**** ***** *	***** **	

id=252778 gene=F28C1.2 name=egl-10 segment=chrV_12458085_12459350_-1 type=IN VIEW

Figure 31: CS=4.72



C.Ele	gtaagtgt	tgtatgacgtg-----...278...	--acgacatttgaatggatga	GATTC	tcGAGG	tcATTT	ctcaaga-----gatatagtcttgc...1163...	tcagattattcg	acgatgga
C.Bri	taagctga	agtatgtcacga-----...313...	agacgacatttgaatggat	GAGATT	cTTGA	gTGC	Attctcaaga-----gatatagtct---...1279...	ccagattgtccg	atgatggc
C.Bre	gtaagtga	ag--tgtcacgaaa-----...1085...	aaagaagcctcccatcaca	GCAGTAAACG	a-cTCAT	-----aaaacgggtcgaatcggtt---...335...	tcagactctcag	atgatgga	
C.Rem	gt-----a	ag--tgtcacgaatgtggg...1198...	aactgaggcctcccatcaga	GCAGTAAACG	a-cTCAT	-----aaaacgggtcgaatcggtt---...364...	tcagattggcgg	atgatggc	
		* * * *	* * ** * * ** ****			** * ** * * *	**** * *	* *****	

id=210086 gene=F08G5.5 name=ugt-65 segment=chrIV_12425346_12426867.1 type=IN

C.Ele	gtaagtgt	tgtatgacgtg-----...1281...	--gcctgcgtgactgacgtcaa-----	AAATCTTC	cGAATC	-----gcg-----atgatgttcccctggga...163...	tcagattattcg	acgatgga	
C.Bri	taagctga	agtatgtcacga-----...1465...	gtgctcgtgcgctccgtgac	TGAC	TCAA	AAATCTT-----cggaatcgcg-----a-gacgttccc---...127...	ccagattgtccg	atgatggc	
C.Bre	gtaagtga	ag--tgtcacgaaa-----...1131...	--gaaatcggttgaaaagcaa-----	GTGATg	CGTTT	gtATTGC	agtcatagccacaagaaga-----...287...	tcagactctcag	atgatgga
C.Rem	gt-----a	ag--tgtcacgaatgtggg...1242...	tcgaaatcggttg--aaagcaa-----	GTGATg	CGTTT	gcATTGC	agtcatagtt--tgaaagactt-----...318...	tcagattggcgg	atgatggc
		* * * *	* ** * * * *	* * * *		* **	**** * *	* *****	

id=210086 gene=F08G5.5 name=ugt-65 segment=chrIV_12425346_12426867.1 type=IN VIEW

Figure 32: CS=4.8



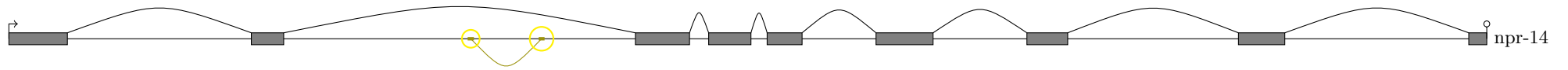
C.Ele	gtaagatg	aatgataaatca...428...-----gtccatccttgtcctggtctgt-----	CCGTCtGGTCCTGGtGCTCctGGAGCTCCA	-----tctggtccagctggtccggc...1863...tcagaactaatg	ccagttgc
C.Bri	gtaagatg	agtgaatatttt...247...--ggcgtttcctgctggtcctt-----	GTGGTCCTGGGGCTCCtGGAGCTCCTGG	ctgctcttgtccacgttctc----...3865...tcagaactgatg	ccggtggc
C.Jap	agtaaagg	aacaagtgattt...436...--ggc-tgtccggctggtccctc	TTGTCCtGGTTGtCCGTCtGGTCCTGGGGCTCCtGGAGCTCCG	-----tctggtccagctggtcctgg...2381...tcagaactgatg	ccggtggc
C.Rem	gtatgatg	aatgagtttatt...248...ccagcaggtccttgtggtcc-----	TGGGGCTCCtGGAGctCTGGGA	gtccttgtccgcgttgccca--...1996...tcagaattgatg	ccagtgcg
	* * *	*** * ****	*** *****	** **** * * *	***** * *** ** * * *

id=210090 gene=F08G5.5 name=ugt-65 segment=chrIV_12427476_12429860.1 type=IN

C.Ele	gtaagatg	aatgataaatca...583...--ccagcgtgtccatcatctcc	TGGAGCTCCtGGGGctCTGtGGTctGGTGG	-----tctggtggcagttgtttg...1705...tcagaactaatg	ccagttgc
C.Bri	gtaagatg	agtgaatatttt...304...--tccacgttgtccgtcctttc	CTGGGGCTCCtGGGGctCCTGGGctCCGT	-----catttctggtgctccggcg---...3806...tcagaactgatg	ccggtggc
C.Jap	agtaaagg	aacaagtgattt...604...--cctgcatgtccatcatctcc	TGGAGCTCCtGGGGctCCTGcGGTctGGTGG	ctgtgttggctgagctccaca...2210...tcagaactgatg	ccggtggc
C.Rem	gtatgatg	aatgagtttatt...422...tgtcctggtgtccgtctgg-----	TCCTGGtGCTCctGGAGCTCCA	-----tctggtccagctggtcctgg...1823...tcagaattgatg	ccagtgcg
	* * *	** ***** *	***** ***** * **	* *	***** * *** ** * * *

id=210090 gene=F08G5.5 name=ugt-65 segment=chrIV_12427476_12429860.1 type=IN VIEW

Figure 33: CS=3.84



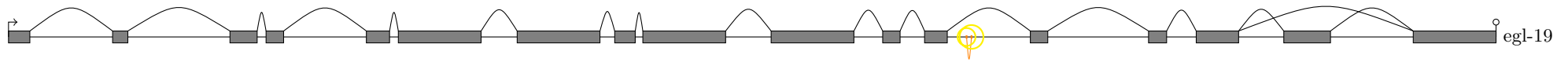
C.Ele	gtctatgg	taggtcggatgggaacagggaaacagggggaac:::::aagatcattcagacacatcaggggaaactacaacggggtg-----TCTGGAAAATTTcGGAA-----caag---atTTTTCCAAAagat...414...tatttttcagc	gca
C.Bri	gtcaatgg	t-----gagttacagcgcTTTGAAcTTTACTGAGGCTaAGGAgTTTTGTAG--TTGTAGC-ctaagcctcagtaaaattc-----...4677...gaattttccagc	gaa
C.Bre	gtcgatgg	:::::aaatgagcc-----gagttacagcgcTTTGAAcTTTACTGAGGCTaAGGAgTTTTGTAG--TTGTAGC-ctaagcctcagtaaaattc-----...4677...gaattttccagc	gca
C.Jap	gtctatgg	t-----gagttacagcgcTTTGAAcTTTACTGAGGCTaAGGAgTTTTGTAG--TTGTAGC-ctaagcctcagtaaaattc-----...4677...gaattttccagc	gaa
C.Rem	gtcgatgg	taggtggagaggttc-----gagttacagcgcTTTGAAcTTTACTGAGGCTaAGGAgTTTTGTAG--TTGTAGC-ctaagcctcagtaaaattc-----...4677...gaattttccagc	gca
	*** ****		*** *** *

id=202625 gene=W05B5.2 name=npr-14 segment=chrI_13051352_13053378.1 type=IN

C.Ele	gtctatgg	taggtcggatgg...1724...cctgccagagccaaaagc-----TTCCAGAATTTCCAGA-----aagtgaacacattttgtca----...222...tatttttcagc	gcaacgct
C.Bri	gtcaatgg	taagtactaca...232...---aaagtttagaacattaaa-GCTACAA--ACTACaAAAACCTCTaAGCCTCAGTAAAAcTTCAAAtccttc---taactgcctcatt...4509...gaattttccagc	gaaatgct
C.Bre	gtcgatgg	taggtggcctaat...3559...---ggtgggtggagagggcttatGGCTACAAAACTACAAAAaATTGt-----GTTGaTTTG---actgggagaactacagagaa---...841...actttttccagc	gcaacgct
C.Jap	gtctatgg	ttagttctttt...493...---aaaagtgtcaaaaagtcact--GAAAAAAATCAGAAAAAATT-----TTTTTTTcaaaaagtaccca---...2112...ttgttttacaga	gaaacgct
C.Rem	gtcgatgg	taggtggagagg...93...---ttgctgaggtctaactcatt--TTGTAGTTTGTAGTCTT-----agcctcagcaaaactgaaa---...4352...tatattccagc	gcaacgcc
	*** ****	* ** *	*** *** * ** **

id=202625 gene=W05B5.2 name=npr-14 segment=chrI_13051352_13053378.1 type=IN VIEW

Figure 34: CS=4.8



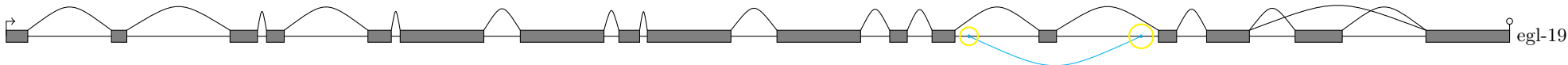
C.Ele	-----caggtaaa	aggatcgaatgtgatat:::::---ttg---cggacgtcttcaatttcccttcttcagtt--	GAAATGGAAATGGGAGAAGAAGAAGGaGAAG	-aagatgcttccccttcttct...349...acttcaggccgg	actccgca	
C.Bre	-----gaatccagat---	gacagaaatgtgatat:::::cogttgtgaaggacgtcttcaattTCTTCTTCTTCTTcGGTT	-----	gaaaattggaatcgaagacg...354...attccaggccgg	tctacgta	
C.Jap	gagaaagaggaatccagtggga	gtgggggaaatgtgatat:::::tttttgagacggaaattggga-----	-----GGAGaAAATgGAGAAGAAGA	agaagaagaagaagcactcg...331...gtttcaggccgg	tctacgca	
C.Rem	-----tcaggt-ac	ggaacagaaatgtgatat:::::---ttg-----	GAAG	-aGAGAAGAAAATgaGAAGA	agtggtttgcgacgtcttca...412...ttttcaggccgg	actccgta
	***	*****	***	*	* ***** ** * * *	

id=250470 gene=C48A7.1 name=egl-19 segment=chrIV_7414085.7414586.1 type=IN

C.Ele	---caggtaaa	aggatcgaat---	g...95...-----	agaagaaggagaagaagatg	CTTCcCCTTCTTCTTCTTCA	tcTCTcaAATTTC	-----	ttgcaacgtcgatcgatgc---	...309...acttcaggccgg	actccgca
C.Bre	gaatccagat--	gacagaaat---	g...95...tctcttcttctcggttgaa-----	-----	-----	AATTGGAA	tcGAAGAcGAAGA	--tgcttcttcttcttctcctc--	...330...attccaggccgg	tctacgta
C.Jap	-----ga	gaaagaggaatccagtgg...151...	-----	agaagcactcgtttgatgca-----	-----	TCTTCTTCTC	aaATTCTCC	-----	aaacctcgttcttctcctcgt...282...gtttcaggccgg	tctacgca
C.Rem	---tcaggtac	ggaacagaaat---	g...32...-----	agaagaagtggttgcgacg-----	TCTTCaATTI	tcTCTctTC	---TTCTTC	gatggaattggaatagaag-----	...372...ttttcaggccgg	actccgta
		* * * * *	*	* * *			*		* *****	** * * *

id=250470 gene=C48A7.1 name=egl-19 segment=chrIV_7414085.7414586.1 type=IN VIEW

Figure 35: CS=3.84



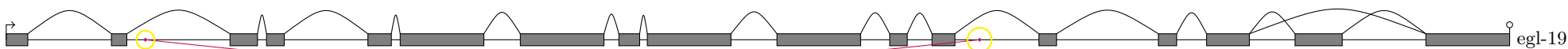
C.Ele	caggtaaa	aggatc-----gaaatgtgatattg-----gaaaa-----aaggggaaaa-aac
C.Bri	caggtaac	tggata-----gctggaaatg-----acgaagaaaa--atgagaagtagaagacgtt
C.Bre	-----	-gaatccag----atgacagaaatgtgatattgaaatggg-----acgacgaaaaaaa-----aagaagaaaa-at-
C.Jap	gagaaaaga	ggaatccagtgggagtgggggaaatgtgatatatctgggtggggaaaaatgtgagcaacatgatgaagaagacgtggtgaggagaaga-ggc
		* ** * * * * * * * * * * * * * * *
C.Ele	gcaaattgag	AAGTGGTTTGC GGACGTCTTCAA TTTCC TTCTT-----cagttgaaattggaatggga...385...acttcaggccgg actccgca
C.Bri	tcgcatgtcttcaa	-----TTTTCTCTCTcTTTtctcctttttgagatggaaa-----...384...cttcaggccgg acttcgca
C.Bre	GAGAAGAAGAAGAGGT	-----tcttcttccgtttgtgaag---...408...attccaggccgg tctacgta
C.Jap	ctgtgacatc	-----TTCTCTCTTTTtTTG-----agacggaaattgggaggaga...366...gtttcaggccgg tctacgca
		* * * * * * * * * * * * * * *

id=250470 gene=C48A7.1 name=egl-19 segment=chrIV_7414085_7414586.1 type=IN

C.Ele	agagtgag	tttgtctaatt...1005...aatgcgaaaaaggctt--act----AAGAGGAAAcTTGAAatGATGTCGTtGAGCaCACTTgaaaaatctcaagtctgcat...49...cttcagagacc acactctc
C.Bri	agagtaag	tcaaacgcact...615...--ttcggacacctcctctaatt--AAAAAGAGGAAAA-----accttatgaatagaaaaaa...87...tttcagagacc tcactctc
C.Bre	agagtgag	ttggaaatatt...48...-tctcgagca-cacttctctgtt-----GCCTTTCTCTcTTCTTcacacacaatgcactttctc...634...cttacagagacc tcactctc
C.Jap	agggtgag	tgaacgagttgt...815...-gtgcgtgtg-ctactagaaaaCAAAAAAGAAGAGAA-----aaaaaagaaaaagatagaaa...26...cttcagagacc ccactcac
		** ** * * * * * * * * * * * * * * *

id=250472 gene=C48A7.1 name=egl-19 segment=chrIV_7414692_7415846.1 type=IN VIEW

Figure 36: CS=5.52



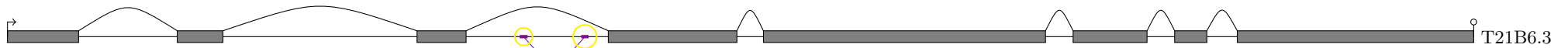
C. Ele	-caggttag	tattttatttg...65...-----tggaactgataattcttac-	GAAGcA	AGAAGAA	-----tcttcatctgttgatagat...1618...atttcaggccgc	cgtggcag	
C. Bre	-caggttag	tagtacactttt...958...acaaa-aaatttgaaatgag-----	TAGT	aGAGAA	tgGAAGGAGAGATTgGGAGG	ggtcatagtttcaaatgac...1186...atttcaggccgc	cgtggcag
C. Jap	-caggtcag	tttttaattttt...1839...tttttttctccca-----tttcac	TGGAAGA	AGAAGAA	aGAAGG	-----cgaaaaaggacagaacatct...1022...tttttaggcagc	cgtagcag
C. Rem	acaggt-at	ttctttactttt...806...atcaatctctttcggaaatg-----	TTTAGAA	GGGAGAAAAGAGA	gaGTTG	ttatgagacactttatcgtc...1548...tttcaggcagc	cgtggcag
	***** *	* * * **	* * * ** *		*	*** ** ** *	*** ** *

id=250450 gene=C48A7.1 name=egl-19 segment=chrIV_7406212.7407971.1 type=IN

C. Ele	----caggtaaa	aggatcgaat-----g...102...ggagaagaagatgcttcc--cc-----	TTCTTCTTCTTC	----atcttctcaaatttctttgc--...324...acttcaggccgg	actccgca		
C. Bre	gaatccagat--	--gacagaaat-----g...62...-----tcttccgtttgtgaaggac	TCTTCAATT	tTCTTctCTTCTTCTTcgGTTG	aaaattggaatcgaagacga--...353...atttcaggccgg	tctacgta	
C. Jap	-----ga	gaaagaggaatccagtgg...68...--aggagaagagcctgtgaca-----	TCTTCTTCTT	tTTTT--TTG--	agacggaaattgggaggaga...366...gtttcaggccgg	tctacgca	
C. Rem	----tcaggtac	ggaacagaaat-----g...36...-----gaagtggtttgcgacgtctt--	CAATTTTCTTCTTCTTCTT	gaTGGG	-aattggaatagaagtggaaa...366...ttttcaggccgg	actccgta	
		* * ** *	* *	***** **	** *	* ** ** *	** ** *

id=250470 gene=C48A7.1 name=egl-19 segment=chrIV_7414085.7414586.1 type=IN VIEW

Figure 37: CS=4.32



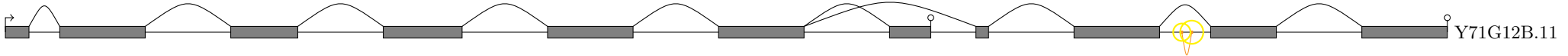
C.Ele	ccagagtg	ctccgcaggtaa...54...-tcaagcaatatctataacaa	ATGACA	CTCA	tcCGCA	aatatctctttttctgcttc...118...aaagttcaactt	gttttcag
C.Bri	ccagagtg	ctcggcaggtaa...58...-caagcaatatctataacaaa	TGACA	CTCA	tcCGCA	aatatctctttttctgcttc...204...taagcacaaga	agtttcag
C.Bre	ccagagtg	ctcggcaggtaa...41...-tcaagcaatatctataacaa	ATGACA	CTCA	tcCGCA	aatatctctttttctgcttc...135...aaaatgaata	attttcag
C.Rem	ccagagtg	ctcagcaggtaa...41...gtcaagcaatatctataaca	AATGACA	CTCA	tcCGCA	aatatctctttttctgcttc...133...aagaataagac	tttttcag
	*****	*** *****					*****

id=13034 gene=T21B6.3 name=T21B6.3 segment=chrX_10947840_10948091_-1 type=IN

C.Ele	ccagagtg	ctccgcaggtaa...164...cgtcttcgaaatttgatctc	TGCG	ttTGGGGTCAT	gaagacta	-----aaaaacattaacttcacaaa-----	aaagttcaactt	gttttcag
C.Bri	ccagagtg	ctcggcaggtaa...226...tttcttcgaaattcgatctc	TGCG	ttTGGGGTCA	cacaggctggcacctcaagcagtgacaaaaaagagcagataaagaaaacagcagataagcacaagaa	-----aataaaaaacagaca---	caggaaa	-gttttcag
C.Bre	ccagagtg	ctcggcaggtaa...168...cgttttcgaaatttgatctc	TGCG	ttTGGGGTCAT	ggaggtta	-----aataaaaaacagaca---	caggaaa	-----aaaaatgaata
C.Rem	ccagagtg	ctcagcaggtaa...168...gcttttcgaaattcgatctc	TGCG	ttTGGGGTCATT	gaggtta	-----agggacaaaaaaa-----	cgagaaa	-----aagaataaagac
	*****	*** *****				**** *	***	** **

id=13034 gene=T21B6.3 name=T21B6.3 segment=chrX_10947840_10948091_-1 type=IN VIEW

Figure 38: CS=2.4



C.Ele	gaacacgg	tgagctattt...	69...ttc	cataattcta-tattctg	TATTCCTGCCCGCGGCCGc	TGATATGTCTGGTAT	-----
C.Bri	gaatacgg	tagtgaaagt...	473...ata	cttataatcag	TTCACCCACCGGCCGc	TGATATGTCTGATAtt	CTTGGGTTATct
C.Bre	gaatacgg	tagtggaatt...	58...-tc	ctttcctctca	CCGGCCGc	TGATATGTCTGGTA	-----
C.Rem	gaatacgg	tagtggttt...	48...-t	ctattctactattcca	CCCACCCCTGGCCGc	TGATATGTCTGgTATTC	TTGGgTTCg
	*** **	* *		* *		* *	***** **

C.Ele	-----tcttgggttgaacttcag-----					...131...	cacgttttcagc	aagaaatc
C.Bri	TTGTTGTA	AACTCAAGTATTAGACGTATCG	aCGGCCGGc	TGGGtTGAA	tcattattattta	gaaaa-----	...440...	atgttttcagc
C.Bre	-----ttcttgggttcattccttac-----					...144...	caatgtttcagc	aagaaata
C.Rem	-----atactctgaaaaacgaacca...					118...	aaattttcagc	acgaaatc
						** **	*****	* *****

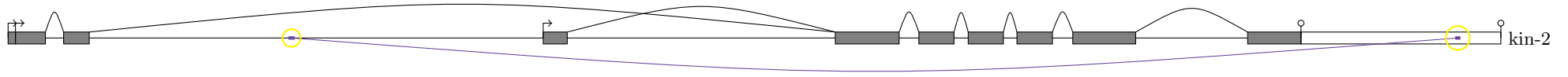
id=79309 gene=Y71G12B.11 name=Y71G12B.11 segment=chrI_1738530_1738828.1 type=IN

C.Ele	gaacacgg	tgagctattt...	136...--	acttcagcgttgaaccgc	-----
C.Bri	gaatacgg	tagtgaaagt...	473...---	atactataatcag	TTCACCCACCGGCCGc
C.Bre	gaatacgg	tagtggaatt...	112...---	tccttactctga	accagtt-----
C.Rem	gaatacgg	tagtggttt...	103...g	gttcgatactctg	aaaaa-----
	*** **	* *		* **	

C.Ele	-----	ATATTAGACGTATCG	aCGGCCGGc	GGGCAGGt	AATGg	ctggtaagtttgagagac-----	...62...	cacgttttcagc	aagaaatc
C.Bri	TTGTTGTA	AACTCAAGTATTAGACGTATCG	aCGGCCGGc	TGGGtTGAA	---tcattattattta	gaaaa-----	...440...	atgttttcagc	acgaaatc
C.Bre	-----	TATTAGACGTATCG	aCGGCCGG	-----	atcgggtgaga	atcttata...	90...	caatgtttcagc	aagaaata
C.Rem	-----	CGAACCAAAGTA	gCAGACGTATCG	aCGGCCGGa	GGGTGGG	-----aatttatg	ctatggctatgg-----	...64...	aaattttcagc
		** *****			*	*		** *****	* *****

id=79309 gene=Y71G12B.11 name=Y71G12B.11 segment=chrI_1738530_1738828.1 type=IN VIEW

Figure 39: CS=6.24



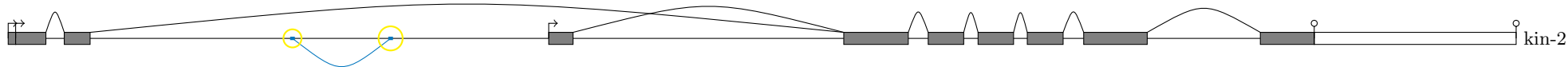
C.Ele	acaacgag	cacaggttagtt...701...-----cgtcggggtcctctggagaa	AGA-GAaGAAAaAGAAgaAGAGGAAGAAGA	-----aaaagaggcactagtttagct...2536...caccaccaagga	atgtgatg
C.Bri	gcaacgat	cacaggttagtt...1323...-----tgacgaggatgtgaagaata	AGAGgAAGAAAAG-----cccc-----gaggcagatttcatt...2015...cgccactgagga	-----gaggcagatttcatt...2015...cgccactgagga	atgtgatg
C.Bre	gcaacgag	cacaggttagtt...1022...gttttttgccagggtcctct-----	GAAGAAGAGGAAGAAGAAAAAGAaGAAG	-----cagcagtagcagaaaagagg-----...2455...agccactgagga	atgtgatg
C.Jap	gcaacgat	cacaggttagtt...1436...---aatgtgtgagctcactgtga-	AGA-GgaGAAAaAGAGG	-----aaaacgacgaagccaatagc-...1916...gttcacaagga	atgcgatg
	*****	*****	** * ** *	** *	* **** ** * ** *

id=20480 gene=R07E4.6 name=kin-2 segment=chrX.5974227_5977556_-1 type=IN

C.Ele	actgatga	cctaatacggattacaatccgtttccccgcat:::::gtcacccttatccagcattgcaagtctcttatctacacc	TTTTCTTgTCTCTTTTTTTTCaTTTCTI	-ccaccacatt---ttccactaga--...106...aaaatttgaag	ttggtggt
C.Bri	gctgatga	cctaa-----tttgccacatac:::::---ccttta-----	CTTtTTCTTgCTTT	-----cttaattttggattcctc-----...845...aaaatttgaag	ttggtgct
C.Bre	actgatga	cttaa-----ttggcc-----:::::-----	CTTCTCTTTTTTCTCTTgaCCTCTaTTTTI	tcctcat-----ttccgcaaagt...983...aaaatttgaag	ttggtggt
C.Jap	actgatga	cttaa-----tttggc-----:::::-----	TCTCTcTTTCTTCT	-----cagtctccatctt---cccgatc-----...742...aaaatttgaag	ttggtggt
	*****	* **	** * *	* *	***** * ** * *

id=20494 gene=R07E4.6 name=kin-2 segment=chrX.5970612_5971659_-1 type=E3 VIEW

Figure 40: CS=4.32



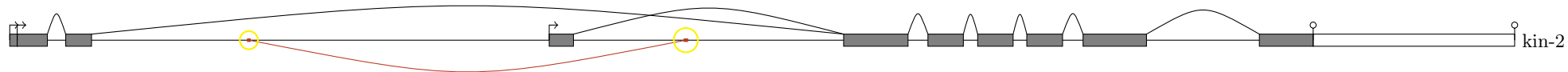
C.Ele	acaacgag	cacaggttagtt...697...-----tttcgctcggggtcctctgg-----AGAAaGAGAAGAAAAA--gaagaagaggaagaag-aaa...2553...caccaccaagga	atgtgatg
C.Bri	gcaacgat	cacaggttagtt...98...-----ctggtgaagtacaaactgtc-----AGAGAAGAAGGGAGGA	atgtgatg
C.Bre	gcaacgag	cacaggttagtt...1019...----gtcgttttttgcagggtcc-----TCTGAAGAAGAGGAAGaAGAAAAAG--aagaagcagcagtagcagaa...2461...agccactgagga	atgtgatg
C.Jap	gcaacgat	cacaggttagtt...1436...-----aatgtgtgagctcactgtga-----AGAGGAGAAaAAGAGGAAAAA--cgacgaagccaatagctaga...1912...gttcacaagga	atgcgatg
C.Rem	gcaacgag	cacaggttagtt...796...aaaatgcaattaggtcaaaCTTCTTcTTCTTcTCTTTTC-----cattgcctcttcattttct...2339...cgccactgagga	atgtgatg
	*****	*****	*** ****

id=20480 gene=R07E4.6 name=kin-2 segment=chrX.5974227_5977556_-1 type=IN

C.Ele	acaacgag	cacaggttagtt...1012...-ttgctcttcggagc--atcgca---TTTTTCTTCTCtTTCT-----gccgctccttaatgtccat-----...2238...caccaccaagga	atgtgatg
C.Bri	gcaacgat	cacaggttagtt...818...aaatcaggtcaaaaa--ttcttTCCTTTTTCTTCTTcTTCT-----caccctctcacatatatggt-----...2514...cgccactgagga	atgtgatg
C.Bre	gcaacgag	cacaggttagtt...1228...ccattggctcagccg---ccgagCTTTTTCTTCTTTTTCTTCGGA-----ccgggtttttgtgaaagaa-----...2253...agccactgagga	atgtgatg
C.Jap	gcaacgat	cacaggttagtt...2055...---gacggcacatgtgtatTTTT---TTTTTCTTCTTCTTCTTT---ccacccctctcttgct-tgct-----...1293...gttcacaagga	atgcgatg
C.Rem	gcaacgag	cacaggttagtt...1004...-tttttcgctcagagg--acctct-----GAAGAAGAaaAAGAAaAAGAAGaagaagaagaagcaaaaag...2130...cgccactgagga	atgtgatg
	*****	*****	*** ****

id=20480 gene=R07E4.6 name=kin-2 segment=chrX.5974227_5977556_-1 type=IN VIEW

Figure 41: CS=4.8



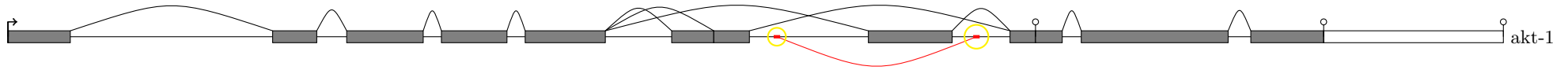
C. Ele	acaacgag	cacaggttagtt	-----gagttg:::gtc-----	aaacatcttcctgtg--	TCTTTTCGTCATTCC	tccgcgttatggctcgaat	-----	...2695...	caccaccaagga	atgtgatg		
C. Bri	gcaacgat	cacaggttagttgcag	-----ggatgacta:::atg-----	AGGTCAA	aATTCTTTCCTTTTTC	ttCTTC	-ttctcacctctcacatata	-----	...2518...	cgccactgagga	atgtgatg	
C. Jap	gcaacgat	cacaggttagttcgtagtgtcgcgaacttta	:::acgttcttaggtttaaaaaattt	ctaagaccttagctat	TTCCTGTTTTCaTTTTCa	ttcaccttttctgttcctt	-----	...131...	gttccacaagga	atgctgatg		
C. Rem	gcaacgag	cacaggttagtt	-----:::gtc-----	ACCAGAACCAGTTCAGTC	tTTGTT	-----tgct-----	agagaggggtatcggt	...3115...	cgccactgagga	atgtgatg		
	*****	*****							*	***	***	***

id=20480 gene=R07E4.6 name=kin-2 segment=chrX.5974227_5977556.-1 type=IN

C. Ele	tccaaagc	ctaaggtgatag...311...	-----ggatgaatgatgagcggcgt	---	GGAATGA	aaTGAAA	aaAAGG	-----	ggaagcgtggaaccttgat	-----	...585...	aaatcttaacat	tt---caggaa
C. Bri	acaaaaat	caagaaggtaaa...503...	tcatccgtcagatgaatgat	-----	GAAGT	GAAA	aaAGGGGAAGGGTTTTG	gaACCT	tgatggagcagcagaaaaaa	-----	...591...	---tattgattc	ttttgtaggaa
C. Jap	gccccaaa	cgacgacgaag...659...	tacaattatccgcgacaat	-----	TGAAGGGAAAATGGGGA	-----	-----	-----	ctagcgccaactgtctttct	-----	...553...	aaatcttgaatt	tt---caggag
C. Rem	taccaagg	ttaaggtgaata...941...	-----cgaacaaaaaagtgagggtc	AGTAAtt	GACTGA	ACTGGTTCTGGT	-----	-----	cattcaaaatttctatttag	...66...	aaattgtattgt	tt---aaggaa	
	* **	* *	* *		***	*	*		*		* **	**	***

id=20482 gene=R07E4.6 name=kin-2 segment=chrX.5973170_5974148.-1 type=IN VIEW

Figure 42: CS=4.32



```

C.Ele gaaggttc gacgatgaagaatctgaatgacgagccgaacatagattatt-----ttgttt--caaaa-ATGTTTACAACTATCCGCagttgaatTTTtagtaggat-----...191...tactgcaggaac tgaataac
C.Bri gaaggttg gcccaactttgagctgattgatgaatcaga---agaaatct-----ggacaagatcgttcgataaaaCATGTTCTACAACTATCCGTT-----ctcat-catataagtttagtag...220...tcctgcaggagc tgagatac
C.Bre gaaggttc gctatc gatga-atcgaataaggaaccatg---atatgatt---ggatggtacattttactat--caaat-ATGTTCTACAACTATCG-----ctagtgc-tagactacggtag...240...tcctacaggagc tgaatac
C.Rem gaaggttc gcctttcatcacgccgaatgatgaatcgaa---aagttatttgatgatggtacatagaaatct--ca-AAAATGTTCTACAACTA-----cccacacttaaaaatatata...254...cttctcaggagc tgaagtac
***** *           ** * * * * *          *          *          *          *          *          *          *          *          *          *          *          *          *

```

id=83975 gene=C12D8.10 name=akt-1 segment=chrV.10251008.10251301.1 type=IN

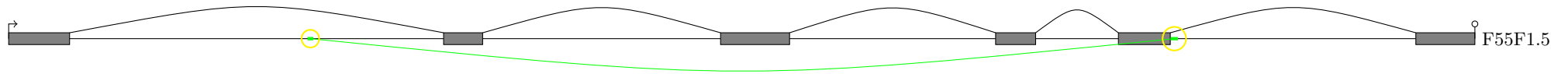
```

C.Ele gaaggtta gaaaa-tgttta-----t-----ttatagaagtagaatacagtagtc-----acata-----GCGGATAGTTGTAGAACAT--gtaaaact--aagaaaactat...50...tttttaagcttg aaaatttg
C.Bri gaaggttc g--gaacagctttttgataggttagaattatg---tagatc---taaga---aaatcagatattcAGCGGATAGTTGTAGAACATG---aatcgttttttaattgacct...58...ttttgtagctgg aaaatttg
C.Bre gaaggtta gaagagctgcttagtcttgactt-----ctttgacagtagatcattagagcctctaattcaga-----GGATAGTTGTAGAACAT--caaatggttttt--atgtacca...60...tcatttagcttg aaaactta
C.Rem gaaggttc g--gaattgctt-----tatattagaatagagagaatagatcactatagaa---ttagtagacagga-----TAGTTGTAGAACATTTTcaagtattttcaaaagaaca...65...gttttagcttg aaaatttg
***** * * * * *          *          *          *          *          *          *          *          *          *          *          *          *

```

id=83977 gene=C12D8.10 name=akt-1 segment=chrV.10251509.10251651.1 type=IN VIEW

Figure 43: CS=7.44



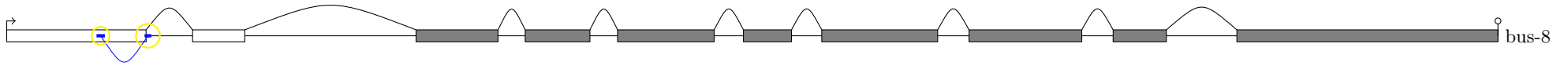
C.Ele	caatgacc	atgtgagtttgt...1319...-caaaggaagttagtttcca	GACTACGGAAATT	-----	ggcaagaacagagtcattc...249...aactaattttac	aggctctgt
C.Bre	caatgacc	atgtgagttttg...930...ccaacggaagttggtttccc	CGACTACGGAAATT	gtgt-tcgtggcaagaacaa-----	...331...gcatgtttttac	aggctctgt
C.Jap	ggccgcct	atgtgagttttt...2852...-tgccggaagttggtctccc	GACTACGGAAATT	gtgttctatgctgaatacta-----	...296...tttctttatttc	aggctctgt
C.Rem	caatgacc	atgtgagtttca...795...ccaacggaagttggtctccc	AGACTACGGAAATT	gtgtgcatggcaagaaca-----	...345...gattattcattc	aggctctac
	* *	*****		***** * * * * *		* * * * *

id=98048 gene=F55F1.5 name=F55F1.5 segment=chrX_2772163_2773807_1 type=IN

C.Ele	aAGTTccT	CCGTgAGTT	gctttttttgggaaaattgttttaaatgtcaagtttgt:::tatagatttttctgaataaaactaatatttc	agcctgga
C.Bre	aAGTTccT	CCGTgAGTTG	-----:-----	tttc agcctgga
C.Jap	aAGTTccT	CCGTaAGTT	-----:-----	ttta agcctgga
C.Rem	aAGTTccT	CCGTgAGTTT	-----:-----	tttc agcctgga
	*****	**** *		*** *****

id=98056 gene=F55F1.5 name=F55F1.5 segment=chrX_2775487_2776111_1 type=IN VIEW

Figure 44: CS=9



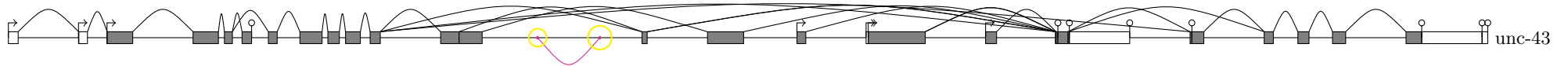
C.Ele	tcgctcat	ttcacacagtgt...131...agcgtattcggtttgtct	CTTAc	CCTGc	TCTT	ttctttccgtcccactttc...54...cgagaagcaggt	aaggcttt
C.Bri	cccttcat	ttcatcacagtgt...157...-gcgctactcgat	TTTAc	CCTGc	TCTT	ttctttccgtcccactttc...54...cgagaagcaggt	aagaatct
C.Bre	tccctcat	ttcacagtgttc...130...-gcgctattcgat	TTTAc	CCTGc	TCTT	ttctttccgttccactctc...54...cgagaagcaggt	aagacttt
C.Rem	tccctcat	ttcacagtgttc...130...-gcgctactcgat	TTTAc	CCTGc	TCTT	ttttttccgttccactctc...54...cgagaagcaggt	aagacttt
	* **	**** * **	***** ** *****	***** ** *****	***** ** *****	***** ** *****	*** * *

id=250483 gene=T23F2.1 name=bus-8 segment=chrX_5492944_5493210_1 type=E5

C.Ele	tcgctcat	ttcacacagtgt...224...ccgaaacttcg	GAGAa	GCAGGT	AAG	cttt
C.Bri	cccttcat	ttcatcacagtgt...249...ccgaaactctg	GAGAa	GCAGGT	AAG	aatct
C.Bre	tccctcat	ttcacagtgttc...222...ccgaaacttcg	GAGAa	GCAGGT	AAG	acttt
C.Rem	tccctcat	ttcacagtgttc...222...ccgaaacttcg	GAGAa	GCAGGT	AAG	acttt
	* **	**** * **	***** ** *****	***** ** *****	***** ** *****	*** * *

id=250483 gene=T23F2.1 name=bus-8 segment=chrX_5492944_5493210_1 type=E5 VIEW

Figure 45:



C.Ele	cacaaaaa	atatatagtaat...405...gaaccatgaaa---ccgtgtt- AAAGTTACCGAcCTTTTTTCAT -----ccgcogagctttccccac...1259...gaaacattattt	ctttcagg
C.Bri	tgaaaaaa	acacacagaac...562...--ctacatgaaa-cccccgaat ATGAATTTACCGATCTTTTTTCATTG --tttctgttttttttgat...1497...ctatttttata	ttttcagg
C.Bre	catggtta	atactgagaag...378...-----tgaaacccccgaattga ATTTTACCGATCTTTTTTCATT --tcttttgccgctttttgaa...1496...ctcatttttca	ttttcagg
C.Rem	cacagtga	aaaagtgatgat...284...--cta--tgaaa---cgaatttgac TTTTACCGATCTTTTTTCATTTT attttcttgtattggttc-...1245...cttatttttga	ctttcagg
	* * *	***** ** * * ***** *****	** *****

id=119602 gene=K11E8.1 name=unc-43 segment=chrIV_10334149_10335899_-1 type=IN

C.Ele	cacaaaaa	atatatagtaat...1354...ttcctcaaaaaaattcaaa----- ATGAGAAAAGaTCGGTAAcCTTT ttcatc-----gttccctaaca...310...gaaacattattt	ctttcagg
C.Bri	tgaaaaaa	acacacagaac...1727...-ttcaaaagcaaatactctt CAAAAATGAGAAAAGtTCGGTAAAAaTCAT ---ccgatcgcacatccaagtc-----...330...ctatttttata	ttttcagg
C.Bre	catggtta	atactgagaag...1550...a-tcaaaaaaatc--taatcc- AAATGAGAAAAGtTCGGTAAAAAT ---catccgg--caatgtctcctg-----...323...ctcatttttca	ttttcagg
C.Rem	cacagtga	aaaagtgatgat...1245...attcaaaaaaatctttaa- AAAAATGAGAAAAGtTCGGTAAAA ---ttcatccgg---aacgtctcctg-----...284...cttatttttga	ctttcagg
	* * *	* * * * ***** *****	* * * ** *****

id=119602 gene=K11E8.1 name=unc-43 segment=chrIV_10334149_10335899_-1 type=IN VIEW

Figure 46: CS=6.8



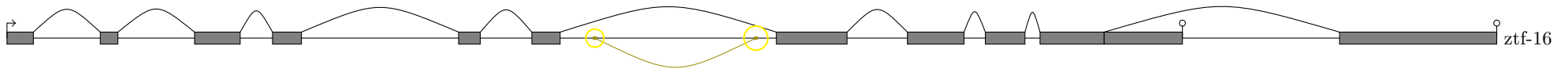
C.Ele	gccgaatt	gtgagtaagaag...544...at	tttcccacaagttgatt	CATAAc	GCGATta	AAGTG	---	ctttcccttcgggtgtg	g--...1350...acatactttcag	atttcag	
C.Bri	agtgaatt	gtgagtgtgag...869...ac	acacacacaagttgatt	CATAAc	GCGATta	AAGTG	ct	TTGT	aggaggttccgacggaggcc...1250...ttatatttcag	attccag	
C.Bre	gccgaatt	gtgagtaaacga...357...t	ttcccacaagttgatt	CATAAc	GCGATta	AAGTG	---	ctttccagaggggtggcga--...842...attcactttcag	atttcag		
C.Rem	gccgaatt	gtgagtaagagg...382...a	tttcccacaagttgatt	CATAAc	GCGATta	AAGTG	---	ctttcccttctagagcagg--...873...gagtgccttcag	atttcag		
	****	*****		*	*****		*		*	*****	*** ** *

id=164451 gene=F32D1.3 name=F32D1.3 segment=chrV.4356141.4358116_-1 type=IN

C.Ele	gggaaatg	gtgagaaataac...38...at	ccgac---tagatcgacagt--	TGCTTATCGCa	TTATG	cacaattaaggacaaggaca-...366...tgaaaattccag	aattctcc		
C.Bri	tagagagg	gtgagttgtcaa...235...-t	ttaaatacagatcattg	ACAGT	CGCTTATCGCa	TTATG	cacaattaggggc-agaacag...894...taaattttccag	aattctcc	
C.Bre	ggaggaag	gtatgaattgtt...27...at	tcgata---gggatcgacagt--	TGCTTATCGCa	TTATG	cacaattaaggacaaggca-...376...tctatatttcag	acstatca		
C.Rem	ggaaaacg	gtaagattactt...126...ct	tgggca---aggatcgacagt--	TGCTTATCGCa	TTATG	cacaattagggacaaggaca-...199...gtttaatttcag	gtgtctcc		
	**	** *	*	*	****	*****	** ** ** *	** ** *	** **

id=164453 gene=F32D1.3 name=F32D1.3 segment=chrV.4355571.4356054_-1 type=IN VIEW

Figure 47: CS=6.24



C.Ele	aagatcag	gtatgcttgct...64...gctgcc-----gccttcgtaactc	AAAAATCGtGTTTTAT	TTCa	--atttacgtaatcaaatggaa...747...tataactttcag	atgcaaga
C.Bri	aagatcag	gtatgtcccact...92...gccgat-----gtcttcgcaactc	AAAAATCGtGTTTT		-atcttccaatttacgcaatc-----...707...tataactttcag	atgcaaga
C.Bre	aagatcag	gtatgcctgtct...62...gaagct-----gtcttcgcaactc	AAAAATCGtGTTTT	TCTC	-ccaatttacgtaatacaatc-----...736...attaactttcag	atgcaaga
C.Jap	aagatcag	gtatgttatcta...157...gccgcttcaaggtcgtttc-----	TATTGGa	TTCGCTTTC	ccggaaagagaagaagaata---...717...tttaattacag	atgcaaga
C.Rem	aagatcag	gtatgggtgctg...63...gaagct-----gtcttcgcaactc	AAAAATCGtGTTTT		-atcttcgatttacgtaatc-----...763...ttcaactttcag	atgcaaga
	*****	****				*****
		* *	* **	** * **	* *	* ** **

id=216551 gene=R08E3.4 name=ztf-16 segment=chrX.4808641.4809536_-1 type=IN

C.Ele	aagatcag	gtatgcttgct...777...ttgtaaattgtaat---attgtg---	TGAAa	GTGAAAACCGATTTTT	-agatgttaaaacataaccgt...34...tataactttcag	atgcaaga
C.Bri	aagatcag	gtatgtcccact...723...-----ttgtaattgtatcgaaagcg-----		AAAACCGATTTTT	aagacaatacacaaaataaa-...77...tataactttcag	atgcaaga
C.Bre	aagatcag	gtatgcctgtct...760...---aaattgtaattgtatcgaaa-----		GGGAAAACCGATTTTT	aagacaataagaattttgat-...41...attaactttcag	atgcaaga
C.Jap	aagatcag	gtatgttatcta...797...---aagttgtaat---attgaagatt	GAAAGCGAAA	CCGATA	ttttacttgatcggaa---tgtg-...77...tttaattacag	atgcaaga
C.Rem	aagatcag	gtatgggtgctg...788...-----ttgtaattgtattgaaagcg-----		AAAACCGATTTTT	aagacaatcggatagtg-...39...ttcaactttcag	atgcaaga
	*****	****				*****
		*****	** *	*****	** * *	** **

id=216551 gene=R08E3.4 name=ztf-16 segment=chrX.4808641.4809536_-1 type=IN VIEW

Figure 48: CS=4.8



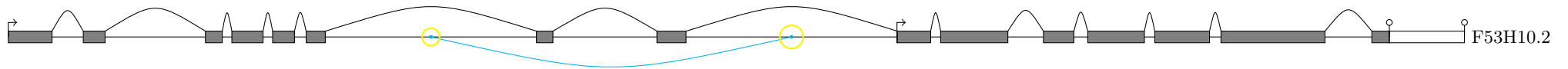
C.Ele	ttgagcac	caaaacttttag...262...acaaactcttc--ttattcaaa-----TGACaTCGTGATA---acaaatcatggtagaaggag...37...ttagtattatg	ggtacggt
C.Bri	ttgagcag	caacttcgtccc...330...--aaaagtccgatttcttcga-----TGACaTCGTGATAaga--aagtcatggtcgaagga...38...ttagtattatg	ggtacggt
C.Bre	gagcagag	caaatttcttag...333...tcctcctctc--ttcttcaaa-----TGACaTCGTGATAagagcaagtcaggtcgaag---...40...tcttgcttatg	ggtacggt
C.Rem	gaaactca	caaaactcttag...274...c aaaagtcca--ttcgtcttCTCCgaTGACaTCGTGATAaga--aagtcatggtcgaagga...38...tctagtgtatg	ggtacggt
		*** * ** ** ***** ** ***** ** * * * ***** *****	

id=111312 gene=T23D8.3 name=T23D8.3 segment=chrI.9972995.9973370.-1 type=E3

C.Ele	ttttttca	gacgggtatggtacgaTATCACGAgaGTCGaggagttgagagtgcacatgggataagacacatca	ggttagtg
C.Bri	caatttca	gacgggcatggtacgaTATCACGAgaGTCGagggtgtcgaagtgcctgggataaaacacatca	ggtgagtc
C.Bre	ttaattca	gacgggtatgatacgaTATCACGAgaGTCGaggagttgaaagtgcacatgggataagacacatca	ggttagtg
C.Rem	tattttca	gacgggtatgatccgaTATCACGAgaGTCGaGGAGtcgaagtgcacatgggacaaaacgcatca	ggtcagtc
		*** ***** ** * ***** ***** ** * * ***** ***** ** * * ***** ** * * ***** ** * * ***** *****	

id=111320 gene=T23D8.3 name=T23D8.3 segment=chrI.9971643.9971705.-1 type=E3 VIEW

Figure 49: CS=3.12



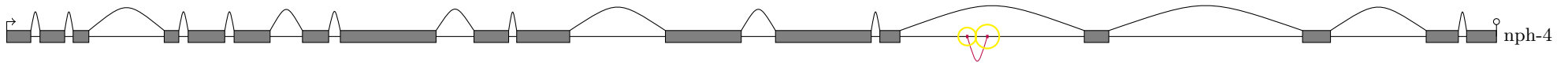
C.Ele	atgttgat	aatccgtaagtt...2130...	---gaagactt	gtgaccgtagtc	GTTGt	TTCa	ACCGAA	---aaattgg	aaaaaagagtaa-----	...1180...	actttta	aatctt	ttcagatt
C.Bri	atgttgat	aatccgtaagtt...1971...	---gcagaatt	gcgatcgtagcc	GTTGt	TTCa	ACCGAA	aaaaaattg	aaaaaaagag-----	...1050...	ttatatc	ttcat	ttcagatt
C.Bre	atgtcgat	aatccgtgagtt...1448...	---gcagaatt	gcggtcgtagcc	GTTGt	TTCa	acCGAA	---aaaattg	aaaaaaagaga-----	...1061...	actttta	aattct	tacagatt
C.Rem	atgccgat	aaccgtgagtt...3682...	ttggaaaa	agaggaaaaaa	GAAGa	GAGa	AAAGA	-----aaa	agaggggcgatgtg...1228...	atcacttt	tttt	tacagatt	
	*** **	** **** **	* * * * *	* * *	** **			**** * *		* * *	* ****		

id=155014 gene=F53H10.2 name=F53H10.2 segment=chrV.10860861.10864250.-1 type=IN

C.Ele	tggcacta	aaaaggtgagtt...2335...	gtcacctt	ccccgttcaag-----	TTCGGT	GAAACAAC	-----aa	acagacagt	gtctccgat...1894...	ttaacc	gatcga	attccagt
C.Bri	tggcatta	aaaaggtgagtg...2103...	acagaag	catcccgttcaag-----	TTCGGT	GAAACAAC	-----aa	acagacagt	gtctcatgt...1781...	tcaac	actgga	atttcagt
C.Bre	tggcatta	aaaaggttagtt...2458...	cctctct	caaccgttcaag-----	TTCG	aTGAACAAC	-----aa	acagacagt	gtctcctgt...2041...	taaat	catgga	atttcagt
C.Rem	tggcatta	aagaggtgag...1108...	tatcgat	gatcagaggtatc	TCTTTCTC	cCTT	cccttcg	acaatatgtgtct-----	...3498...	tca	cgcgga	atttcagt
	***** **	** **** **	* * * *		* * *			** * * * *		* **	* ****	

id=155018 gene=F53H10.2 name=F53H10.2 segment=chrV.10855315.10859621.-1 type=IN VIEW

Figure 50: CS=4



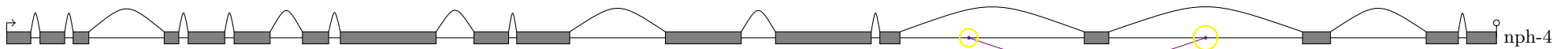
C.Ele	gcacagaa	gaagtaagcca...305...cctgtgctcacattaat	atc	TAGTGTAGAGATAGa	GCGG	cgaaaaaggattagtagtac...1553...atctgtttattt	tcagcgag
C.Bri	acatagaa	gaagtaagatc...308...aatggctcacattaat	atc	TAGTGTAGAGATAGa	GCGG	cgagaaaggattagtagtac...1901...tcgttactttt	ttagttaa
C.Bre	tcatagaa	gaagtgagtaa...312...agcaggctcacattaat	atc	TAGTGTAGAGATAGa	GCGG	cgaaaatggattagtggtac...1772...ctctttatttt	tcagttaa
C.Jap	gaatagaa	aaagtgctgta...297...gcttgctcacattaat	atc	TAGTGTAGAGATAGa	GCGG	cgagaatggattagtagtac...2539...aagagacaattt	tcagcgaa
C.Rem	gcatagaa	gaagtaagaga...297...aggggctcacattaat	atc	TAGTGTAGAGATAGa	GCGG	cgagaaaggattagtagtac...1674...ttattttgttt	tcagttaa
		* ***		*****	*	***** ** ***** ****	*** * ** *

id=82016 gene=R13H4.1 name=nph-4 segment=chrV_11836067_11838007_-1 type=IN

C.Ele	gcacagaa	gaagtaagcca...405...tttgtaaaagtaatgggca	CTGC	CTGTCTCTACACTA	ccttagacagtggtcaatac...1453...atctgtttattt	tcagcgag	
C.Bri	acatagaa	gaagtaagatc...407...gtcggataataaatggggca	CTGC	CTGTCTCTACACTA	ccttagacagcggtaatac...1802...tcgttactttt	ttagttaa	
C.Bre	tcatagaa	gaagtgagtaa...410...atttgtaaatccatggggca	CTGC	CTGTCTCTACACTA	ccttagacagtggtcaatac...1674...ctctttatttt	tcagttaa	
C.Jap	gaatagaa	aaagtgctgta...397...tttgatcgaatgctgggca	CTGC	CTGTCTCTACACTA	ccttagacagcggtaatac...2439...aagagacaattt	tcagcgaa	
C.Rem	gcatagaa	gaagtaagaga...396...gttgggcaataaatggggca	CTGC	CTGTCTCTACACTA	ccttagacagtggtcaatac...1575...ttattttgttt	tcagttaa	
		* ***		*****	*	***** ** ***** ****	*** * ** *

id=82016 gene=R13H4.1 name=nph-4 segment=chrV_11836067_11838007_-1 type=IN VIEW

Figure 51: CS=3



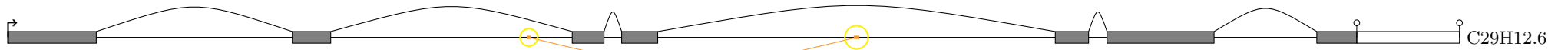
C.Ele	gcacagaa	gaagtaagcca...	313...	cacattaatatctagtgtag	AGATag	AGCGGCGA	aaaaggattagtagtaccgt-----	...1550...	atctgtttattt	tcagcgag
C.Bri	acatagaa	gaagtaagatc...	316...	cacattaatatctagtgtag	AGATa	GAGCGGCGA	gaaaggattagtagtaccgt-----	...1898...	tcgttactttt	ttagtgaa
C.Bre	tcatagaa	gaagtgagtaa...	320...	cacattaatatctagtgtag	AGATag	AGCGGCGA	aaatggattagtggtaccgt-----	...1769...	ctctttatttt	tcagtgaa
C.Rem	gcatagaa	gaagtaagaga...	1781...	cttttgcaaggcggaggag-	GATGTGc	CAGTTGTTT	-----ggtcctcccgggatctga...	193...	ttattttgttt	tcagtgaa
	** ** ** *	***** **		* * *	* * * * *	* *	** * **		* * **	* ** **

id=82016 gene=R13H4.1 name=nph-4 segment=chrV_11836067_11838007_-1 type=IN

C.Ele	caaacttt	attgtaagcct...	2394...	tatcaggttacatacaagaa-----	TCGCa	CGCT-ATCT	gatgacggaattctgattc...	927...	tcacgtgttg---tt	tcaggaac
C.Bri	caaacttc	attgtaggtta...	2386...	tatcgagttacatacaagaa-----	TCGCa	CGCTCATCT	aatgacggaactcggattg...	567...	aatatttta---tt	tcaggaac
C.Bre	caaattat	gtcggtagttt...	1813...	tctcaggttacaataaaaa-----	TCGCa	CGCT-ATCT	aatgacggaactcagattc...	604...	---cgtgtgtcttt	tcaggaac
C.Rem	ctaacttc	attgtaagatt...	1046...	ttgaagataagaaatcataa	GAACA	ACTGTACATT	-----ggatcggaaactacccaaa...	1315...	tcacgtgtat---tt	tcaggaac
	* ** *	* ** *		* * * * *	* ** *		* ** **		* * **	*****

id=82018 gene=R13H4.1 name=nph-4 segment=chrV_11832541_11835938_-1 type=IN VIEW

Figure 52: CS=3.6



C.Ele	cgggtcgt	tcccgaggagaa...515...	tagtgaaaagatgcgaaagt	GCGATATGCAAATG	-----	ctttacttactttcttttgt...80...	gatggcagatgg	caaccttt
C.Bre	tggatcat	tcccgaggagga...549...	tagtgaaaagatgtgagagt	GCGATATGCAAATG	-----	ctttacttactttccctctt...118...	gatggcagatgt	tatgtatt
C.Jap	gggatcgt	tcccgaggagaa...555...	gag-aaagagatggagaagg	CGATATGCAAATGG	cgcgctcttttacttactag-----	...85...	aacaaaaatga	aaataaac
C.Rem	tggatcat	ttcctaggagaa...520...	-agtgaaaagatgtgagagt	CGATATGCAAATG	-----	ctttacttactttcttttctt...115...	tatggcagatgg	catccaaa
	** ** *	* ** ***** *	** ** *****	** *****		*****	* * ***	*

id=115537 gene=C29H12.6 name=C29H12.6 segment=chrII.6116680.6117352.-1 type=IN

C.Ele	gatatgct	tcacatgattcc...463...	-aattttgctgcacaaacatt	CATTaTGTAatTATCGC	tgatgggaaggagagaagga-----	...495...	cccacttcaaaa-	ccttcatt
C.Bre	gatatgca	tcacatgattca...256...	-aattgtgctgcacaaacatt	CATTaTGTAatTATCGC	---taggaaggacacaagagggc----	...469...	-ccacttcaaaat	ccctcatt
C.Jap	gatacgc	tctcatgattct...105...	taattgtgctgcacaaacat	TCATTaTGTAatTATCG	-----	gagagggggagagcagcggg...386...	accacttgaaaa-	cgctcatt
C.Rem	gatatgca	tcacatgattcc...115...	-aattgtgctgcacaaacatt	CATTaTGTAatTATCG	-----	aaagggacaagaggcgaac...486...	accacttcaaaa-	ccctcatt
	**** **	** *****	*** *****	*****		* **	***** **	* ****

id=115541 gene=C29H12.6 name=C29H12.6 segment=chrII.6115423.6116461.-1 type=IN VIEW

Figure 53: CS=4.8



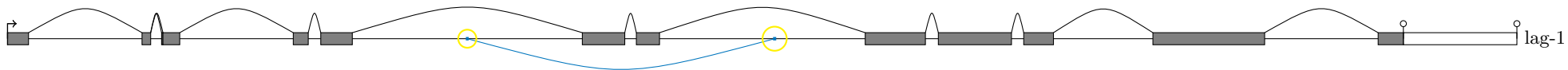
C.Ele	gtgcgtGT	CA	taGTTG	AAGTTCACAAA	TGCCA	ctGAAT	gtgctcac-----tgttttatatt...115...aataatattga-a	attgtagt	
C.Bri	gtgcgtgt	catagttgt	AAGTTCACAAA	TGCC	-----c-----	ctgaatgatccgttttgat---	...121...-ttaatgaatcaa	gttttagt	
C.Bre	gtgcgtgt	catagttgt	AAGTTCACAAA	TGCCA	-----ctgactactgaatg--	tgttcc-----	...142...ttaaactcctcaat	atttcta-	
C.Jap	gtgcgtGT	CA	caGCTG	AAGTTCACAAA	TGCCA	-----ccgat--ccacatt--	catttcgc----	...139...agtgaattta-a	aacttgat
C.Rem	gtgcgtgt	catagttgt	AAGTTCACAAA	TGCCA	-----c-----	ccgaatg--	tgttccgattca...137...-atataataaaca	gtttcagt	
	*****	**	**	*****		*	**	*	

id=297395 gene=H01G02.1 name=H01G02.1 segment=chrIV_11803842_11804020_-1 type=IN

C.Ele	gtgcgtgt	catagttgtaag...65...---	tcaccacaaaacaacattcg-	GTTG	ctTGGCATTGTGAACTTTAGTTGAT	----cttcaactactactaactgagttaacct-----	cgtaaaa--ctgaa-aataatattgaa	attgtagt-----		
C.Bri	gtgcgtgt	catagttgtaag...70...---	cttcaa-----	atactcggttctct-	GGCATTGTGAACTTT	ttggttggtcatc--	aaccaactactaacca-----	ttaaattagat-agagcatgat-taatgaatcaa	gttttagt-----	
C.Bre	gtgcgtgt	catagttgtaag...88...---	cttcca-----	aatattcagttc-ct	TGGCATTGTGAACTTT	ttggttggtttt-	cagacaaaaccactaaciaa--	aaaatcattttgttaaaa-----	atgttttaa	tcctcaatatttcta
C.Jap	gtgcgtgt	cacagctgtaag...89...c	cactccga-----	aaattatgtta--	TGGCATTGTGAACTTTGGTTGAC	----ct--	caactactaactg--	taattttagtacctcaaa--	cagaacagtgaatttaa	aacttgat-----
C.Rem	gtgcgtgt	catagttgtaag...85...---	cttcca-----	tctattcggttc-ct	TGGCATTGTGAACTTT	ttggttggttattttgatccaactactaacc-----	tcaatcatctgagatctgaaatataataaac-a	gtttcagt-----		
	*****	**	**	*****		*	*****	*	**	*

id=297395 gene=H01G02.1 name=H01G02.1 segment=chrIV_11803842_11804020_-1 type=IN VIEW

Figure 54: CS=4.8



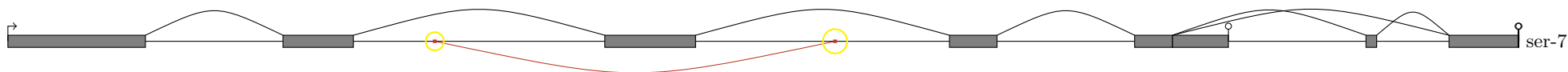
C.Ele	attgtgag---	ttttggaaattt...497...aaaaat	atgcatagt-tgtcc	ATAT	CATGT	GGAAC	TTTg	GTGC	---	tcatctctatttgacaagag...2605...	tttcagctgat	ccattcta
C.Bri	gttgtaag----	ttagggaattta...1277...-----	tgcataacgtgtccatatt	CATGT	GGAAC	TTTtagcag	tact-catccttttct-----	...3514...	tttcagccgac	caattcta		
C.Bre	----caaatct	tttcggaaaaca...533...-----	tattcatagt-tgtccatatt	CATGT	GGAAC	TTTtagcag	tgcctcatctcggt-----	...3041...	cttcagccgat	ccattcta		
C.Rem	tatgtaag----	ttatgagagcat...751...-----	tatgcatagt-tgtccatatt	CATGT	GGAAC	TTTtagcag	tgcc-catctctgtt-----	...3182...	tttcagctgat	ccgttcta		
	*	** * *	****	*****	*	****	*	** **** **	* ****			

id=78312 gene=K08B4.1 name=lag-1 segment=chrIV_6102966.6106156.1 type=IN

C.Ele	aaggtaa--a	gataaaaggaag...760...-----	taccaagtaccgatattcat	GTACA	AAGGac	TCCAC	GTGGTGT	tatacttgacacacttcatc...363...	tttcagattct	tctgccca
C.Bri	--agttagaa	gatcaaagaggg...433...acacattctcaagtacc--c--ca---	AAAGGac	TCCAC	GTG	---	ttctttccatagctagctgt...798...	cattcagattct	tctgtcca	
C.Bre	--tgaatga	gatcaaacgaag...397...-----	ttctggagtact-ctctttat---	AAGGac	TCCAC	GTG	---	ttcgctattcttctcaacac...513...	tttcagattct	tctgccca
C.Rem	--ggtaagga	gatgaaaggaag...437...tca---	tctcaagtact--cattca---	AAAGGac	TCCAC	GTG	---	tttctactttacattatatt...363...	atttcagattct	tctgtcca
	* * *	*** ** *	* *****	*	*****	*	* *****	* *****	**** **	

id=78316 gene=K08B4.1 name=lag-1 segment=chrIV_6106497_6107706.1 type=IN VIEW

Figure 55: CS=5.8



C.Ele	aacttgtc	aggtcagttggg...241...--tacacacacacacatat	gt	GAAATaaCTATAaGAATTGTTTT	-----	tttgtcaacgacgcccggg-----	...2931...ctctttgtttc	aggtcatc
C.Bri	gacgtgtc	aggtcagctgag...72...-----	atgtgtgtgcaattcaacac-----	TTTTtCACCaTTCa	taagtttcgaggcacgaaga-----	...2829...tatttctcttc	aggtcctt	
C.Bre	aacttgtc	aggtcagctggt...251...aagagaagagtacacatat	GTGGaaATAACTATAaGAATTGTTT	TTGT	-----	cgacgacgcgtgagatagaa-----	...2252...tcccttgtttc	aggtcatc
C.Jap	aacttgtc	aggtcagttgga...223...-----	agagtgcacacatatgtggaaATAACTATAgGAATTGTTTT	-----	ctgtcggcgctgc---	aatagaa-----	...2001...tactctagtttc	aggtcatc
C.Rem	aacttgtc	aggtcagctggt...286...aagagaagagtacacatat	GTGGaaATAACTATAaGAATTGTTT	TTGTGGACGACGCGG	-----	gagatagaacaagagcggtg...2175...ttccttgtttc	aggtcatt	
	** ** ** *	***** **		* * ** * **	****		****	**** *

id=193558 gene=C09B7.1 name=ser-7 segment=chrX_2674978_2678238_1 type=IN

C.Ele	aggaccat	tggtatgtcatt...989...-----	ggcatcgttctcgttccaat-----	AAAAATCA	tATTCaATGGgGTTTT	-----	tttgtcaggcctgccttc...376...acctatgattac	agattcgg
C.Bri	aggaccac	tggtacgtcaat...1014...caaagtggcac--	ttattgagc-----	TGAAg--	cGGTGGAAA	-----	ttctttcatctctctca...494...gtttttttttc	agattcgt
C.Bre	aggacctt	tggtacgtcact...537...-----	ggggcatcgtagtcttcca-----	ATAAAATCA	tATTCaATGGgATTGTgTTGC	ctgcc--ctcc-gacatgtgacg...462...actcattattac	agattcgt	
C.Jap	aggaccat	tggtacgtcagc...448...-----	gggca--tttctgttccaataa-----	AAAAATCA	tATTCaATGGgATTGT	-----	gggtctcttcctgacatgtg---440...ttcgtaatgc	agatccga
C.Rem	aggaccac	tggtacgtcagt...450...-----	tttctgtcctgttggggcaTCGTaGTCGtTCCA	TAAAATCA	tATTCaATGGgtTTGTgTTGC	ctgccctctcc-gacatgtga--454...actcattattac	agattcgt	
	*****	***** **		* *	** * **	** *	** *	* ** * **** **

id=193560 gene=C09B7.1 name=ser-7 segment=chrX_2678569_2680022_1 type=IN VIEW

Figure 56: CS=6.9



```

C.Ele aacttgtc aggtcagttggg...40...tctgcactcttttccggtc--CTTTTtTTTCTcaCTTT--c-ttactccacatcttgaac-----...3140...ctcttttgtttc aggtcatc
C.Bri gacgtgtc aggtcagctgag...53...ttttgcttttttcaactcca-----TGTGTTGTCAAATCAAacactttttcacctattcata-----...2847...tatttctctttc aggtcctt
C.Bre aacttgtc aggtcagctggt...97...gaaacctcccccaaacgca-----TGTGTTGTCAAATCAAacact--ttcacctattcataag-----...2420...tccctttgtttc aggtcatc
C.Jap aacttgtc aggtcagttgga...869...tgtgcactctgtttcttctgTCTTTTTTCcTTTTTCTTTT-----cctccgtttttaaagcaaaa...1356...tactctagtttc aggtcatc
C.Rem aacttgtc aggtcagctggt...98...gaaaaccaaaccaaacgca-----TGTGTTGTCAAATCAAacact--ttcacctattcataag-----...2389...ttcctttgtttc aggtcatt
** **** ***** ** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

```

id=193558 gene=C09B7.1 name=ser-7 segment=chrX.2674978.2678238.1 type=IN

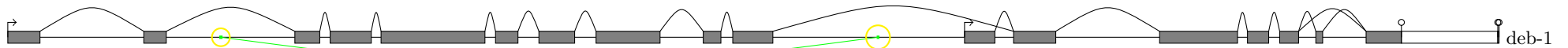
```

C.Ele aacttgtc aggtcagttggg...359...-ggcacattatttgggagaga---AAAGaaAGAAAAGAAGtaagaagggggaagagggtg---...2822...ctcttttgtttc aggtcatc
C.Bri gacgtgtc aggtcagctgag...738...-----ggcaattaggagagggtgcgtTTGATTGACAgATACA--gaccttgaaaaaaaatcca...2162...tatttctctttc aggtcctt
C.Bre aacttgtc aggtcagctggt...744...---aacggcaattaggag-gctat--TTGATTGACAgATACA--caccttgaactatcgttcgc...1773...tccctttgtttc aggtcatc
C.Jap aacttgtc aggtcagttgga...2110...gcaaacgaccaccgcacgaaAAAGtGAAGAAAGAAAAGAGA--gccttctctccttccgctt...113...tactctagtttc aggtcatc
C.Rem aacttgtc aggtcagctggt...816...---acggcaattaggagtgcac--TTGATTGACAgATACA--cgcttgaactattgttcgc...1671...ttcctttgtttc aggtcatt
** **** ***** ** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

```

id=193558 gene=C09B7.1 name=ser-7 segment=chrX.2674978.2678238.1 type=IN VIEW

Figure 57: CS=6



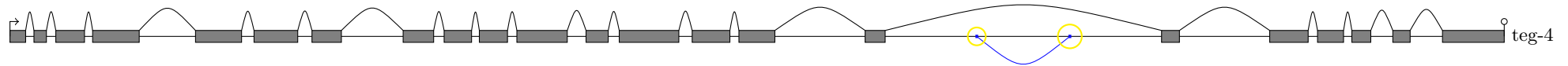
C.Ele	aaacttga	ttcaggttagtc...215...	gtgtcggctcctaattcggt	GAGCcaACACAcAACAA	tagacaacaagtcgacaaa...323...	----aгааattgtgt	tt-caggtt
C.Bri	aaacttga	ttcaggtgagaa...205...	gtgtcggctcctaattcgct	GAGCcaACACAcAACAA	tagacaacaagtcgacaaa...334...	ctgtataatac---	tt-taggtt
C.Bre	aaacttga	ttcaggtaaatc...161...	gtgtcggctcctaattcggt	GAGCcaACACAcAACAA	tagacaacaagtcgacaaa...378...	----gtaaatttctgt	ttgcaggt-
C.Rem	aaacttga	ttcaggtgagaa...190...	gtgtcggctcctaattcggt	GAGCcaACACAcAACAA	ttgacaacaagtcgacaaa...361...	----ataattctggtt	tt-caggtc
	*****	***** *	*****	*****	*****	*	** ****

id=216415 gene=ZC477.9 name=deb-1 segment=chrIV_7091787.7092405_-1 type=IN

C.Ele	caattgca	taatggtgagtt...916...	-actttcttttttccgcttt	TTGTTTGTGTGCTC	cttgtaattttgcgacgac--...385...	actaa--aatatct	cacagggg
C.Bri	caattgca	taatggtgagag...693...	-ttttgagctctcccgccttt	TTGTTTGTGTGCTC	cttgtaa--ttttgacgatggg...184...	tctaa--tatatct	cataggtg
C.Bre	cagttaca	caatggtgagta...383...	-gtcgttttttaccgccttt	TTGTTTGTGTGCTC	cttgtaattttgcgacgac--...452...	acatg--caaacct	aacagttc
C.Rem	cagttgca	caatggtgagtt...342...	cactttc-tttttccgcttt	TTGTTTGTGTGCTC	cttgtaa-ttttcgacgacga-...267...	--taagtatcatct	cacagggg
	** ** *	***** **	** *****	*****	*** ***** *	* **	* **

id=216431 gene=ZC477.9 name=deb-1 segment=chrIV_7087897.7089275_-1 type=IN VIEW

Figure 58: CS=6.08



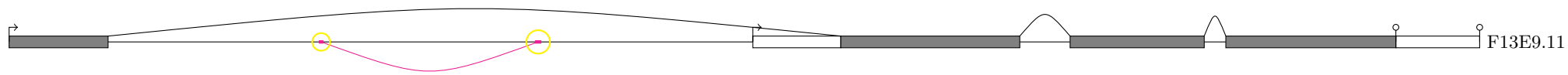
C.Ele	aaaacaag	gtca	gt	-----	ttct	::::	ttaa	atttag	-----	attcaaa	-----	TCGAAc	CTTGTCTCTTCTCA	ag	AGAATAc	ATTCT	ctaaa	tattctctcaaccg	-----	...1883...	aca	attttcag	aatttccc	
C.Bri	aaaataag	gtga	gt	-----	tgta	at	-----	-----	-----	-----	-----	TCGAcg	TCGGGg	ATTCAGAA	gg	AAGT	-----	ctaaaa	aagaagaaaaaag	-----	...4763...	ata	attttgcag	aacttccc
C.Bre	aaaacaag	gtac	gc	-----	tat	-----	-----	-----	-----	-----	-----	-----	TCTCTTTT	-----	-----	-----	TTC	gggtgagaatgtgtgaaaat	-----	...4907...	tttt	attttcag	aacttccc	
C.Jap	agaataag	gtgc	gt	-----	gtttctgc	gttttt	gtattgc	::::	atat	-----	cgatccattatttcatttacacgc	-----	-----	GAAGA	at	GAGAA	GAAGAAG	-----	agagc	tttgagctggata	...1481...	ttttttttcag	aacttccc	
C.Rem	aaaacaag	gtacgcgatgt	-----	tg	ttct	::::	ttctatc	ctgc	aaccac	ctgc	caccattcacaggt	aaaacg	T	TTTC	ga	TTTCTTCTT	-----	c	-----	gattcattccctag	-----	...2479...	ttttctttcag	aatttccc
	* * * *	**	*		*									*				*				*** **	** *****	

id=207064 gene=K02F2.3 name=teg-4 segment=chrI.6819439_6832583_1 type=IN

C.Ele	aaaacaag	gtcag	tttcttt	...3860...	-----	gtctc	gtcttc	gttt	aaagt	AGGGTTGTTT	TGAAt	GAAGAGGATAAGa	TTGA	-----	aagaaa	actgagagga	tcct	...1031...	aca	attttcag	aatttccc	
C.Bri	aaaataag	gtgag	ttgta	...1067...	-----	aaagt	taccg	ctgc	ccgttga	ACTTTTCT	cc	GAATT	-----	TTGAg	TTGA	-----	gtg	tagttgtagagacttgt	...3833...	ata	attttgcag	aacttccc
C.Bre	aaaacaag	gtacg	ctatatt	...188...	gaagt	ctaa	agggt	-----	gaataa	-----	-----	GAAGAAGAAA	AGGAGA	-----	aga	agtaggaggtggttat	...4721...	tttt	attttcag	aacttccc		
C.Jap	agaataag	gtgc	gtttctgc	...4138...	-----	ggtt	ctccat	caaga	aatg	TTTCTTTTCTCT	-----	TT	-----	TT	-----	tttct	gttctgca	caaa	-----	...771...	ttttttttcag	aacttccc
C.Rem	aaaacaag	gtacgcgatgt	...3974...	-----	aagg	gtcct	cactaa	agaa	-----	-----	-----	AAGAA	aa	GAAGGAAAA	catata	aactac	cttta	ttgc	...935...	ttttctttcag	aatttccc	
	* * * *	**	*		*				*												*** **	** *****

id=207064 gene=K02F2.3 name=teg-4 segment=chrI.6819439_6832583_1 type=IN VIEW

Figure 59: CS=4.8



```

C.Bri cacatggagattccaggtga...458...-----tgacagtgtatagtaatataGTAATGCAAACATacaatatgtgaacagacgg---...1265...--aaaaatgccccatccatcg
C.Bre tacatggagattccaggtaa...476...cagttgatgacag-----taatataGTAATGCAAACATatatacatgtggacagacgg----...1313...attgtgatgccccatctcgg--
C.Jap cacatggagattccaggtaa...469...---tgccgacagtgt---taatataGTAATGCAAACA----aatatgtgaacagacgggac-...2472...gttcgaatgccccatctcatc--
C.Rem tacatggagattccaggtga...440...-----tgacagtgtatagtaatataGTAATGCAAACACGA--atatgtggacagacgggtgg...1352...tgaaaaatgccccagt--agtg
***** *                               ***** * ***** * ***** * ***** *

```

id=21296 gene=F13E9.11 name=F13E9.11 segment=chrIV.10866965.10868914.-1 type=IN

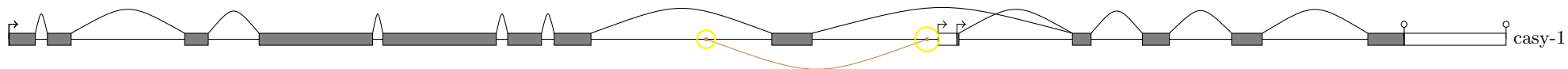
```

C.Bri cacatggagattccaggtga...1117...tttccccatcatttcttctc--ATGTTcaTGCActTTGCacttgtcgacaacttgcgca...602...--aaaaatgccccatccatcg
C.Bre tacatggagattccaggtaa...1143...tcttgttcttcttttctc--GTGTTcaTGCActTTGCacttgttgacaacaggcaaa...642...attgtgatgccccatctcgg--
C.Jap cacatggagattccaggtaa...1182...agagggcaacatttcgctc--TGTTcaTGCActTTGCacttgttgacaacagcgggt...1755...gttcgaatgccccatctcatc--
C.Rem tacatggagattccaggtga...1174...tctcatcttttcttctcTCGTGTTcaTGCActTTGCacttgttgacaacagaagga...614...tgaaaaatgccccagt--agtg
***** *                               *                               ***** * ***** *

```

id=21296 gene=F13E9.11 name=F13E9.11 segment=chrIV.10866965.10868914.-1 type=IN VIEW

Figure 60: CS=4.8



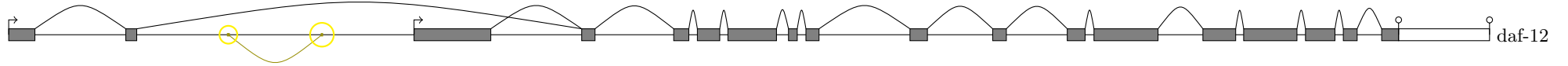
C.Ele	gcaatcag	ttgtttgtcacg...1308...	ttatccttggtga-ttcacc	GTGCaCTTTTTTCTTccTTCTT	-ttcct-----	tttcgaagcttcaa--...	256...	tatatagatctt	tgaaaatt
C.Bri	gcaatcag	ctgtttgtcacg...149...	attactcattcattcatcca--	TTCTTCTTCTTCTTTCTT	ccctcc-----	ttctcgagactctt---	1358...	gattgagatatt	tgaat
C.Bre	gtaaccaa	ctctttgtcacg....32...	tctgaaaccaaagtttag-----	TTCTTCTTCTTCTTTT	-----	gatttttggtcacttcttta...	1402...	gattgagatatt	tgaat
C.Rem	gcaaccaa	ttgtttgttacg...266...	cagcctataatgacttggcc-----	CGTCTGTTTcATCG	-cctcgaatgggttttcgga-----	...	1060...	gatcgagatatt	tgaat
	* * *	* * * * *	*	*** * *		* * *		** * * * *	*** **

id=45850 gene=B0034.3 name=casy-1 segment=chrII_5951573.5953222_-1 type=IN

C.Ele	ttggaagc	tctagacttcag...2610...	gaagaa-----	ataaggaagggcgc-GAGAAAAGAAAAAGcaGCGC	-----	.....	-----	att
C.Bri	ttggaagc	tcaagacttcag...2368...	aagag-----	ggcgcaagggcaaa-AGAAGAAGAAGAAGGA	-----	.....	-----	ctt
C.Bre	tcggaagt	tccgtcttcag...2705...	caa-----	ctgccaccaaactata-AAAActGGAGGAAGAGG	cgccataaagaagaa-----	gaagaaa.....	-----	ctt
C.Rem	ttggaagc	tcacgtcttcag...1109...	atagaat	tttccatca-actCGATaaAAAAATGATG	acagctcaagagagatgtccttcttctactatgaattat	.....	aaaagttgataaatacaattcgttctagttagaacacct	*
	* * * * *	** * * * * *	*	* * * *				

id=45852 gene=B0034.3 name=casy-1 segment=chrII_5948690.5951395_-1 type=IN VIEW

Figure 61: CS=5.2



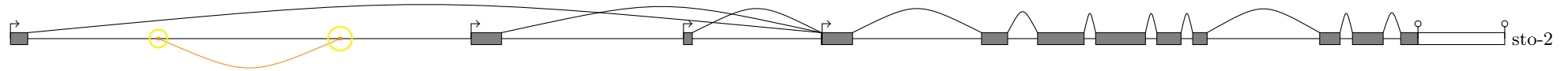
C. Ele	g t t a g t t t	g t t a t t a t g t t t . . . 455 . . .	-----	g a a g t g a g t g g a g a g g a a a g	-----	A A G A A c t G A T G T T c T T G A G	t g t g a t g t g c t c t	---	c a a c a t t . . . 4451 . . .	---	c c a g g g a g c t c	c	g g t t t c c t
C. Bri	g t t a g t t t	g t t a t t a t t t t . . . 426 . . .	-----	t t c c t t c t g g a g t a g a a g t a	--- G T A	--- A T G T c A G A G A G A A A	-----	a a a a a c t a t t t t t c a g c g g g . . . 4482 . . .	---	t c a g g g a g c a c c g	c	c g g t t t t -	
C. Bre	g t t a g t t t	g t t a t t a t t t t . . . 283 . . .	-----	t t c t t t g a c c g a g a g t t g t	T T G G A A A G	--- A G A A A G A G G A G A A	-----	c t g a t g t t c t g t a g t g t g a t	---	t c a g g g a g c c c c	c	c g t t t c c t	
C. Jap	g t t a g t t t	g t t t t t t t t t g . . . 242 . . .	.. t t g c t g c t g c c g t t t g t t t	-----	A G A A G A a	--- a G A A A A G A A G A A C T G	-----	- a t g t t c t a t a g t g t a a a t t c . . . 4660 . . .	---	c c a g g g a g c c c t t	c	c g t t t c c -	
C. Rem	g t t a g t t t	g t t a t t a t t t t . . . 2402 . . .	-----	c a c g g a a g g t a c t t c a g a a c	-----	G A A A a t A A A g T A G A A a a A G G A G A A A	-----	- a a g a g a a a t c g a c g a c g g t g . . . 2498 . . .	---	c t t c a g g g a	---	c c a g g t t t c c t	
	*****	*** ** * **		*		****		* *		*****	*	* **	

id=26316 gene=F11A1.3 name=daf-12 segment=chrX.10645835_10659276.1 type=IN

C. Ele	g t t a g t t t	g t t a t t a t g t t t . . . 3083 . . .	. . . g a t t a a a a t t g t a c t g a	----	t t t T T C A A A A C A T T T T C T T	-----	a t c g t t t c a a g a c t t a g t a c	-----	. . . 1826 . . .	---	c c a g g g a g c t c	c	g g t t t c c t
C. Bri	g t t a g t t t	g t t a t t a t t t t . . . 1357 . . .	-----	g a a g t c t t a - g a t t t c t t c c a	-----	T T C T C T C T T G T A T T G T	-----	c t a g a g a a t a g t t c c a a a t g . . . 3551 . . .	---	t c a g g g a g c a c c g	c	c g g t t t t -	
C. Bre	g t t a g t t t	g t t a t t a t t t t . . . 2032 . . .	---	c c g a a a t g t t g c g a t c g a c c	-----	T T C T T T T T T C T T C T T T G T C G A T	g c c t g t t g t c g t c c g t c g c	-----	. . . 2869 . . .	---	t c a g g g a g c c c c	c	c g t t t c c t
C. Jap	g t t a g t t t	g t t t t t t t t t g . . . 3980 . . .	-----	t a t t t t g c t g t t t c t g a g a c	---	T A G T T C T T T T T T T C T T T T	-----	t t c t t c t t t - - t t t c c g c g a c	---	. . . 924 . . .	---	c c a g g g a g c c c t t	c
C. Rem	g t t a g t t t	g t t a t t a t t t t . . . 3854 . . .	-----	a a t g t t a c t g a c g a c g t t c g	T	--- T T C g T C T T c T T C T C T T T T T C	---	- t g c t a t t t t t c a g t t t c t c c	-----	. . . 1048 . . .	---	c t t c a g g g a	---
	*****	*** ** * **		* *		* *		* *		*****	*	* **	

id=26316 gene=F11A1.3 name=daf-12 segment=chrX.10645835_10659276.1 type=IN VIEW

Figure 62: CS=4.8



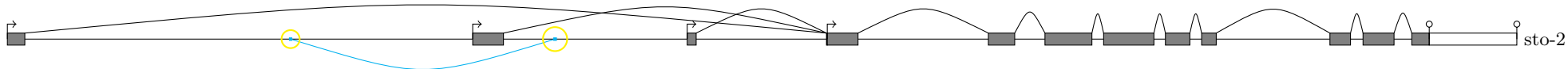
C.Ele	cttcttcg	agtgag---	ttgttttata	tctcatct---	:::::	attatttatcattt	gaaaaagttgtcaaa-----	TGTAaACTTTCTTT	-----	tagaacaaaa---	ctttcaaaa...	2687...	attgccactaa	c----	atgaaga	
C.Bre	catcttca	agtgag-----	:::::	:::::	:::::	:::::	:::::	TGTTTGTGTTTTaTTCT	catcagtc	tcatca-----	tcatca...	4931...	tccaacaa	aaagtatgaaga		
C.Jap	cgtcacgc	cgtaagttttac	ggatacattt	atcattttgt:::::	aactctaggggat	ggataatctctt	tacacgccttgctc	TAACgGAAAGGGAAAacAGAAA	-----	tgcgatagaatt	gag-----	ttt---	a...3437...	tattctgaaaga	a----	atgaaa
C.Rem	catcctca	agtgagtttact	gttgtttcat	atcatcttca:::::	attttctttta	atctcaataag	tttttttctctt-----	TTGTTTCTTGTTG	-----	aagaattaaga	aagacatct---	a...	3302...	aactttgaacaa	a----	atgaaga
	* ** **	** **						*		*	*	*	*	*	*	**** *

id=233792 gene=F32A6.5 name=sto-2 segment=chrX.5315257.5323286.-1 type=IN

C.Ele	cttcttcg	agtgagttg	ttt...3187...	gacaaac--	attattcatagat-----	AAAGAaAAGTccTGCA	aagacgaaaacc	gatgagc-----	...1722...	attgccactaa	c----	atgaaga	
C.Bre	catcttca	agtgagttg	ttt...1786...	tgagataaag---	gataggaaaa-----	AGAAAGAAAACAACGGT	GCGA--	aataaatcatatt	gatctc...	3118...	tccaacaa	aaagtatgaaga	
C.Jap	cgtcacgc	cgtaagttttac	...2312...	taacaaaccgat	cttttttTTTCTTTCTTTTTCGTTA	-----	tccaaccac	aaaaaacgg...	2594...	tattctgaaaga	a----	atgaaa	
C.Rem	catcctca	agtgagtttact	...1667...	atgtgataaaa---	attaggaaa-----	CGAAACAAGAAAaaACAG	-----	atctaccaat	tttcaattct...	3167...	aactttgaacaa	a----	atgaaga
	* ** **	** ****		* ** *	*	*	*	*	*	*	*	**** *	

id=233792 gene=F32A6.5 name=sto-2 segment=chrX.5315257.5323286.-1 type=IN VIEW

Figure 63: CS=3.84



C.Ele	cttcttcg	agtgagttgttttat-----	.....:aaaaaaaatattattatcatttgaaaaagtgtcaaa-----	GCTTCTTTCaCAAA
C.Bri	catcctca	agtgagttgtagttgtttcatatcaccat:	.....:-----	CAATTTTCgGAGAA
C.Bre	catcttca	agtga-----	.....:-----	GTTGTTGTGTTGTTT
C.Jap	cgatcatcg	cgtaagtttt-----	.....:aatatctcttacacgccttgccctAGGActAGGTgAGAAaaTGAAGaAAGATaTTGGAAGAA	
C.Rem	catcctca	agtgagt-----	.....:-----	TCATaTCATCTT
	* ** **	** *		* **

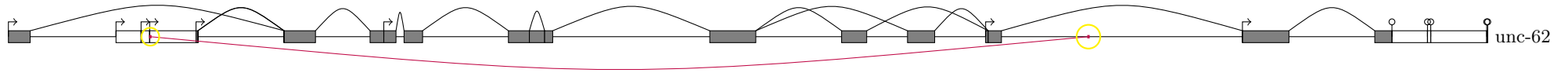
C.Ele	-----	tttttaccggtaaaacttt-----	...1914...-attgccactaa---	catgaaga
C.Bri	-----	AAAGAACAT-----	gaaaaaactactgctcgaga...4423...tgttttctaaaaa---	-atgaaaa
C.Bre	-----	atttctcatcagt-----	ctcatca...4937...-tccaacaaaaag	tatgaaga
C.Jap	GAGAGGAAGAAAGGAGCAAGAAATAaAGAGGGGAagAAAGaAAAC	aacgatgaaaaatgaataac-----	...3254...tattctgaagaa---	-atgaaaa
C.Rem	-----	CAT--cgatgaaagaaaattagct---	...4851...aactttgaacaaa---	-atgaaga
				* **

id=233792 gene=F32A6.5 name=sto-2 segment=chrX_5315257_5323286_-1 type=IN

C.Ele	accacta	ggtaaatatatt...151...-----	gttttgtcattcgagcatc-----	TTTGgGAAAGaAAAGT	----caataagaatgttgcttgac...2140...gcctctttta	gatg	
C.Bri	accataa	ggtaacacttta...1032...-----	tcatcgagtagtaactaaa-----	ATGTTtCTTtTTC	-----TTCAAAGTTG	----cgagtatacgagcccacg...762...ccctaatttta	gatg
C.Bre	accagata	ggtaacataaaa...520...--attgtgtttgttttgccg	-----	-----	-----AAAACAACAAaCAAC	----acaaagtacttctggaatt...1546...gcctctttta	gatg
C.Jap	accatta	ggtaatgacgaa...209...aaccctaaactttttttac	GTTTcCTTTCTCTTCTgcTATTTtTTTGTTTTTTTTTTaTTTTTggTTTTgtTTAGGTTTTgTTTTaggTTTTagGTTTTTTT	tttcagattctttcatccag-...2099...acttgctttta	gatg		
C.Rem	accataa	ggtaacatacat...464...-----	aatccgtttgccaccgccc-----	-----	-----GTGGAaGATGGATGA	----tctacttttggcgttgaa...1361...gcctcattta	gatg
	**** **	*****	*			* ****	****

id=233794 gene=F32A6.5 name=sto-2 segment=chrX_5312768_5315138_-1 type=IN VIEW

Figure 64: CS=5.4



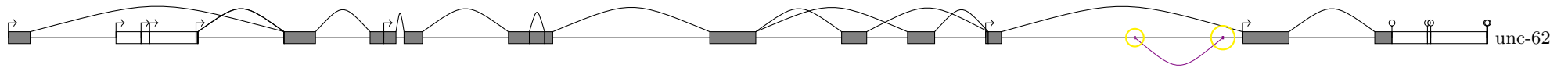
C.Ele	aagattga	catacaaccgttttgaagtgtgtgagaagttgtcattt	CGATatTCATC	TGTC	tgtc
C.Bri	aagattga	catacaaccgttttgaagtgtgtgagaagttgtcattt	TCGATatTCATC	TGTC	tgtc
C.Bre	aagattga	catacaaccgttttgaagtgtgtgagaagttgtcattt	TCGATatTCATC	TGTC	tgtc
C.Rem	aagattga	catacaaccgttttgaagtgtgtgagaagttgtcattt	TCGATaTTCATC	TGTC	tgtc
	*****	*****	*****	*****	*****

id=258170 gene=T28F12.2 name=unc-62 segment=chrV_4499462.4499511.1 type=AN

C.Ele	aacaactg	gtacgttatttt...2061...--gctggcagagacagcctt	GGCAatGATGGATCG	cgcagctggcgacgttgac-...1832...tatttttctgca	ggttc	catc
C.Bri	aataactg	gtaagtgcactt...2344...acgactggcag--gacagcctt	GGCAatGATGGATCGA	cgcagctggcgacgttgaca...1618...aaaactattcca	ggttc	catc
C.Bre	aataactg	gtaagttcactc...2302...--gctggcagagcgacagcctt	GGCAatGATGGATCGA	cgcagctggcgacgttgaca...1441...aaactcittaca	ggttc	catc
C.Rem	aataactg	gtaagttccgtt...1971...--gctggcagagcgacagcctt	GGCAatGATGGATCGA	cgcagctggcgacgttgaca...1195...cttaatatttca	ggttt	tatc
	** ** ** *	*****	*****	*****	* **	*** **

id=258195 gene=T28F12.2 name=unc-62 segment=chrV_4505892.4509863.1 type=IN VIEW

Figure 65: CS=1.92



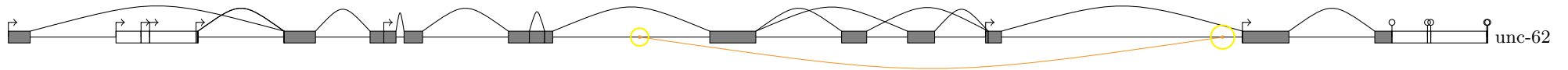
C.Ele	aacaactg	gtacgttatttt...2331...-----tttgtcaatttggtgatgg	TGA	-----	AGGTGTCAATT	tatgaggaaaagagtgattg---...1563...tatttttctgca	ggttcatc
C.Bri	aataactg	gtaagtgcactt...503...tccttgacttcacaccacct-----	GTTTGA	att	TACGAGGTGT	-----gaaaaaagaagcggatttca...3457...aaaactattcca	ggttcatc
C.Bre	aataactg	gtaagttcactc...417...tcctccttctgttgacacct-----	GTTTGA	att	TACGAGGTGT	-----gatctcatgaatcacaaca...3324...aaactctttaca	ggttcatc
C.Rem	aataactg	gtaagttccgtt...374...aagacctgttttgacacct-----	GTTTGA	att	TACGAGGTGT	-----gaatccaatggggaatcaa...2790...cttaattttca	ggtttattc
	** *****	*** ** *		** *	*** *****	** *	* ** **** **

id=258195 gene=T28F12.2 name=unc-62 segment=chrV_4505892_4509863_1 type=IN

C.Ele	aacaactg	gtacgttatttt...3812...---agacgcaca--taaattgtcac	GATT	t	GACACTT	---TTA--gtggctgtttgggtccgac-----...81...tatttttctgca	ggttcatc
C.Bri	aataactg	gtaagtgcactt...1595...-ttgagtgacattttgactg-----	ACATTT	CGTGTCAAAC	tgac-----	gaacgaccaccagcc...2367...aaaactattcca	ggttcatc
C.Bre	aataactg	gtaagttcactc...1281...attgagtgacat-tttgactg-----	ACATTT	CGTGTCAAAC	tgac-----	gtacgaccaccctctt...2462...aaactctttaca	ggttcatc
C.Rem	aataactg	gtaagttccgtt...1069...attgagtgacat-tttgactg-----	ACATTT	CGTGTCAAAC	tgac-----	gaacgaccaccgcc...2097...cttaattttca	ggtttattc
	** *****	*** ** *		* ** * * **	*** ** * * * * *	* ** * *	* ** **** **

id=258195 gene=T28F12.2 name=unc-62 segment=chrV_4505892_4509863_1 type=IN VIEW

Figure 66: CS=3.84



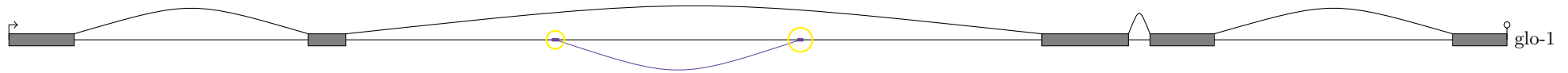
C.Ele	cgatggag	gtgagaaataga...665...	cgcctagcgcaaagatat-----	AGGGTGTCAA	ta-ATTG	gatttgcacaccgatacaca-----	...377...	ttcaagtttcag	ggatcatc
C.Bri	cgttggag	gtgagaaataga...163...	-----aattgtctatctagagggg	GAGGGTGTCAA	ta-ATTG	-g---attcagtgctcctctctc-----	...423...	cagatgttccc	ggatcctc
C.Bre	cactggag	gtgagaagtta...395...	-----atggataataggcgacgaag	AGTCAATCTAGTA	aa---	gtgcggcgac-----tctaaat...602...	tagatgttccag	ggaccatc	
C.Rem	cgttggag	gtgagaaataga...234...	-----ggataaatatggataatagg	AGTCAATCTAGTA	aa---	gtgc-acgacactcttct-----	...566...	tagatgttccag	ggatcttc
	*	*****	***** * *			***** * *		* ** * *	*** * **

id=258186 gene=T28F12.2 name=unc-62 segment=chrV_4502827_4503948.1 type=IN

C.Ele	aacaactg	gtacgttatttt...3811...	gagacgcacataaattgtca----	CGATTGACACTTT	tagtggctggtt-gggtccga----	....83...	tattttctgca	ggttcatc
C.Bri	aataactg	gtaagtgcactt...3904...	gtgacgcacataaattgtca----	CGATTGACACTTT	tagtgggtggtt-aggtccgat----	...59...	aaaactattcca	ggttcatc	
C.Bre	aataactg	gtaagttcactc...2693...	-----tgataaagattgtgacaagg	TACTAaGATTGATT	--gtgggaa----	aacggaaatgtgg...1052...	aaactcttaca	ggttcatc	
C.Rem	aataactg	gtaagttccgtt...2323...	-----tgataaagattgtgacaagg	TACTAaGATTGATT	--gtgggaatttctagggtgat----	...845...	cttaatattca	ggtttatc	
	**	*****	*** ** *			** ** ** *		**	**** **

id=258195 gene=T28F12.2 name=unc-62 segment=chrV_4505892_4509863.1 type=IN VIEW

Figure 67: CS=5.32



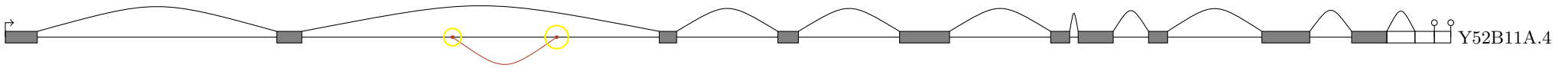
C.Ele	atctggga	tatttcaggtgagc	gaaaataaaat	ttttatt:::-----	CTAAcaGT--TTctAGTGaaGTTG	attggc	ttaatg-----	caaaaata...4517...aaacattatttc	atttacag		
C.Bri	ata-----	-----	-----	-----	TGGGAtAT--TTCAGGT	-----	aagccgaaca-----	ttaagcgaaa...4947...gaaaaaaaaatat	aatttcag		
C.Jap	atctggga	catttcaggtaa	-----	-tcttca--:::-----	TACAcaCAAAaTGTT	-----	gctgtttgcagg-----	ggaacaaa...4873...caagacaaacgc	attttcag		
C.Rem	atctggga	tatttcaggtgagc	gaaaagaattt	cctttatt:::tttatcagcctg	cctcactgtctacaagg	caagagccatca	CGGATTgTTCTTcCATT	-----	ggttgaacggctcctc	ccggc---...4013...tatatcaaagtc	atttcag
	**					*	*		*	*	** ** **

id=17717 gene=R07B1.12 name=glo-1 segment=chrX.9874201.9881449.-1 type=IN

C.Ele	atctggga	tatttcaggtga...2946...-----	acccattgcaatggggcgg	TAACCACTtcAAAC--TTAG	-----	aaattatagaacaagagagg...1961...aacattatttc	atttacag		
C.Bri	atatggga	tatttcaggtaa...548...-agctag	tcgtaaccataga-----	ATCTGAAATT-TCCA	-----	agtttattgatttctgcact...4363...gaaaaaaaaatat	aatttcag		
C.Jap	atctggga	catttcaggtaa...428...-----	cgggcatgtttgggaaggaa	AAACGcT--TTGTGTG	caggcaattttgaggcg-----	tgt...4484...caagacaaacgc	attttcag		
C.Rem	atctggga	tatttcaggtga...1115...gaagtagaccg	--atggtggag-----	AATGtAAGAGGATCTG	-----	aatttgaggttcgaatctgt...3794...tatatcaaagtc	atttcag		
	** *****	***** *	*	*	*	* ** *	*	*	* ** **

id=17717 gene=R07B1.12 name=glo-1 segment=chrX.9874201.9881449.-1 type=IN VIEW

Figure 68: CS=2.4



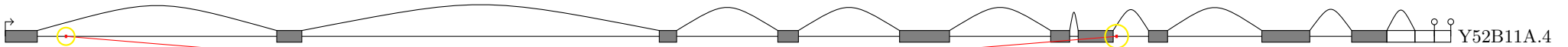
C.Ele	tggtcgag	gtgagcatttga	----	2064	..	tgaatatttgaattataga	-----	GGAaATTCAAGTTTT	aaacaaaaat	tttgaa	----	aaaa	-----	2844	..	tataactttag	gtccgccg		
C.Bri	ccgttgag	gtgag	---	taaagg	...	607	..	tcggaatttcgagattttc	-----	GAATTCAGTTTT	---	tcaaaaatattgat	---	ctcaca	----	3081	..	taatttttcag	gtccgccg
C.Bre	tggtcgag	gtgag	---	ttgaaca	...	944	..	cctgaaaaaagtttgggtccc	AATTTCAGAAAATGTC	-----	gtataacgagagcaacaac	----	3962	..	tctgagtttcag	gtccgacg			
C.Jap	ttgttgag	gtggg	---	tacggta	...	3743	..	cagcctttcgcagcgttttt	-----	TTTTTCGGGAATTTTCAG	-----	aaaattctaaa	---	aaaatggga	...	1163	..	acacatttcag	gtccgccg
C.Rem	tggttgag	gtgag	---	tggggat	...	113	..	tgtaaaat	ttgggtaatttt	ATTTT	ttCTGGAA	aATTCT	-----	tactttctaaatgtcacata	----	4793	..	ttttgttttcag	gtccgccg
	** **	*** *	*			*		*	*		*	*		*	*	*	**	*****	**

id=301861 gene=Y52B11A.4 name=Y52B11A.4 segment=chrI_10985080.10990496_-1 type=IN

C.Ele	tggtcgag	gtgagcatttga	---	4832	..	-----	aatctaaaaatataaaaata	GAGAAATT	---	TGAATTTTC	caaaaaaaaaat	tttta	-----	att	-----	76	..	tataactttag	gtccgccg							
C.Bri	ccgttgag	gtgag	---	taaagg	...	659	..	cagaat	ttt	-----	aattaaaaatc	-----	AAAA	ttCTGAGAATTC	---	c	-----	aaat	tttctg	-----	gttccttga	...	3027	..	taatttttcag	gtccgccg
C.Bre	tggtcgag	gtgag	---	ttgaaca	...	4246	..	-----	aattcggaaaattccaatca	---	GAA	TTTTCTGACGAATT	-----	tttctaccggaatattcct	---	662	..	tctgagtttcag	gtccgacg							
C.Jap	ttgttgag	gtggg	---	tacggta	...	4056	..	-----	ttttcattgaattaaaatga	---	CTGAg	AAA	TTCTCTGAAAAA	-----	tgatcctgaacagtgaat	---	849	..	acacatttcag	gtccgccg						
C.Rem	tggttgag	gtgag	---	tggggat	...	499	..	ggtcactgt	-----	aatctaaaaatc	-----	AGAAT	gTTTCAG	ct	AAAA	---	tataaactttc	-----	attccta	...	4407	..	ttttgttttcag	gtccgccg		
	** **	*** *	*			***	*		*	*	*		*	*	*	*	*	**	*****	**						

id=301861 gene=Y52B11A.4 name=Y52B11A.4 segment=chrI_10985080.10990496_-1 type=IN VIEW

Figure 70: CS=4.8



```

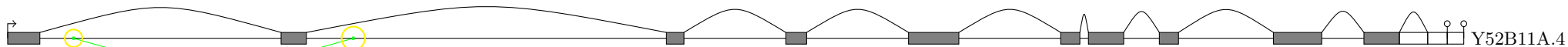
C.Ele  caattgag gtgagttagga.....93...ctataaactacatggagaaa-----TTGTAGTTTGTAGTCT-----aaagctcatcagactacaaac---...4816...ctgtaatttcag aaccgatt
C.Bri  cagctcag gtacgattttaa...1628...tcagaaaccattgtagctc-----TGTAGTTTGTAGTTTCATTtaTTCAaaTTTTTAgttttacaatatttttaa---...3264...gaaatttgcag aaccgaat
C.Bre  cagttgag gttagtgtcggg...384...ttccgattgctttgtagagg---CAGAAaTTGTAGTTTGTAGccTTAACCTCT-----acaaagctc-----ctgccgaccg...4512...aaatatttccag aaccgact
C.Rem  cagttgag gttagtcatgtt...1202...tt-----tatttttgggatgaggccTAGTTTtGTAGTTT-----gtagttaagaggatttga---...3709...ccaatttctag gaacgaat
** * **  ** *
                * *
                *****
                * * *
  
```

id=301859 gene=Y52B11A.4 name=Y52B11A.4 segment=chrI_10990621_11004118_-1 type=IN

C.Ele	cgttggag	gtg-----	AGACTACAAACTATAA	actacaactacaaactacaaaaaccgggaattttga:::::aaactatacactacaaactacaaaatttccag	atgattcg
C.Bri	ctt--	TGG	AGGTGAGcAATGGACTACAAACTACA	-----agaaatttgagaacttttga:::::actacaagactacaaactacaaaatttcag	atgattcg
C.Bre	ctttggag	gtg	AGAGGcTTAGaCTACAAACTACAAaaTCTG	-----:-----ag	atgatcag
C.Rem	ctttggag	gtgagcctttg	AGACTACAAACTA	-----caaactacaaaa-----:-----aaactacaaaatcttatgttttaatttccag	atgattcg
	* * *	*	*****		** ***** **

id=301871 gene=Y52B11A.4 name=Y52B11A.4 segment=chrI_10981094_10981268_-1 type=IN VIEW

Figure 71: CS=5.2



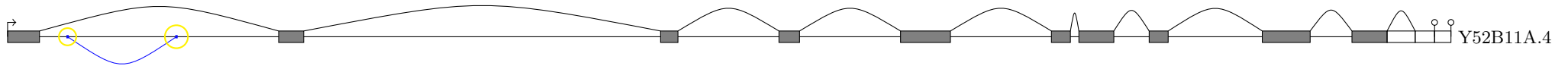
C. Ele	caattgag	gtgagttagga...	118...	gttt	gtagtctaagctcatc	-----	AGACTACAAACTACAAAATTG	-----	cctaatga	---	cattgtagtttg	...	4786...	ctgtaatttcag	aaccgatt
C. Bri	cagctcag	gtacgattttaa...	2105...	----	aaacacctcgcggtttact	GAGGCTAAgc	GACTACAAACTACAAAA	----	cgcttcta	---	agcctcagtga	...	2793...	gaaattttcag	aaccgaat
C. Bre	cagttgag	gttagtgtcggg...	1016...	gtgca	agttttttttgattg	-----	GCTCacTTCCAAAAttTTCCaAATTT	-----	cgttgcaa	---	agccatacaaa	-----	3883...	aaatatttcag	aaccgact
C. Rem	cagttgag	gttagtcatgtt...	4378...	ttatt	gaggcttaaggaatt	-----	TGACTACAAACTACAA	-----	attccagt	cagcctcactat	-----	531...	ccaattttcag	gaacgaat	
	** * **	** *			*		* * * * * *		* * *	*			** **	* * * * *	

id=301859 gene=Y52B11A.4 name=Y52B11A.4 segment=chrI_10990621_11004118_-1 type=IN

C. Ele	tggtcgag	gtgagcatttga---	176...	at	ttttcatg	---	aaat	tttttTAATTTTCTGTAGTTTGT	----	AGTCT	-----	ctaagt	ctctgtgcctcaac	...	4726...	tataacttttag	gtccgccg
C. Bri	ccgttgag	gtgag---taaagg...	507...	---	tggcggagcttaactc	ttt	----	TTTTGTAGTTTGT	----	AGTTTAgTTTT	ttttaact	tagaaaaattga	...	3168...	taat	tttttcag	gtccgccg
C. Bre	tggtcgag	gtgag---ttgaaca...	4137...	at	ctgaatattcaggtttt	---	GAATTccGGAA	TTTTGGAAAGAGT	-----	-----	at	ttttcattttatcagct	...	764...	tctgagttcag	gtccgcag	
C. Rem	tggttgag	gtgag---tgggat...	2494...	ctt	gtgagg	---	caatt	gtgtaTTGTAGTTTGT	----	AGTTA	-----	cagt	gaccacttggcgttgc	...	2415...	ttttgttttcag	gtccgccg
	** * **	***** *			*		*	* * * * *		***			*		** **	***** **	

id=301861 gene=Y52B11A.4 name=Y52B11A.4 segment=chrI_10985080_10990496_-1 type=IN VIEW

Figure 72: CS=4.32



```

C.Ele caattgag |gtgagttaggga....93...ctataaactacatggagaaa----TTGTAGTTTGTAGT|ctaagctcatcagactacaa--...4818...ctgtaatttcag|aaccgatt
C.Bri cagctcag |gtacgattttaa...1628...tcagaaacccattgtagctc-----TGTAGTTTGTAGTTT|catttattcaaatTTTTatg...3282...gaaattttgcag|aaccgaat
C.Bre cagttgag |gtagtgcggg...389...-----attgctttgtagaggcagaaTTGTAGTTTGTAGT|ccttaacctctacaaagctc---...4523...aaatatttcag|aaccgact
C.Rem cagttgag |gtagtcatgtt...1202...-----tttatttttgggatgaggccTAGT--TTTGTAGTT|ttagttaaagaggatttgg--...3710...ccaattttctag|gaacgaat
** * ** ** *                * *                ** * ** ** *                ** ** * ** *

```

id=301859 gene=Y52B11A.4 name=Y52B11A.4 segment=chrI.10990621.11004118.-1 type=IN

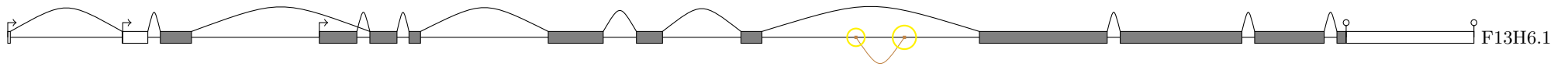
```

C.Ele caattgag |gtgagttaggga....829...-----gaagtttggtggggctcac--ACTACAAACTACAA|---aattgggtgcggctaagatt---...4082...ctgtaatttcag|aaccgatt
C.Bri cagctcag |gtacgattttaa...1847...-----aaacttcttcctcggcttgtAGACTACAAACTACA|-----ccggtctcctaagcctcagt...3063...gaaattttgcag|aaccgaat
C.Bre cagttgag |gtagtgcggg...803...-----gttttctggaggcaaagcgaCTACAAACTACAA|agcgtttctcagcc-----actacaa...4109...aaatatttcag|aaccgact
C.Rem cagttgag |gtagtcatgtt...4379...tattgaggctta----aggaattt-GACTACAAACTA|----caaattccagtc-----agcctcac-...534...ccaattttctag|gaacgaat
** * ** ** *                ** **                *****                *                ** ** * ** *

```

id=301859 gene=Y52B11A.4 name=Y52B11A.4 segment=chrI.10990621.11004118.-1 type=IN VIEW

Figure 73: CS=4.8



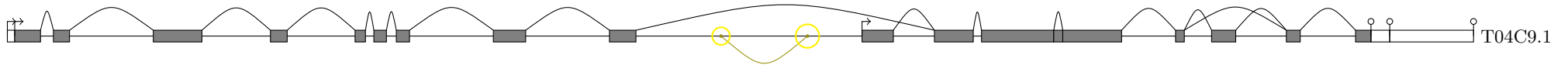
C.Ele	tgacttag	gtgagttggtca...322...tgcctatgtaccaacgagtg	GACCaGTTTTGAC	cagcaatttgagaagaattt...452...tactaattacag	ggagctct
C.Bri	tgacttag	gtaggtttgatc...307...cgactatgtactgccgagtg	GACCaGTTTTGAC	cggcaatttgagaagaattt...491...tatggtttacag	gaaactcc
C.Bre	tgatttag	gtaggtttggtca...350...tgactatgtactgaagagtg	GACCaGTTTTGAC	cggcaatttgagaagaattt...490...aagaattttcag	ctaacgca
C.Rem	tgacttag	gtgagcatatat...328...actatatgtactgacgagtg	GACCaGTTTTGAC	cggcaatttgagaagaattt...484...tcttattttcag	caaattcc
	*** **	** *	*****	*****	** **

id=216097 gene=F13H6.1 name=F13H6.1 segment=chrV_6359210_6360060_1 type=IN

C.Ele	tgacttag	gtgagttggtca...511...-tcaatgaatagaaga----aggtc	GTCAaAGACcGGTC	gttggctcggcgctcagggg----...262...tactaattacag	ggagctct
C.Bri	tgacttag	gtaggtttgatc...481...-----caacggaggctcctggggtc	GTCAaAGACcGGTC	gacggctc---tttcgattctga---...316...tatggtttacag	gaaactcc
C.Bre	tgatttag	gtaggtttggtca...535...accattgaatagatga----ggtc	GTCAaAGACcGGTC	g--ggcgagaggctcggatctg---...304...aagaattttcag	ctaacgca
C.Rem	tgacttag	gtgagcatatat...513...-----gaatagaaaagtttggggtc	GTCAaAGACcGGTC	gttggc----tctcggatctttca...298...tcttattttcag	caaattcc
	*** **	** *	*****	** **	** **

id=216097 gene=F13H6.1 name=F13H6.1 segment=chrV_6359210_6360060_1 type=IN VIEW

Figure 75: CS=3.84



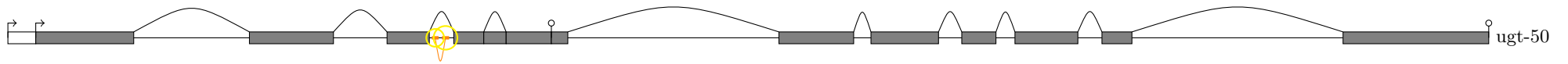
C.Ele	caaagtga	gttcaatttatt...1403...	-agcgcccgtaa	gaata-----	AGAAGAAAGAAaaAGTG	-----a---	gagaaagtga	cgtttttctg...3505...	atctcaagatga	gtgtatac	
C.Bri	aagagtga	gtctctaccgat...203...	ctgttgttttgagttccagc	TCTTCTTCTTCTTCTTCTTCT	-----	actgctgc---	tgcttctgtcgc...4552...	agaagacgatga	gtgtgtac		
C.Bre	cagagtga	gtctcccttctt...1649...	-agccggtgtgggagagtgc	-----	GGGAAGAAGAAGAAGA	-----	tttctgag---	agcttctcttc...3260...	acacgatgagca	gtttgtac	
C.Jap	caaagtat	gttttttttctc...160...	-tggcgaggggagaagcaaat	-----	GGAAGAAAGAAAGAAAGGGG	aaaaaagaagaagaagagg	-----	...4742...	aagacaagatga	gtcgcgga	
C.Rem	cagagtga	gtttttccgtat...1436...	-gatggggcgaagcgagaaa	-----	TGAAtAAGAaAGAATGAGAAGAAGA	-----	aaagtgagaaaatgacgttt	-----	...3464...	tcgcaaaatga	gtgtgtac
		* **	**	*	*		*		*	** **	

id=296840 gene=T04C9.1 name=T04C9.1 segment=chrIII_5997386_6002669.1 type=IN

C.Ele	caaagtga	gttcaatttatt...4911...	tgtcctcttctttcatatca	-----	CATTcTTCTTTTTTCT	-----a-----	c:::::	-----	-----	-----
C.Bri	aagagtga	gtctctaccgat...1744...	---aaattaggtcaggtgattgg	AGGAAAAAAGAAaGGAAaaGAAGAAGA	-----	agaagcg	-----	c:::::	tcatcctttccgaacgcctccgctcgatg	-----
C.Bre	cagagtga	gtctcccttctt...3460...	---atthttccgctcgattacct	-----	TCTTCTTCTTCTTCTTCT	-----	acgaaaaaaagaagcggctcttctatthttccctcc	:::::	ccgattcagagcatataaacctcatgatttcag	-----
C.Jap	caaagtat	gttttttttctc...326...	-ggccaccagt---atatacagtaa	-----	TCCTTTTTTTCgcCTTTTCTTC	-----	cgctttgctcctcccccttt	:::::	tcttttcaactgtgogggctcttttcttctcgtt	-----
C.Rem	cagagtga	gtttttccgtat...2176...	tg--ttctcggttcgtttagtc	-----	TCCTTTTTCTCATTCTTCTTTTTG	ctacactcgatttaaaagtg	-----	tcaca:::::	cgctcggattacagaagaagatatatcgtgatgaa	-----
		* **	**	*						

id=296840 gene=T04C9.1 name=T04C9.1 segment=chrIII_5997386_6002669.1 type=IN VIEW

Figure 76: CS=4.8



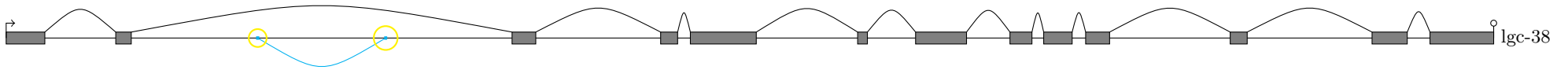
C. Ele	tGAGTTAG	ATctCATATC	TTCCG	caaaatggaaatgatatgtaatctagcttacaggttgttcaa	catcccaa	
C. Bri	tGGGTTAG	ATccCATATC	TTCCGc	TTGATGGAAatGATATGtaATCTAGCTTA	caggtcctctcaa	catctcca
C. Jap	tGAGTTAG	ATctCATATC	TTCCG	gaaaatggaaatgatatgtaatctagcttacaggtcgttggg	aatcccta	
C. Rem	tGGGTTAG	ATccCATATC	TTCCG	cgtaatggaaatgatatgtaatctagcttacaggtacctcaa	catctcga	
	** *****	*** *****		*****	*	*** * *

id=173482 gene=T07C5.1 name=ugt-50 segment=chrX_12692536_12692593.1 type=IN

C. Ele	tgagttag	atctcatatccttccgcaaaa	TGGAAatGATATGta	ATCTAGCTTA	caggttgttcaa	catcccaa	
C. Bri	tGGGTTAG	ATccCATATC	TTCCGc	TTGATGGAAatGATATGta	ATCTAGCTTA	caggtcctctcaa	catctcca
C. Jap	tgagttag	atctcatatccttccgcaaaa	TGGAAatGATATGta	ATCTAGCTTA	caggtcgttggg	aatcccta	
C. Rem	tgggttag	atcccatatccttccgcgtaa	TGGAAatGATATGta	ATCTAGCTTA	caggtacctcaa	catctcga	
	** *****	*** *****		*****	*	*** * *	

id=173482 gene=T07C5.1 name=ugt-50 segment=chrX_12692536_12692593.1 type=IN VIEW

Figure 77: CS=2.4



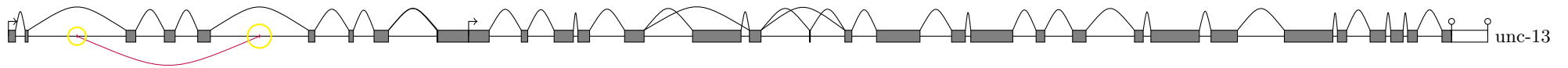
C.Ele	taagtact	ttcct-----tt--ttg-tctgttt-----:::ccatccggtgctctcatcccttatagagaaaagaaaatg	CTTCTgTCTTCTTCTG	-----tcttcactcacatacactc...2047...cagggcgaaag	taacgaa
C.Bri	tgagtctt	ttttc-----ttactttgctctttt-----:::ccacacgacgt-----gtaa-----	TTCT-TCTTCTTCagTTCC	ttcgacatctggaagcgtag...3428...cagggatcaaag	caatgaga
C.Bre	taagtact	tttca-----tt-ctttgttcttttttggaa:::cc-----ga-----	TCTTTTCTaTTTTCG	ttcaaaactcggattcaga...3585...cagggatcaaag	caatgaga
C.Jap	--agtcaa	ttttccaccaattttttactcttctc-----:::tc-----gg-----	TCTCTTTCTcTTCTTcTCTTTT	-atttggccaaatgaaggaa...3138...tagggaccgag	caacgaga
C.Rem	-----	-----	TCTTCTTCTTGAtACTT	-tcttgtttccgaacagttc...3941...cagggatcaaag	caatgaga
			**** *	**** **	** ** *

id=326635 gene=F11H8.2 name=lgc-38 segment=chrIII.7009591.7014252.1 type=IN

C.Ele	-taagta--ct	ttcctttttgt...3778...----aacttgatttttcggtgtac----	TAGAAGAAGAAGAAG	-----ttgagcttctgtgtggagag...805...cagggcgaaag	taacgaa
C.Bri	-tgagtc--ct	ttttcttacttt...2637...----aaagagaaatagagagaaat----	GGAAAaGAAGAAGAAGAA	-----gaagaagaggattccgaaaa...1674...cagggatcaaag	caatgaga
C.Bre	-taagta--ct	tttcattctttg...1738...----agttatagctgtagaagtgt	TGAGAAAGAAaAAGA	-----agagcagttgttttcaaat...2256...cagggatcaaag	caatgaga
C.Jap	---agtcaatt	tttcaccaattt...1056...gctagattgctttttggaag----	AAAGAAAGAAAGAAAGAcAGGG	gaagaaataaagagaggcaa...2705...tagggaccgag	caacgaga
C.Rem	gtaagtc--tt	tcttcttgata...2063...gcccaaagactaa-agaaga--	AAGTTCAGAAGAAGAgTGAGA	-----gactggtaacattgagataa...1840...cagggatcaaag	caatgaga
	*** *	*	*** **	**** **	** ** *

id=326635 gene=F11H8.2 name=lgc-38 segment=chrIII.7009591.7014252.1 type=IN VIEW

Figure 78: CS=4.8



C.Ele	agctgtcg	gtgagt--atttctattgattttataacttaa:::tttggcaaattttaatcaaat	tttggac	cttttagagt	---	AAGA	tAAGAGAAAAGAG	tcg	ttgaagaggcagg	aaaa	----	1176	..gcctgatctcag	atgaattc
C.Bri	aactgttg	gtgagtcgatttgaatttcaaaaataaaaaa:::aagtgacactctctagaattcgattgacccgaaaatg	---	CTGAAATTCGGAAC	-----	aaaaataattaaaaaat	...	2228	..ctttttccag	acgaattc				
C.Bre	cacacaag	gtgagtc-ttttgctttttttattgaaaaa:::gagaagcgtctctaacgaaa	---	CTTTCGAAATTG	-----	cattttctcgaaaaatcg	...	3018	..aaaatttgcag	acgaattc				
C.Jap	cgggttg	gtgagttgtttgtcttttttaaaatttact:::aattacgattttcatgcaattcaccggttattttttc	GTCGGGAGAAAAT	TGGAAAAGAG	---	gaatgg	aaaaaagaaaacc	...	312	..caaaattgcag	atgagttc			
C.Rem	cactgttg	gtgagtcgattcg-----:::-----	AAAA	aaTTGGAAAA	AATG	-----	aaaaaaccttcaaatcttc	...	4913	..tatgtttccag	acgaattc			
		* ***** **				** *		*		** *			*	*** * ** **

id=95539 gene=ZK524.2 name=unc-13 segment=chrI.7422984.7424929.1 type=IN

C.Ele	tccttttg	gtgagtggtgttattcagaattataatttct:::tttttgaatatcttttctaaaacgcttacaattttt	---	CTCTTTCT	tTCTTTCTT	-----	tcaaaaactg	tttccttcta	...	3710	..aacttctttcag	atgtacaa			
C.Bri	gccttttg	gtgagttaaaaatatttataattttataaatt:::ctttctgatttctgatcctgaaaagttgtacattga	---	GTTT	tTTGAATTCAG	-----	at	tattctaaaattaggat	-----	3935	..gttctttttcag	atgcgcaa			
C.Bre	gccgtttg	gtgagtt-----ttttgcctatct--tt:::cctattgtagcaaaaatca	---	gaCGAA	atTTTCaGAGAG	-----	ttt	gtcttaatggtg	tttga	-----	2331	..aaaatg	tttcag	atgcgcaa	
C.Jap	acctttcg	gtgagtt-----gatttgcataatattgtt:::ct-----acgataccatcg	---	TTT	TTCCAA	caTTTTTT	gtTCTGGT	aatt	-----	3913	..tttgaacttcag	atgcgcaa			
C.Rem	accgtttg	gtgagtt-----t-----:::-----tca	---	gcCGTTTT	TTCCAATTTT	-----	agt	gcaaat	tttgg	gtg	ccg	-----	4928	..ttctattttcag	atgcgcaa
		** * * *****		*		***		*				*****	*** **		

id=95545 gene=ZK524.2 name=unc-13 segment=chrI.7425800.7430275.1 type=IN VIEW

Figure 79: CS=5.4



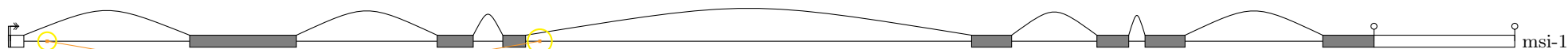
C.Ele	cacaagcc	aaggttggtgga...	955...	tatgcaaatacattgtcag-----	TAGAGAAGAGAAGAAGA	--cgtgcgaggagtgctaattc...	3448...	ttttccaat	ttt	cagttggt
C.Bri	cccaagcg	aaggttggtaac...	752...	gtgaaagtgctagtgaatgg-----	GTTGAAGAAGAAAAGcGGAAG	aaaatagagtgcactctttt...	3213...	aatgaggattg	g	cagctcgt
C.Bre	cacagcg	aagtaatgggc...	1441...	catcaccactgtgaatctc-----	AGGAAGAAGAAGAA	aaaatagc-atattgtatg...	3470...	tattttctctc	g	cagctcgt
C.Jap	ctcaagcc	aaggttggtcga...	1109...	tcaagccaatcggatcattTTCGAT	TTCCCACA	-----	ttttttgctatattgttt...	2915...	tgttcaagttt	aagcttgt
	* * * *	*****		* *	* *		* *	*	**	* * * *

id=142364 gene=R10E9.1 name=msi-1 segment=chrIII_3967105_3971588_-1 type=IN

C.Ele	cacaagcc	aaggttggtgga...	2109...	gcttattttatggaatactTCTTCTCTCTTTTCTA	-----	gtttttttggcagccct...	2292...	ttttccaat	ttt	cagttggt
C.Bri	cccaagcg	aaggttggtaac...	3552...	tctcattgaaagaagtgtcCTTCCcaCTTTTCTTCAAA	-----	aaagtggccccaccgccc...	414...	aatgaggattg	g	cagctcgt
C.Bre	cacagcg	aagtaatgggc...	2937...	tcttggtttccgacacggc--TTCTTCTCTTTTCT	-----	ctgtctcttcacatcact...	1972...	tattttctctc	g	cagctcgt
C.Jap	ctcaagcc	aaggttggtcga...	1614...	aatgcgctcc-----gagatatt	TGTGGGAAAATTGGA	tattttcaagtttatgagc-----	2411...	tgttcaagttt	g	aagcttgt
	* * * *	*****		**	**		* *	*	**	* * * *

id=142364 gene=R10E9.1 name=msi-1 segment=chrIII_3967105_3971588_-1 type=IN VIEW

Figure 80: CS=3.84



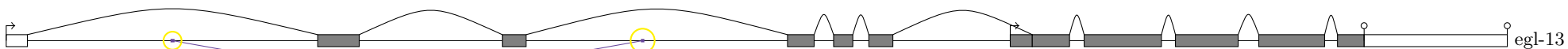
C.Ele	ttctagac	agtgtaagtc-----	:::::	ATTTcTTCCTCGTC	-----	tttttctactcatttctttc...	3309...	tattttcatttt							
C.Bri	ttctagac	cgtgtaagtcctcgtggcgagacc	caaatctt:::::	gggaagcatgagaatttgg	aattttcagcgattttt	gagaGATTTTtcTCCAGTTTTTcTCGTTTTc	-----	tccttcttttgaattttcct...							
C.Bre	tcctagac	cgtgtaagtcgaatgaggatctt	-----	:::::	ggtgagaaaa	-----	TTTTACAGAA	-----	AAAAAA	-----	agaaatgattttagcgaaa	-----	...	2492...	ccgctaatttt
C.Jap	ttctagac	cgtgtaagttttattctcgctaca	----att:::::	aaaaaagttgagaaatc	-----	-----	GAAtGGAGAgAGAGAAAGAGCGAGtcTAAAT	tactactgtactatacagt...	3519...	caaatgatattt					
C.Rem	ttctagac	cgtgtaagtc-----	:::::	-----	-----	AAAAcTCGAAAAA	-----	aggaatatttctcttttgttt	-----	...	3098...	tccttattttt			
	*	*****									*	*		***	

id=142358 gene=R10E9.1 name=msi-1 segment=chrIII.3972900_3976323.-1 type=I5

C.Ele	cacaagcc	aaggt--tgggtgaattg	-----	:::::	-----	GACGAGGAAAGAT	-----	ttt-----	catttgcccatacact	-----	...	4403...	ttttccaatttt	ca			
C.Bri	cccaagcg	aaggt--tggtaacgagtg	tgggtggttagc:::::	gggaagttgggtgtgaa	agtctagtgaaatggg	tttgaagGAAAaaATGActAAAAA	-----	tcTTGAAAAATC	-----	att-----	caacatttttctgaaac	-----	...	2803...	aatgaggatttg		
C.Bre	cacagcg	aagtaatggcggaagga	-----	:::::	agggtgtaaccaggctacttt	gagcttcgtggttc	-----	TTTTT	-----	TTTCTGTtGAAA	at-----	catttttcatctccctt	-----	...	3542...	tattttctctc	
C.Jap	ctcaagcc	aaggt--tggtcgaaatg	-----	:::::	cgtaaacccagccctgattt	caactatcttcgatc	gaaaATTTA	cCTCGCTT	aTCTCTTCTTT	-----	TTTTc	-----	tttttagttacttttttca	-----	...	1279...	tgttcaagttt
C.Rem	cacaagcc	aaggt--tgggtgagaaa	-----	:::::	-----	-----	TTTTTCGAA	TTTT	-----	-----	tttttcggaagaagtccaat	...	4129...	atccccatattc	ca		
	*	**	*				*				**	**		**	*		

id=142364 gene=R10E9.1 name=msi-1 segment=chrIII.3967105_3971588.-1 type=IN VIEW

Figure 81: CS=5.9



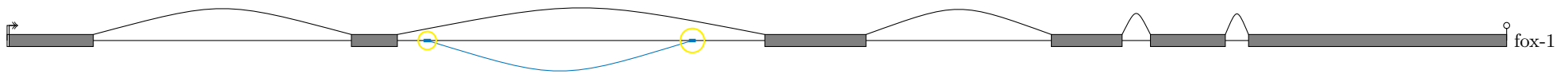
C. Ele	gtggtgag-	ta--agaactagtt...1350...----	ttggaattcatgttatcaa--	CTATgaTCTTtCATT	-gacaatagtcacaaaat	tttccagcatga	gccgtaga
C. Bri	gtggtaat	gggaacaaaa---...401...a---	gtct--tctattccataaata	ATTGTTTTTCTTCTTT	-----acaatctttgtgttatgta-	...3665...tttcagcatga	gccgtaga
C. Bre	gtggtgagt	tgaaaaaactg---...99...----	ctgctcttttcccctagcac---	CTCTTTTTTGTccTTGTG	-----caaactttccattttattat	...3185...tttcagcatga	gccgtaga
C. Jap	gtggtgag-	tggtagaactag--...135...aaactttgc--	tccacttttac----	TTCTCTTCTCTTTTTTGT	gcatgagtcgccgtttgtca-	...3140...tttcagcatga	gccgtaga
C. Rem	gtggtgagt	taattaaacta---...890...a---	ttgt--attgctcgaagaag	TTTCaTCTTtTTTCT	-----ctcaaaa---gtgtgacattgag	...2323...tttcagcatga	gccgtaga
	**** **	**	*	* * * *		*** *****	*****

id=201274 gene=T22B7.1 name=egl-13 segment=chrX.5663876_5668284.1 type=I5

C. Ele	gaggtggg	tgaattggcgg...360...atctgcaatcggctctgcaaa----	AAGTGtAAGAATAG	-----aacaaaaccac-acgtcatac--	...1165...ttttcagcacgt	cagcaaca	
C. Bri	aaggtgag	ttggtcatgtta...415...--tgaaaaatgaaaagaaacgg---	AAAGAAaGAAAAAACAGT	-acagaattttgatttcctcc--	...1253...gtttcagcacct	ctgcgaca	
C. Bre	gaggttag	tttccagcttct...984...gatttgatgacagctgaaat	TGCAAtAACAGAAaGAAGAG	-----aaggagtgggaaggagtagc--	...661...ttttcagcacgt	cagctacc	
C. Jap	aaggtgag	tggaaagaaaag...997...----cggtgacagctgaaattgca	ATAACAGAAaGAAGAGAA	agcagggcgta-gtgctaata--	...583...ttttcagcacgt	cagccaca	
C. Rem	aaggtgag	ttccgaaatga...45...acaagacagtggttgc	aat-----AGAAAAAGAGAGA	-----ggcacaatt--gttcccctga	...1696...ttttcagcacgt	ctgtaca	
	**** *		* **	* ****		***** *	* ** **

id=201278 gene=T22B7.1 name=egl-13 segment=chrX.5669735_5671337.1 type=IN VIEW

Figure 82: CS=5.4



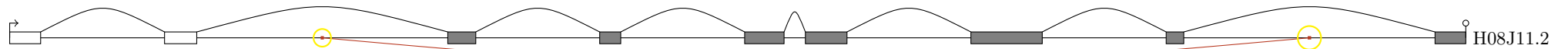
C.Ele	gtcaaggt	acgttccaattaa	-----cctcttaacttc	---aattttctgtc	---ATGc	TCACC	CTCA	TCGT	tcacatttcgtgtgagctat	-----...1133...	tgttttacagga	cgatccga	
C.Bri	gtcaaggt	a---aaaattac	tattatttttttctcttacc	caaaaacattttctgtcatg	ctctctcacc	ccctca	CTCGTTCACA	ttTCGTGTGT	gttatatgaatgaat	acgta...711...	tgttttacagga	cgatccga	
C.Bre	gtgaaggt	atgtttgaattacc	-----ctcttacc	---aattt-ctgtc	---ATGc	TCACC	CTCA	TCGT	tcacatttcgtgtgtgtat	-----...578...	tgttttacagga	cgatccaa	
C.Jap	gtcaaggt	atgtttcgcttg	tt-----ccttcttttttcgcc	-----aaattttt	gtcatgctct	---CACC	CTCA	CTCGTTCACA	ATTT	tggtgtgttatatgaat	gg-----...699...	tgttttacagga	cgatccga
C.Rem	gtcaaggt	atgttcaaattacc	-----ctcttacc	---aagttactgtc	---ATGc	TCACC	CTCA	TCGT	tcacatttcgtgtgtgtat	-----...594...	tgttttacagga	cgatccaa	
	** *****	*	**	* * *	* ** ****	*****				*****	*****	** *****	

id=130569 gene=T07D1.4 name=fox-1 segment=chrX_2447531_2448753_-1 type=IN

C.Ele	gtcaaggt	acgttccaatta	...1036...	ttaaactaattaat	ctaaac-----	ACG-GTGAGa	GGTGGt	GTGT	--tgc	atctcagagcagagat	gtgcacggtt	gtg:::atctgt	aatgagcgc	ttttgttttacagga	cgatccga	
C.Bri	gtcaaggt	aaaaattac	cta...762...	-----tggtttt	ctcgatcct	---aag--	GCGCATGAtc	TGTGAATGAG	-----	-----	-----	-----	-----	cgctttttgttttacagga	cgatccga	
C.Bre	gtgaaggt	atgtttgaatta	...484...	-----ttt	taacttcttttctagat	ACG-GTGAGa	GGTGGt	GTGT	--tgc	atctca--	aatgagatgagc	acggtt	gtg:::atctgt	aatgagcgc	ttttgttttacagga	cgatccaa
C.Jap	gtcaaggt	atgtttcgcttg	...604...	ttga---aatt	---tctaaacatttt	GAATTGAACG	GTGAGa	GGTGT	actgttagcatct	ccgatacacgagat	gtgcacggtt	gtg:::ttctgt	aatgagcgc	ttttgttttacagga	cgatccga	
C.Rem	gtcaaggt	atgttccaatta	...502...	-----act	attttaactcct	---tagac	ACG-GTGAGa	GGTGGt	GTGT	--tgc	atctcaataatgagat	gtgcacggtt	gtg:::atctgt	aatgagcgc	ttttgttttacagga	cgatccaa
	** *****	*	*	* *	** *** **	*****				*****	*****	** *****				

id=130569 gene=T07D1.4 name=fox-1 segment=chrX_2447531_2448753_-1 type=IN VIEW

Figure 83: CS=6



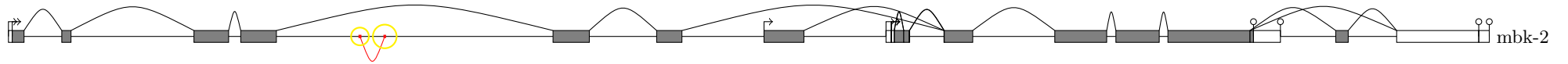
C.Ele	gaaattgt	agaagagggtgt...1982...cgaaaaggtagattaatcca-	AACCGC	TGTCAATCAA	attgtagagcctacaactat...1480...ctttcagagac	aaggggaa
C.Bri	gaagtctg	ggaagaaggagt...1524...cgaaaagacggattaatcga-	AACCGT	TGTCAATCAA	atcatagagctttagtctta...929...ttttcagatac	aaggggaa
C.Bre	gagttgt	agaagaggcgt...1413...-gaaaagacagattaatacag	AACCGC	TGTCAATCAA	atcatagagcctactacacc...1339...atttcagagac	aaggggaa
C.Rem	gaagttgt	cgaggaaggcgt...1217...cgaaaagacagattaataca-	AACCGC	TGTCAATCAA	atcatagagcctacaccta...1003...ctttcagatac	aaggggaa
	** * **	** * * * *	*****	***** * *****	***** * *	***** ** *****

id=161533 gene=H08J11.2 name=H08J11.2 segment=chrX_9083977_9087519.1 type=I5

C.Ele	tgtgagtt	ttttctctgttg...924...ctgtttccatctttttcac--	TTGATT	GACA	GTGGTT	gaataggtttgacaaataaa...1182...ttcagggacgac	aacgcttc
C.Bri	catgtgag	tatccctgttg...842...--atatcgatactcctctcctc	TTGATT	GACA	GTGGTT	gaataggttcgacaaataaa...1763...tgcagggacgac	aactcatc
C.Bre	agtaccba	ttttaactgtta...743...ctgttccaaaactttttcac--	TTGATT	GACA	GTGGTT	gaataggtttgacaaataaa...1472...ttcagggacgac	aacgcatc
C.Rem	cctttcgc	tgttttttgttg...476...tagatatcgatactcccttc--	TTGATT	GACA	GTGGTT	gaataggtttgacaaataaa...1110...tacagggacgac	aatttatc
	*	* * * * *	*	*	*	*****	* ***** ** **

id=161545 gene=H08J11.2 name=H08J11.2 segment=chrX_9095091_9097278.1 type=IN VIEW

Figure 84: CS=4.8



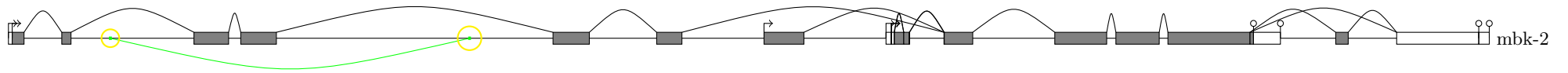
C.Ele	ggttagtt	tttttttcaa...732...ctcaactgtttcattttct-----	CTCTacTGCTTCTTCTTCTTCTacTCT--T	---caatctcgtcgtcatttaa...4165...tacaggatcata	cgagtttc
C.Bri	ggttagtt	tttttttgagt...278...----acttggaaccaagcaggc-----	TAGCacTTTCTCTCTTCTcTTTCTTTA	ttCTGCTact--agtacgtatccactttt...4611...tacaggatctta	cgagtttc
C.Bre	ggttagtt	ctttctcattta...1022...caaccagctgtctaataagaacGAAGaAGAAGAAGAAGctGAGA	-----	agcgtattacattgtccatt---...3881...tacaggatcata	cgagtttc
C.Jap	ggttagtt	tgttatcttcca...841...--gaaatgtacaagtgaagtaAGAAAGAGAGAGAGAAAG	-----	agc--attactttgtccattca...4066...ttcaggcgctta	cgactttc
C.Rem	ggttagtt	tttttttgaat...488...gaccattttatacttgtct-----	TCTTCCTTCTTCTTCTTTT--TCG--T	Tagttcaaaattttctcttc---...4414...tacaggatcata	cgagtttc
	*****	** *		* * *	* ** * **

id=286505 gene=F49E11.1 name=mbk-2 segment=chrIV.13015092.13023809.1 type=IN

C.Ele	ggttagtt	tttttttcaa...893...-----gaacgaagaagctgaagaat---AAGAAGAAGAAGAAGAAGCAAGGG	-----	cgctattacattgttcatt---...4008...tacaggatcata	cgagtttc	
C.Bri	ggttagtt	tttttttgagt...353...--ttccgaacacataacataaaAGTAGtTGAAaaAGAAAAGGAAGAGAGAAAGCTA	-----	cacatgtcggtaaatcgatt---...4538...tacaggatctta	cgagtttc	
C.Bre	ggttagtt	ctttctcattta...1959...--tccttctctgattttcaggag-----	TCTCTTTCTTTTtTTCTCTTC	agatcttccccaagatatac---...2946...tacaggatcata	cgagtttc	
C.Jap	ggttagtt	tgttatcttcca...2059...-----atthtctctacttggcgcc-----	CTTTgTCTCTCTCTTCT	---ctctctctctctatctcc...2848...ttcaggcgctta	cgactttc	
C.Rem	ggttagtt	tttttttgaat...575...tctctcaaccagctgtcta-----	ATGAACGAAGAAGAAGAAGctGAGA	-----	cgattacattgtccactgc...4322...tacaggatcata	cgagtttc
	*****	** *		* *	* ** * **	

id=286505 gene=F49E11.1 name=mbk-2 segment=chrIV.13015092.13023809.1 type=IN VIEW

Figure 85: CS=3



C.Ele	-agtgagct	tttgattctttt...191...ccctgtggggtccttgagaa	AACTtt	TTGATGTtt	TTTG	-----tccatttatgcttaacctga...4715...ttcagtgagtgt	cccacatc	
C.Bri	cagtgagtt	g-tgttactttt...2115...tctctcatctagttctcatt	-----	TTTCt	GAAAGAAA	cgccctcctactcttaagtgc...1931...ttcagtgagtgt	ccaacatc	
C.Jap	-agtgagtt	gctgtttattaa...2772...ccgtacctattaataaaatg	GGCAA	-----	TGAtg	GCAA	ttgatttgtggtggagaaaa...2139...ttcagcgagtgc	cccacatc
C.Rem	-agtgagtt	tctgttactttt...273...ctttacaacacgggcggcca	CTTCat	TTTTT	-----	CTTTTTG	-----atctacttctcatatttaga...3469...ttcagtgagtgt	ccaacatc
	***** *	** * **		**	*	**** *****	** *****	

id=286501 gene=F49E11.1 name=mbk-2 segment=chrIV_13009492.13014589.1 type=IN

C.Ele	ggttagtt	ttttttttcaa...3977...-----	caagctgacctgtgtgccac	CAAA	ACGTCAA	cGTT	-----	cgcaaatcgttcgtcatc--g...930...tacaggatcata	cgagtttc				
C.Bri	ggttagtt	tttttttgagt...1390...-----	attacc	-----	tccaattaccctct	-----	TTTCt	TTTCGAGA	-----	caaga	-----	ttttgctctcttcgg...3522...tacaggatctta	cgagtttc
C.Jap	ggttagtt	tgttatcttcca...4469...ggtggggtgggcgcgagcct	-----	TTGCTC	CATTGCC	-----	agcttgcagcctgctttcca	---...444...ttcaggcgctta	cgactttc				
C.Rem	ggttagtt	tttttttgaat...580...-----	tcaaccagctgtctaataa	-----	CGAA	AAGAAGAAGAAG	ctgagacgtattacattgtc	---...4328...tacaggatcata	cgagtttc				
	*****	* * * *	*	*	*	*	*	* * *	* * * *	* * * *	* * * *	* * * *	

id=286505 gene=F49E11.1 name=mbk-2 segment=chrIV_13015092.13023809.1 type=IN VIEW

Figure 86: CS=4



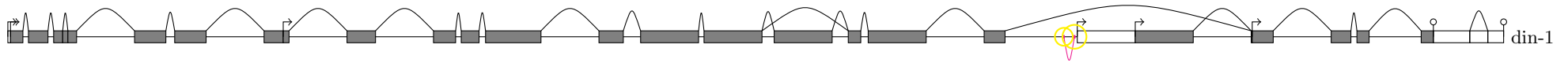
C. Ele	caaataga	atccgtgccccg...38...tactaacacaaatcgtcttg	TCCGTGCACTC	caaggagagagtgtgcatg...77...taagtggcgtg	tgagtttt
C. Bri	cagattga	atctgtgcttat...38...cactcattcaataacttcctg	TCCGTGCACTC	caaggagagagtgtgcatg...77...taagtggaacag	taagtttt
C. Bre	cagattga	atccgtgactac...37...cactcacacaacccctccta	TCCGTGCACTC	caaggagagagtgtgcatg...77...taagtggcgag	taagtttc
C. Rem	cagattga	atccgtgcctat...35...cactcacccaagacttcctc	TCCGTGCACTC	caaggagagagtgtgcatg...77...taagtggcgag	taagtcca
	** ** *	*** **	*** * ** * ** * *****	*****	* * **

id=172750 gene=F53F10.2 name=F53F10.2 segment=chrI_3831120_3831310.1 type=E5

C. Ele	caaataga	atccgtgccccg...59...tccgtgactccaagggaga	GAGTgtGCATGGAA	gcttgcccgaactgtcccca...54...taagtggcgtg	tgagtttt
C. Bri	cagattga	atctgtgcttat...59...tccgtgactccaagggaga	GAGTgtGCATGGAA	gcttgctattaactgtcccca...54...taagtggaacag	taagtttt
C. Bre	cagattga	atccgtgactac...58...tccgtgactccaagggaga	GAGTgtGCATGGAA	acttgcattaactgtcccca...54...taagtggcgag	taagtttc
C. Rem	cagattga	atccgtgcctat...56...tccgtgactccaagggaga	GAGTgtGCATGGAA	acttgcattaactgtcccca...54...taagtggcgag	taagtcca
	** ** *	*** **	*****	*****	* * **

id=172750 gene=F53F10.2 name=F53F10.2 segment=chrI_3831120_3831310.1 type=E5 VIEW

Figure 87: CS=2.4



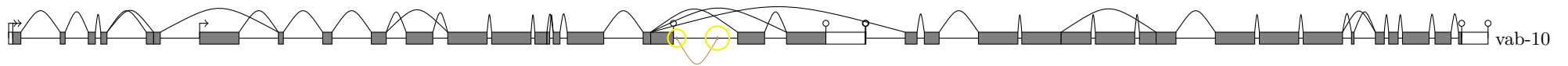
C.Ele	gatccgag	tgcagcgttgg...	1082...	-----	tgcgtggcgctgttgtttg	GGAGGGCGCGACGCACGCTCATT	cgcccggtcggctcgtcgcgc...	76...	actgttgattgt	cgttctct					
C.Bri	agctatat	ttcaaagatggt...	1198...	-----	atgctggcgctgttgtttt	GGA--GCGCGACGcACGC	tcattcgcctggtcggtcgc----	79...	acggttgattgt	cgttctct					
C.Bre	ggctcgag	ttcagcgttgg...	1142...	...	ggtctccatgctggcgctg-	TTGTTTGA--GCGCGACGcACGC	tcattcgcctggccggtcgc----	76...	actgttgattgt	cgttctct					
C.Rem	agccacat	ttcaacgttgg...	1228...	-----	atgctggcgctgttgtttt	GGA--GCGCGACGcACGC	CATT	cgcccggttgcgcgcg...	73...	acagttgattgt	cgttctct				
	*	**	*	****	*****	*	***	***	*****	**	****	*	**	*****	*****

id=314394 gene=F07A11.6 name=din-1 segment=chrII_11619823_11621067_-1 type=IN

C.Ele	gatccgag	tgcagcgttgg...	1166...	gaaggtcccgccacaattc-	AGTGtAGTGTGTCGCGGcTCTCT	gtctccagccactggtgattgt	cgttctct	
C.Bri	agctatat	ttcaaagatggt...	1284...	-----	ccgccactattcggttgtt	GTGTCGTGcGCGCTCT	ctatcccagccacggtgattgt	cgttctct
C.Bre	ggctcgag	ttcagcgttgg...	1232...	-----	ccgccactattcgg-tgtt	GTGTCGTGcGCGCTCTCTGtAGCAA	gccactggtgattgt	cgttctct
C.Rem	agccacat	ttcaacgttgg...	1307...	gaaggtcccgccactattc-	GGTGtGTGTCGTGcGCGCTCT	ctgtcccagccacagttgattgt	cgttctct	
	*	**	*	****	*****	*****	*****	*****

id=314394 gene=F07A11.6 name=din-1 segment=chrII_11619823_11621067_-1 type=IN VIEW

Figure 88: CS=3.84



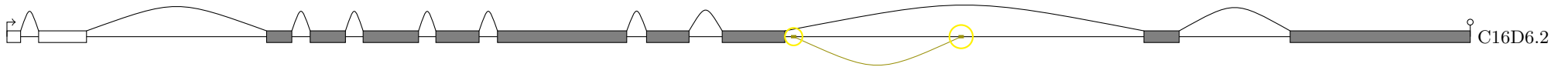
C.Ele	-ttcattca	ttgtcttctaaa-----	ttttttcttcaaaa--	AAAAATCGAATTCAGAGCA	ctttttaatcccctcgcaa...1719...	tcattctgaaca	ggaagaag---
C.Bri	agtctttat	tgatttcttatc-----	attatcacaatcaa	AAAAAATCGAATTCAGAGC	-accagcaacaacaatttt...2229...	ccgcttctcaca	ggaagaag---
C.Bre	actctttct	t-attgtttaac-----	tta-cac-----	AGAAAAATCGAATTCAGAGCA	caactcgaactccaccct...1347...	---ctctgcaca	ggaagaagaag
C.Rem	-tccatatt	tcatttttaaatcattatctctttttctctac-	AAAAAATCGAATTCAGAGCA	ccccatccaacataattacc...3066...	ttctggtttcaa	ggaagaag---	*****
	* *	* * **	*	*****			* *****

id=288310 gene=ZK1151.1 name=vab-10 segment=chrI_11771325_11773120_-1 type=IN

C.Ele	ttcattca	ttgtcttctaaa...1490...	--aaccaaccaaccaaacac	TGTTCTTGAATTCGATTTT	----ctttctacaatctctgtatc----	...222...	tcattctgaaca	ggaagaag---
C.Bri	agtcttta	ttgatttcttat...1610...	--aatcaaccagcctctcacac-	GTTCTTGAATTCGATTTT	---ctctt----tctctgcgtctatct...	...613...	ccgcttctcaca	ggaagaag---
C.Bre	actctttc	ttattgtttaac...876...	ccaatcaa-aaaattctcaca-	TGTTCTTGAATTCGATTTT	----tgagaattaatcccagtct---	...457...	---ctctgcaca	ggaagaagaag
C.Rem	tccatatt	tcatttttaaaa...1345...	tttctcgc-tgagtactcaca-	TGTTCTTGAATTCGATTTT	ttccactcaaaaacgtttctg-----	...1722...	ttctggtttcaa	ggaagaag---
	*	* * * *	*	*** *****	*	**		* *****

id=288310 gene=ZK1151.1 name=vab-10 segment=chrI_11771325_11773120_-1 type=IN VIEW

Figure 89: CS=6.24



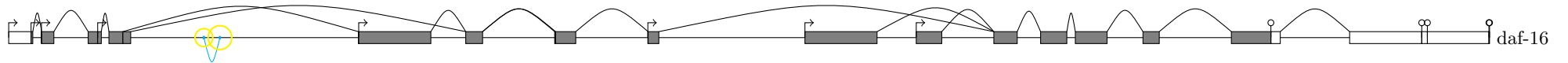
C.Ele	gatcaact	gcaacaa	AGGTAAAc	GCCC-G	tTCGACGACA	c--	TATGCACGT	gaccacg	cgatgaaatc	ctt-----	...1258...	ttgttcatactg	caatttca	
C.Bri	gatctacg	gctacacag	GTAAC	AGCCCGGT	TCGACAAt	ACATT	TGTCACGT	---	gcctcacg	aaaaac	cttt-tc-----	...1698...	gatatcaaatt	aaattaag
C.Bre	gatccacg	gcgacac	AGGTAAAc	GCCC-G	TTCGACAACA	c--	TATGCACGT	gATCA	----	cgcgact	ctttattc	accac...1333...	tagttcatgatg	ggttttca
C.Rem	gatctacg	gcaaca	CAGGTAAAc	GCCC-G	tTCGACAACA	c--	TATGCACGT	gATCA	cgccat	gagatct	ttttctc-----	...1252...	gagttcatacca	atttttca
	**** *	** **	*****	****	*****	* **	* *****		*	*	*		***	**

id=305510 gene=C16D6.2 name=C16D6.2 segment=chrX_12538022_12539351_-1 type=IN

C.Ele	gatcaact	gcaacaa	aggta...	426...	ttgttg	gaaa--	atgatgatg	g-----	GTGTGCATG	atGTTt	GTTG-At	CGGGTt	TTTACCT	----	gcaaac	-ttg	aattgaa	g...806...	ttgttcatactg	caatttca	
C.Bri	gatctacg	gctacacag	gta...	413...	--gat	gataat	gatgatgatg	g-----	ATGTGCATG	atGTTT	GTTG-At	CGGGTt	TTTACCT	ctgag	agaaaa	acgttcaa	-----	...1264...	gatatcaaatt	aaattaag	
C.Bre	gatccacg	gcgacacag	gta...	384...	--aat	cacaat	gatgatgatga	TGATgg	GTGTGCATG	atGTTt	GTTGAAT	cGGGt	TTTACCT	----	acaaa	catata	aa-tattc...	921...	tagttcatgatg	ggttttca	
C.Rem	gatctacg	gcaacacag	gta...	437...	ttcac	acaaat	ggaat--	tga	TGATgg	GTGTGCATG	atGTTt	GTTG-At	CGGGTt	TTTACCTG	----	a-aaa	atatt	aaattattc...	787...	gagttcatacca	atttttca
	**** *	** **	*****		**	**	**		*****	*****	*****	*****	*****	****	*	*		***	**	**	

id=305510 gene=C16D6.2 name=C16D6.2 segment=chrX_12538022_12539351_-1 type=IN VIEW

Figure 90: CS=4.8



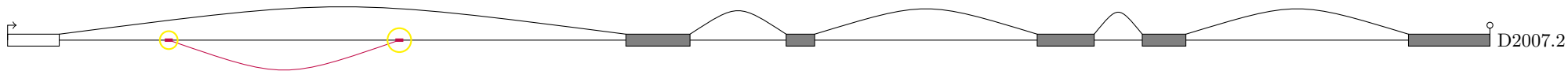
C.Ele	agaactag	gtacgccaatt...585...-----cg-----ggaattcacgtgcatgt-----GAGGAGgAGAGGcAAATAGAATTTAAaggggtttcccgatctttt-----...4314...tcatcca-attcc	agagaact
C.Bri	acaacag	gtacgcatgag...604...cgcc--catg---tgaattcacgt-----GAAGGGAAAAAGacAGAAA-----tgcgagcaaaca-aaaagggg...4301...-actacattttcc	agaatcct
C.Bre	agaaccag	gtatgcttatta...255...-----ttttgatcattgaaatTTCTTTCTTTTTTCACTCTT-----ctttatatttcgatctcgt-----...4651...-catttatattcc	agagaaat
C.Jap	ggcaccag	gtaatacacgca...2812...-----tgatgatagacatcgaaaa-----AAGAAaAAAGAAAAGAAGAATAA-aaaagttgaaaatgttaca-----...2091...-tatcatcattcc	agagacc
C.Rem	agaaacag	gtacgcgaaagg...575...ccccttcatg---tgaattcac-----GTGAAGAGacGAAAAAGAAAAGA-----agagcaaacagtttgaaacg--...4327...-atttaatttcc	agatttca
		* ** *** * ** ** *	

id=31150 gene=R13H8.1 name=daf-16 segment=chrI.10751178_10762756.1 type=IN

C.Ele	agaactag	gtacgccaatt...687...----agtttgcaacaactggggaTTAGGTttTCTATTTCTCTTTCTC-----ttttgattgcttggaaatta...4212...tcatcca-attcc	agagaact
C.Bri	acaacag	gtacgcatgag...2604...catcgaaaatgccatcctct-----TTTCTCTTTTTTCTTTTC-----cccatattatcgggtcattt...2303...-actacattttcc	agaatcct
C.Bre	agaaccag	gtatgcttatta...495...-----atgaaattcacgtgaaacac-----TGAGAGaAAAGAGAGGcacatgataaaaagaagaag...4414...-catttatattcc	agagaaat
C.Jap	ggcaccag	gtaatacacgca...4448...--tcgcttcgagctccactaag-----TTGTTCTTCTTcTTCTTTCTTT-----cgctgccggtttcgattct...455...-tatcatcattcc	agagacc
C.Rem	agaaacag	gtacgcgaaagg...658...cttttgactctctcctccc-----TCTTtCTCTTTTCTTCTTCAT-----tttgtcaaacgacaaaaac...4245...-atttaatttcc	agatttca
		* ** *** * ** ** *	

id=31150 gene=R13H8.1 name=daf-16 segment=chrI.10751178_10762756.1 type=IN VIEW

Figure 92: CS=3



```

C.Ele  tcgactca gaatgcttgcaa...196...tcctttccttcacaaaaa--GAGGAAgGAAAaAGAAATGGAGttGAAGGaactcaattcgattaa-caac...3067...ttcagaacttca aagacatc
C.Bri  tcggttga gaatgcttgcaa...701...gaagagacctgatagaaaatGAAAAGAAGAGAGAAGAAAAGAGTTCT-----gtgcgctccggctcattgggt...2048...ttcagaacttca aagacatt
C.Jap  tcgtttga ggattctggcaa...1772...tattcatttagataatgacaAAAActGAAGGAAAAGT-----taatttgact--actaaccagc-...3136...tgcagaacttca aggacatt
C.Rem  tcgattga ggttattggcaa...191...tccgattccttcgtattccc--GGAAGGAaaAAAGA-----aa-tagagtcgacgactcaat-...2091...ttcagaatttca aagatatt
***  * * * * * ****
                *   * * * *
                                *
                                *   * * * * * * * * * * * * * * *
  
```

id=142538 gene=D2007.2 name=D2007.2 segment=chrIII.8149018.8152373.1 type=I5

```

C.Ele  tcgactca gaatgcttgcaa...1279...-----gagtcataactgtctgatc-TTTCttCTTCATTTCTTTTCaTTCCTCctccacactcgattttaa...1984...ttcagaacttca aagacatc
C.Bri  tcggttga gaatgcttgcaa...1153...--aataaaacgagcgatatcta--AGAATTCTTTTaTCTTCTTTTCTTT-----gattagatttctctccgcc...1595...ttcagaacttca aagacatt
C.Jap  tcgtttga ggattctggcaa...3321...-----cctctcctccccaccttctGCTTTTTTCTTTCCTTT-----gctccgagagccctcaattt...1586...tgcagaacttca aggacatt
C.Rem  tcgattga ggttattggcaa...709...acaacgagatgag-aacaac-----TCTTTTCTTCT-----cctgggaattcagtttctcg...1575...ttcagaatttca aagatatt
***  * * * * * ****
                *
                                *   * * * * *
  
```

id=142538 gene=D2007.2 name=D2007.2 segment=chrIII.8149018.8152373.1 type=I5 VIEW

Figure 93: CS=4.8



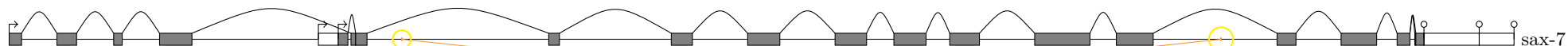
C.Ele	gcgttgag	gttggtttttt...467...gacaacccacagacacaca---	TCAAAA	GTCGAAAA	GTCAAA	caagaaaagtg---tgtgcctag-...87...tgatcgttacag	acatgtca
C.Bre	ggattgga	gtgagtttgata...524...ctcagacacacagacacata---	TCAAAA	GTCGAAAA	TGT	---caa-acaagagagctgtgccg---...69...actttctacag	acatgtca
C.Jap	aatatgag	gtaaatttttaa...308...--caatcacacacacacact--	TCAAAA	GTCGAAAA	---	---tgtcaa-acaagag---tgtgccg---...117...tttgtgttcag	acatgtca
C.Rem	gctttgag	gttagtctgatt...460...---gacacacagacacatacaca	TCAAAA	GTCGAAAA	TGT	---caa-acaagag---tgtgccgtga...63...ctctttctacag	acatgtca
	**	** * *	* **** * *	*****		*** * ** * *****	* ** *****

id=284064 gene=T05B11.1 name=T05B11.1 segment=chrV.7749345.7749984.1 type=IN

C.Ele	gcgttgag	gttggtttttt...554...-----tgaatattatatacatt	TTTGACTTTT	TGACT	TTTTGA	cacgtgtcaacaag-----ccaacttgat--cgttacag	acatgtca
C.Bre	ggattgga	gtgagtttgata...595...aaactgactgactgaaatat-----	ATATTTT	TGACT	TTTTGA	cacgtgtcaaccct-----tctact-ttt--c--tacag	acatgtca
C.Jap	aatatgag	gtaaatttttaa...393...-----acatatatcacctctttttt-----	TTTTGACT	TTTTGA	TTTTGA	cacgtgtcaacacgcacgcgaaactgtctacatcacctcctactcaactgttttggttcag	acatgtca
C.Rem	gctttgag	gttagtctgatt...524...--actgactgactgaaatat-----	ATATTTT	TGACT	TTTTGA	cacgtgtcaaccct-----tctactcttt--c--tacag	acatgtca
	**	** * *	* ****	*****		*** * ** * *****	* ** *****

id=284064 gene=T05B11.1 name=T05B11.1 segment=chrV.7749345.7749984.1 type=IN VIEW

Figure 94: CS=6.8



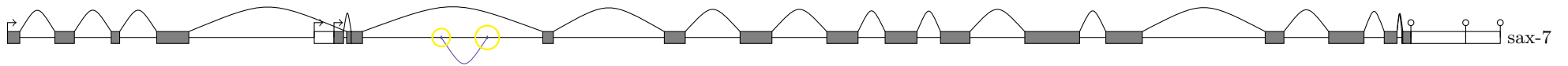
C.Ele	gttgtgag	ttcttttttaa...266...atatccgccccgtaaaattg-	TTGTGT ac TTTC a CTTTT	-----ca-----	ttcactttctgaggaaat...2325...ttttcagtgcaa	caaatgcc
C.Bri	gttgtgag	ttttttatcctt...47...---gaatttcggcaaattataaa--	TTTTCTTC g TTGCAAAAAT	tgaatcagatcaatcaaaaa-----	...2066...ttttcagtgcaa	cagatgcc
C.Bre	gttgtgag	ttttttcgaatc...3587...---cgaattagtagaatctcgag	TTTC t TTTC c TTTCTT	-----cgcgcagctttcactttca-----	...1321...ttttcagtgcaa	cagatgcc
C.Jap	gttgtgag	ttttttcaaacg...2631...gttcca--ttcgattatttc--	TTTCTTCTT t TTTCT	-----cggccgcccccacaatctc-----	...2200...ttttcagtgcaa	caaatgcc
C.Rem	gctgtgag	ttttttatttct...43...tttcaaattcctgaaag---aaa---	TTATTG g TTGCAAAAAT	tgaatcagatcaatcataaa-----	...2215...ttttcagtgcaa	cagatgcc
	* *****	** ***	* * *	**	*****	** *****

id=9251 gene=C18F3.2 name=sax-7 segment=chrIV_8067348.8070021.1 type=IN

C.Ele	gaggtgag	agttttctacat...694...tcattagctggagaaggagc-----	AAAAAG a GAAG aa ACACAG	gaaatagctggaccttcgag-----	...1511...attacagtggac	cctggagt
C.Bri	tgttcata	ggtttactgtac...1557...-acccaag-gaagacttaacc ATTTT	TGCAA a GAAAT GAGAG	---caccaggcgcgcccgcg-----	...459...attacagtggat	cctggagt
C.Bre	gaagttcg	aattctgtgat...1258...-----gaacattaataactatac	GAGAAA a GAGAGAG	-----atactgaacatcttcatctc--	...892...attacagtggat	cctgggca
C.Jap	gaggtgag	ttttttgaaacac...1982...-----atthaaccactttgtgcaa	AGAAAT GAGAAAGAAA	-----actagccgctcggacccttc...	1425...tttcagtcgac	cctggagt
C.Rem	gaggtgag	tattttgaaaa...1222...--ccaagttaaagacttaacc ATTTT	TGCAA a GAAATGA	-----gagcaggcgtgagaaaacg-----	...471...attacagtggat	cctggagt
	** *	*	* * * *	*	** * * *	*****

id=9267 gene=C18F3.2 name=sax-7 segment=chrIV_8079133.8081420.1 type=IN VIEW

Figure 95: CS=4.5



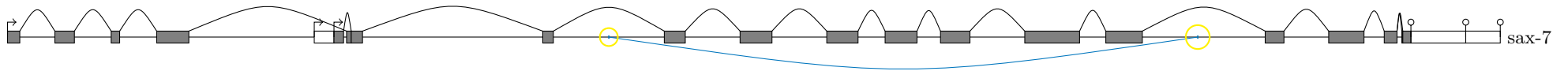
C.Ele	gttgtgag	ttcttttttaa...671...-aagaacggttgaatcggaat---	GAGAGAGAGAAAAAG	-----agatctgacaacccccgagg...1924...ttttcagtgcaa	caaatgcc
C.Bri	gttgtgag	ttttttatcctt...1180...---agttgtctcttctcttcttc	TCATCACCAAtCACAA	-ttttattgaattct---attctt---...937...ttttcagtgcaa	cagatgcc
C.Bre	gttgtgag	ttttttcgaatc...2909...caacaatgttgcatctgata---	GAGAAAAGAGAGAAAAAG	agtcagttaggaactaa-----atgg...1999...ttttcagtgcaa	cagatgcc
C.Rem	gctgtgag	ttttttatttct...1237...-ggagtgtctgcttcttctt---	CATCACCAAtCACAA	-ttttattgaattct---attctt---...1024...ttttcagtgcaa	cagatgcc
	* *****	** ***	* * **	**	***** ** *****

id=9251 gene=C18F3.2 name=sax-7 segment=chrIV_8067348.8070021.1 type=IN

C.Ele	gttgtgag	ttcttttttaa...1092...gctgggtgctcgtgtcgcgatg-	CTTTTCTTCTCTT	-----cacttttgcaatctacgca---...1504...ttttcagtgcaa	caaatgcc
C.Bri	gttgtgag	ttttttatcctt...1324...ctcaaaccgcctcttctt---	TTGTGTGGTGGTGG	gtgaatgactaaccagt-----cag---...794...ttttcagtgcaa	cagatgcc
C.Bre	gttgtgag	ttttttcgaatc...3586...tcgaattagtagaatctcga-	GTTTCTTTCTCTTCTT	-----cgcgcacgtttcactttt-----ca---...1321...ttttcagtgcaa	cagatgcc
C.Rem	gctgtgag	ttttttatttct...1392...-----cgcctccttcttcttctt	TTGTGTGGTGGTGG	---taatgacaaccagt-----cagta...870...ttttcagtgcaa	cagatgcc
	* *****	** ***	** * **	** *	** ** ***** ** *****

id=9251 gene=C18F3.2 name=sax-7 segment=chrIV_8067348.8070021.1 type=IN VIEW

Figure 96: CS=2.4



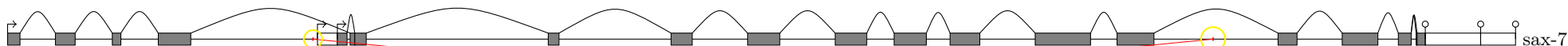
C.Ele	atagtaa--g	tttttgacttt...809...	--cgccgccacg-aggtccgaac-----	TCTAATGAAGCGTG	cccttgtagc-tttgaatgtt-----	...3097...	atttcagtccag	cacaaaa
C.Bri	--agtaagcg	ttttcaatttc...431...	-tcgacacaac--caatctttcc	GGAGAGAGAAAAAGAGAG	-----cttagaagatgttaagatgt-----	...1386...	ttttcagcccag	cacaaaa
C.Bre	atagtaa--g	ttttctttcaat...636...	---gccgcagcgtcgaaccgaaac-----	TCTAATGAAGCGT	accatgtacgttttgaatg-----	...1139...	ttttcagtcccg	ctcctaaag
C.Rem	atagtaa--g	tttttcgatcac...768...	gtatacccttttttgactt----	GAGAGAGAAAAGAAGAGTGAAT	----tgaagtgaagtgtggtcac....	740...	atttcagcccag	caccgaag
	**** *	****	* *	** **	* * *		***** ** *	* ** **

id=9253 gene=C18F3.2 name=sax-7 segment=chrIV_8070119_8074102.1 type=IN

C.Ele	--gagtaag	agttttctacat...588...	-----t-gttttgtgttcggttcgctc	CATGCTTCATTAGG	-----tcttctcgcggtcatttctc...	1622...	attacagtggac	cctggagt
C.Bri	tgttcatagg	tttactgtac...1243...	---agaagaacaaatgttgcata-----	TTCTCccTTTCTaCTTTT	accatctc-caactgcttc-...	775...	attacagtggat	cctggagt
C.Bre	--gaagttcg	aattctgtgat...503...	-----taaccttttgtt--gttcgtcc	ATGCTTCATTAGG	-----cggcgcggcaattccttgtt...	1648...	attacagtggat	cctgggca
C.Rem	--gaggtgag	tattttgaaaaa...940...	tacgtgaagaggaacatcat-----	GTTGCAaTTCTcTCTTTCTCTTTT	tactcatctt-cgattgctta--...	745...	attacagtggat	cctggagt
	* *	* *	*	** **	* **		*****	****

id=9267 gene=C18F3.2 name=sax-7 segment=chrIV_8079133_8081420.1 type=IN VIEW

Figure 97: CS=6



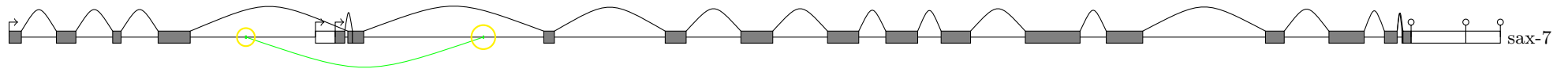
C.Ele	caagtgag	tgataacagttt...2511...tttgggcaagtgagagata	GGAAAAGAGAGaaAGAGATctACTGC	-----	:-ttgctgct-gctactgctgccagtg	tgtgcctc----
C.Bri	caagtgag	tggggaagggg...1745...aagaagacgactgggacgac	GGAAAaGAAGGATG	-----	:ccttcttctggttgctgctactgctgc	tgtgcctccttt
C.Bre	caagtaag	ttgggctagagt...986...aacagattagccgagttaa	GTGGTGTTCCTCTT	-----	cctattccctgctactgctgccagtg	tgtgcccc----
C.Jap	caggtgag	tgggggagcct...4856...gacagggtggtggagtgcgc	AGAGAAGAAGAGAG	-----	:cgtactgct-gctgctgccgccagtg	tgtgcccc----
C.Rem	caagtgag	tggggagatggg...888...aacagattagccgtagttaa	GTGGTG-TTCCTCTT	-----	:cctactgct-gctactgctgccagtg	tgtgcccc----
	** ** *	*	*		* * * * * ** * **	***** *

id=9245 gene=C18F3.2 name=sax-7 segment=chrIV_8064309_8066907.1 type=IN

C.Ele	gaggtgag	agttttctacat...609...--atgcttcattaggtcttctc	GCGGTcATTCTccTTCTTTCT	cactca-----	ttccacctgcgcg...1592...attacagtggac	cctggagt
C.Bri	tgttcata	ggtttactgtac...742...-----ggttccttcttttcctatc	CATCgtCTTCTTCT	--tcttcgggtgcactcgcaat-----	...1282...attacagtggat	cctggagt
C.Bre	gaagtgcg	aattctgtggtat...1693...aagaaatgagagcaggcgct	GAGAAAACgaGCCAT	-----	gtttg-----ttccaaatagatg...456...attacagtggat	cctgggca
C.Jap	gaggtgag	tttttggaacac...1832...aatccgcccgaacgatctc	CTCTTCTTCTTcTTCT	-----	tcttttcttcttcctggac-----	...1574...tttgagtcgac
C.Rem	gaggtgag	tattttgaaaa...1252...aagaaatgagagcaggcgct	GAGAAAACgaGCCAT	-----	gtttg-----ttccgaatagatg...445...attacagtggat	cctggagt
	** *	*	*	*	** ** ** *	*****

id=9267 gene=C18F3.2 name=sax-7 segment=chrIV_8079133_8081420.1 type=IN VIEW

Figure 99: CS=6



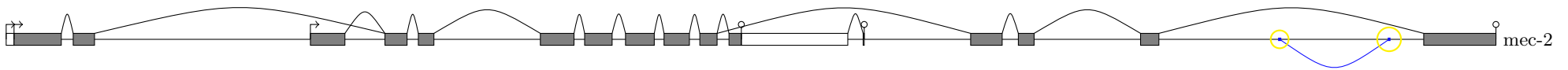
C. Ele	caagtgag	tgataacagttt...1914...	tggtgtagatgaagtgaatc-----	TIGTTTTCTTTCAATTC	-----	gcgctgtttttttctaaa-----	...602...	tgctgccagtgc	tgtgcctc----		
C. Bri	caagtgag	tgggaagggg...294...	-----aaaacc---aatttcgggtcc	TTTC	---aTTTCTCTTCT	TGAG	-----	attgagatttagcatcaa-----	...1713...	--ctgc--tgc	tgtgcctctcttt
C. Bre	caagtaag	ttggctagagt...952...	-----taaaaaggaagggggagggga			GAAGAGGAATGAAAAACAGAT	-----	tagccgcagtttaagtgggt	...745...	tgctgccagtgc	tgtgcccc----
C. Jap	caggtgag	tgggggagcct...4856...	-----gacagggtggtggagtgcgc			AGAGAAGaAGAGAGtAAAA	-----	ttcgggaaagcgagagaga...	...50...	tgccgccagtgc	tgtgcccc----
C. Rem	caagtgag	tggggagatggg...366...	-----ttcaagtatccgtagtgtgc	CTTCT	cTCTTTCTCCTTCT	TTCA	-----	tatagtactacaactctctc...	1204...	tgctgccagtgc	tgtgcccc----
		** ** *	*					*		* ** ***	***** *

id=9245 gene=C18F3.2 name=sax-7 segment=chrIV_8064309.8066907.1 type=IN

C. Ele	gttgtgag	ttcttttttaa...1044...	-----tcggtggga---ggcacaccga-----			TGGGAATGAAGAACAG	-----	ctgttcattcgctgggtgc---	...1549...	tttccagtgcaa	caaatgcc
C. Bri	gttgtgag	tttttatcctt...426...	-----gttgatccaacaatgttgca			TTTGATaGAGAGAGAGAAaGAGA	-----	atgagctggttagagaggaa---	...1684...	tttccagtgcaa	cagatgcc
C. Bre	gttgtgag	tttttcgaatc...1911...	-----gaagacttcacggaagacct	GTCT	tGTTTTTCATTCT	tCCTC	-----	atagcctgctccagcgagtc---	...2988...	tttccagtgcaa	cagatgcc
C. Jap	gttgtgag	tttttcaaacg...405...	-----ttgtcagtca---actgcatctt			TTTTTCTCTCTaTTCTTT	-----	tccccctggtctgtctcttt...	4422...	tttccagtgcaa	caaatgcc
C. Rem	gctgtgag	tttttatttct...469...	-----agtgtgtagga---actgaat			TGGGGGAGtaAGAGAaAGAaAGAAG	-----	accatcatcgactctgaac---	1780...	tttccagtgcaa	cagatgcc
		* *****	** ***	*						*****	** *****

id=9251 gene=C18F3.2 name=sax-7 segment=chrIV_8067348.8070021.1 type=IN VIEW

Figure 100: CS=4.5



C.Ele	cccaggta	agccttcatttt...740...-gaaaaagctcaaaagaaaa	AGAAGctGAAGaGGAGA	--agaagttgaaaagaagaaa...1857...attttcagcac	ttctgac
C.Bre	cccaggta	aaaactatttct...475...aaagagtgttgtaaggaaa	GCAGAAAGAAGaGGAAAG	aatccacgagtgagttatc...2169...aatttcagcac	ttctgac
C.Jap	cccaggta	tgtaattgcat...1431...-gaagaatcagaagatgagtc	GGAAGAAGaaGAAG	-aagaagaagcggagaagaa...1009...tccttcagcac	ttctgac
C.Rem	cccaggtg	agaacaattact...482...-aaaaatgtagtgaagagaa	TAGGAAGAAGCGGAAAG	aatctacaagtgaaactggt...2160...ttcttcagcac	ttctgac
	*****	*	*** ** *	*	***** *****

id=296527 gene=F14D12.4 name=mec-2 segment=chrX.5587764.5590441.1 type=IN

C.Ele	cccaggta	agccttcatttt...2469...-acttgcatcttcttctcgc	TTTCgCTTCTTCT	gcacatcacagtgagt-ttga...130...attttcagcac	ttctgac
C.Bre	cccaggta	aaaactatttct...2508...catcttcttcttctcctcg	CTTCTgCTTCTTCTGC	acatcacagtgagtattttc...136...aatttcagcac	ttctgac
C.Jap	cccaggta	tgtaattgcat...2382...-ctcaatttctactgttccgc	TTTCgCTTCTTCT	cgacatcacagtgagt-ttt...58...tccttcagcac	ttctgac
C.Rem	cccaggtg	agaacaattact...2513...cttcttcttcttctcgc	CTTCTGCTTCTTCTG	cacatcacagtgagt-ttgag...129...ttcttcagcac	ttctgac
	*****	*	*** ** ***** ***** ***** **	*	***** *****

id=296527 gene=F14D12.4 name=mec-2 segment=chrX.5587764.5590441.1 type=IN VIEW

Figure 101: CS=4.8



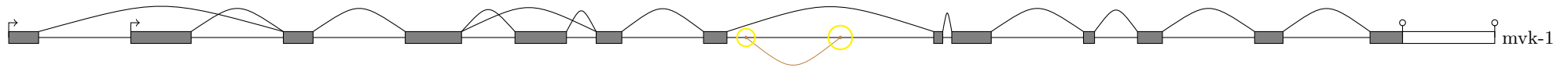
C.Ele	aaaaggtg	gaaactacaatc...1499...-----agtagtttacgcacctcatt-----	TTTCTTCTCgCTTTCatAAGCC	agatgtatattgcctctgga-----...3403...--gaaaaagctgtg	tgtagcct
C.Bre	aaaaggtt	tatactttgact...3831...gcaacattaaaatcttaccg-----	CATTTCTTCaTCTTTcaTTCTA	-----tcggttcttctttcacataa...1071...aagaagaagctgtg	tt--gcct
C.Jap	aaaaggtg	gatgttttgaa...1029...----aatgagatthttacttgttt	GTTTCTTCTTCTTCTaTTTTtTTTATTTTT	-----gctatthtttctatthtttct...3641...--gagaagaccttc	ttcttctt
C.Rem	aaaaggtt	tatactttgaca...472...--gaattggtggtccaagtgaa-----	TTCCcaTTTTgTTCTTCTTTCacTTAG	---ttgcggaaggaaatcatttt-----...4426...aagaagaagctgtg	tt--gcct
	*****	* *	* * * * *	*	** * * *

id=296500 gene=F14D12.4 name=mec-2 segment=chrX.5576312_5582573.1 type=IN

C.Ele	cccaggtg	agccttcatttt...671...gtagacaaaaagcagcaaaa	GGCTTtgGAAAAAGAGAGAAAGAAG	-----ctagaaaaagagaagaagaa-----...1918...atthtttcagcac	ttctgatc
C.Bre	cccaggtg	aaaactatttct...682...----taagaaagcagcaaaagcat-	TGGAGAAGGAGAAGAAGAAAATG	-----gaaaaagagcagaaaaagct---...1957...aatthtttcagcac	ttctgatc
C.Jap	cccaggtg	tgtaattgccat...576...gccgccaaagcactggaaaa-	GGAATGAAAAAAcGAGAAaaAGAAcaGAAGAAAT	tgagaaagctcaaaagaag-----...1843...tcctthtttcagcac	ttctgatc
C.Rem	cccaggtg	agaacaattact...675...----acaaaaagcaggcgaaagct	TTGGAGAAAAGAAAGAAAAAActGGAA	-----aaggaacagaagaagttaga...1957...ttctthtttcagcac	ttctgatc
	*****	*	* * * * *	** * * * * *	*****

id=296527 gene=F14D12.4 name=mec-2 segment=chrX.5587764_5590441.1 type=IN VIEW

Figure 102: CS=4.32



C.Ele	ctgcactt	ttggtatgttta...58...--ctcaaaaagtgtgt----gcggc	GGCGGGTGCCCGGGTgTGTG	----attcttcatttcttattatt...1278...tgtttcatattt	caggagga
C.Bri	ctgcactt	ttggtacgtctt...72...aatgggtcaaaattg-----acggc	GGCGGGTGCCCGGGTg	-----tgtcttttttttcaaataa...1548...cgatttttctta	caggagga
C.Bre	ctgcactt	atggtaggggaag...71...-----aaaagtgtgtgtttggcggc	GGCGGGTGCCCGGG	----tgtgtgttccttctctctc-----...1024...ctgaaatttta	caggagga
C.Rem	ctgcactt	ttggtacgtttt...56...--actgaaaattgtgt---ggcggc	GGCGGGTGCCCGAGGGT	ggtgtgtatctctctttttt-----...1071...aattattttta	caggagga
*****	***** *	**** **	***** * *	** * * *	* ** *****

id=216150 gene=Y42G9A.4 name=mvk-1 segment=chrIII_6127870_6129289_-1 type=IN

C.Ele	ctgcactt	ttggtatgttta...801...-----cttgattattatcttccatc	TACAaACCCcCGGGCGCCgCGCC	ctcataaatccaatcaacac...532...tgtttcatattt	caggagga
C.Bri	ctgcactt	ttggtacgtctt...383...ccccccacctaccgtaacc-----	CATCcCGGGCGCCcCGCC	cctcctctctcaactgtt...1235...cgatttttctta	caggagga
C.Bre	ctgcactt	atggtaggggaag...498...--gtctgtgtaaccgaatctc-----	CCCGGGCGCCgCGCC	cccaatcctcacatgtcgtc...596...ctgaaatttta	caggagga
C.Rem	ctgcactt	ttggtacgtttt...492...-----tagacccaattttcatcgaa-----	ACCCcCGGGCGCCgCGCC	ccacgtcttctgatcaact...633...aattattttta	caggagga
*****	***** *	* *	***** * *	** *	* ** *****

id=216150 gene=Y42G9A.4 name=mvk-1 segment=chrIII_6127870_6129289_-1 type=IN VIEW

Figure 103: CS=4.8



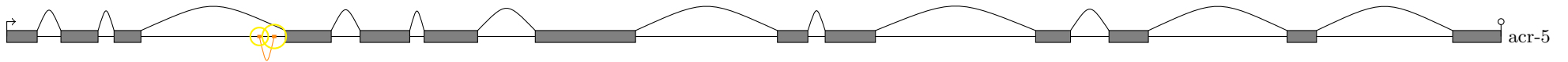
C.Ele	cttcccaa	ggtagataaatt...935...-aaacgtttacggcattt	gta	TTTGCAACgCAAAT	--acccc--gatgtgttaccg	g...63...tcaattctttca	gatgaacc					
C.Bri	tttcccga	ggtaatgagaag...883...tacacgtttacggca-tagta	TTTGCAACgCAAAT	acacccc--gattccagta--gaa...116...tttctgttttca	gatgcacc							
C.Bre	tttcccga	ggtaatatctca...703...taaacgtttacgggc-atgta	TTTGCAACgCAAAT	actccctcttca	ctccatc----...102...tgattttttgca	gatgaacc						
C.Rem	cttcccaa	ggtaatgagaaa...603...taaacgtttacggca-tagta	TTTGCAACgCAAAT	acgcctctcgaatgaatgta----	...99...tctgttttttca	gatgcacc						
	**** *	****		* *****	*****	**	*	*	*	*	*	**** **

id=71168 gene=Y8G1A.2 name=inx-13 segment=chrI.3750475.3751550.-1 type=IN

C.Ele	actctcga	agtaagtcaatg...40...t--gcgactgcggtcctgtata	ATTTGgGTTGgCAAG	gccat-tcgtgtgtctccga--a...367...attaaaatttca	gatggaca				
C.Bri	actcgaga	tgtaagttatgt...47...tagatggttctggtc--atata	ATTTGgGTTGgCAAG	gccatcccgattgtatccgt--...175...attcgattttca	gcggccca				
C.Bre	attctcga	tgtaagtcaatg...51...ttggtggttctggtc--atata	ATTTGgGTTGgCAAG	gccat-ccgattg--tccgttga...103...ttttcaatttca	gcctctca				
C.Rem	attctcga	tgtaagtcaatg...30...ttggtggttctggtc--gtata	ATTTGgGTTGgCAAG	gccat-ccgattg--tccgttga...144...ttatcgttttca	gcatctca				
	* * * *	***** *		* * * * *	*****	*	*****	*	**

id=71172 gene=Y8G1A.2 name=inx-13 segment=chrI.3748944.3749429.-1 type=IN VIEW

Figure 104: CS=6.92



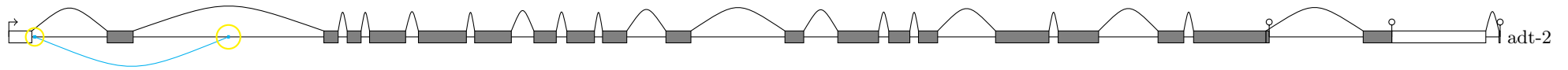
C.Ele	aaaagctc	aatgaaggttg...320...aaacgtgcagtc	catgtccga	GTGGTTAAGGA	gaTTGA	ctcgaatcaattgggctct...50...tgttgatatt	tttacagg
C.Bri	agaaatta	aatgaaggtg...140...gccagtcagtc	catgtccga	GTGGTTAAGGA	gaTTGA	ctcgaatcaattgggctct...133...tttgcgcttt	taccctt
C.Bre	agaaattg	aacgaggtaag...198...cggcatgcagtc	catgtccga	GTGGTTAAGGA	gaTTGA	ctcgaatcaattgggctct...97...tgattttaatt	tttcagg
C.Jap	agaaactt	caagaagtgag...111...tttcgtgcagtc	catgtccga	GTGGTTAAGGA	gaTTGA	ctcgaatcaattgggctct...79...cttataacctt	tttaaagg
C.Rem	agaaactg	aatgaaggtg...152...cgtcgtgcagtc	catgtccga	GTGGTTAAGGA	gTTGA	ctcgaatcaattgggctct...97...atactttttga	cttcagg
	* ** *	* ** ** *		*****		*****	*****

id=81285 gene=K03F8.2 name=acr-5 segment=chrIII.6513846.6514296_-1 type=IN

C.Ele	aaaagctc	aatgaaggttg...369...tgggctctgcccgcgtaggt	TCGAaTCCTgc	TGACTGC	gaa--ttcattttatttaaaattgttg	-----:~::~-----atattttac----agg
C.Bri	agaaatta	aatgaaggtg...189...tgggctctgcccgcgtaggt	TCGAaTCCTgc	TGACTGC	gaa--ccttttttgc---tttttatcgagcactggg	:~::~:actgtcttatcgagttttgcgcttttaccctt---
C.Bre	agaaattg	aacgaggtaag...247...tgggctctgcccgcgtaggt	TCGAaTCCTgc	TGACTGC	gaa--tcctttttatt---ttttgc	:~::~:-----attttaatttttcagg
C.Jap	agaaactt	caagaagtgag...160...tgggctctgcccgcgtaggt	TCGAaTCCTgc	TGACTGC	gaaactttttttgttggtattttttatt	-----:~::~:---tataa-----accttttaa----agg
C.Rem	agaaactg	aatgaaggtg...201...tgggctctgcccgcgtaggt	TCGAATCCTgc	TGACTGC	gaa--tcctttttgtt--ttctttttattga	-----:~::~:---tataaagataaattaacttttttgacttccagg
	* ** *	* ** ** *		*****	*** * ** **	***

id=81285 gene=K03F8.2 name=acr-5 segment=chrIII.6513846.6514296_-1 type=IN VIEW

Figure 105: CS=6



```

C.Bri ggtctgt-----TTCTtCTTTTCtgTTTCG-----tttttttctnnnnnnnnn...683...--tacagtaaagttgcacggag
C.Bre ----gGTCTGT-----TtCTTCTCTtCTTCTTTTC-----gtttttcttcttcactcat---...354...--ttcagtaaagttgcacggag
C.Jap ----gGTCTGTTTCTTCATTTTCcTTCTTCTTCTCTCCTTTTTCaTTTCgtTTTGGgtgcgtggtgagtgtatgtg...334...gtttcagt--agtcgcacgaag
C.Rem ----gGTCTGT-----TTCTtCTTCTTTTC-----gtttttcttcttcactcat---...357...--ttcagtaaagttgcgcggaa
          *                ***** * *                * * *                * **** * ** * * * *

```

id=38998 gene=F08C6.1 name=adt-2 segment=chrX_7585661.7586061.1 type=I5

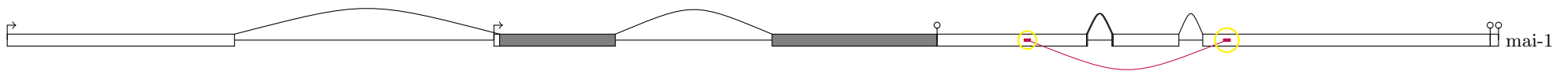
```

C.Bri agtgagttttatttcggcgt...1730...a-----tgactgacaaaaaagtcgt----TGAAAGAAAAAGGGAA-----cgtagatcagaacccgacc...591...ttcagaatgcgattgcattt
C.Bre -gtcaactttttgtgttcac...651...agcattcaactgaccggca-----GGAA--AtGGAAGA--GAAGAGGccAGCGGGC-----gccagggggtgaaatcgaa---...1992...ttcagaatgcagtgcggtat
C.Jap agtaagtcttttacttgca...1795...tttttatccctatcggataTTAGGGGAGGAAGcAAGGAAAGGAAGGAAGAGGGTGgaGGGGttAGCGGGCCaggtactgaagagggaacaa-----...840...ttcagaatgcattgcattt
C.Rem -gtgagtcattttcacatt...497...agccactcaactgaccggca-----GGAA--AtGGAAGA--GAAGAGGCC--gccagcggcgcgggggta-----...1998...ttcagaatgcaattgcattt
          ** *      * **                * * * *                *** * ****                ***** * ** * *

```

id=39000 gene=F08C6.1 name=adt-2 segment=chrX_7586200.7588613.1 type=IN VIEW

Figure 106: CS=3.12



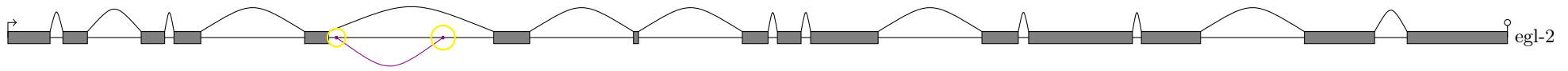
C. Ele	tatttgct	gtttgtatgta...127...gccgtcaacgatcattcat	CTCCatCGACTACAT	ggcttacttgttcagtagc....82...caagatcaaggt	agaatatt	
C. Bri	caaccctc	gtgtgtctgtgt...65...aacggattcggagaatcgg	ACGTCtCGTCCTCCG	cgctgctgtcgagaaggaca....151...caagatcaaggt	aagctaca	
C. Bre	aatctcgc	gtgtgtgtgcac...56...aacggattcggagaatcgg	ACGTCtCGTCCTCCG	cgctgcccgcgaaaaggaca....151...caagatcaaggt	ataaaacg	
C. Jap	gatccggt	gtcgttctctg...66...aacggattcggagaatcgg	ACGTCtCGTCCTCCG	cgcccgcgtcgagaaggaca....151...caagattaaggt	gggattag	
C. Rem	tatccttc	ttatgtgtgcct...58...aacggattcggagaatcgg	ACGTCtCGTCCTCCG	tgccgccgtcgagaaggaca...1546...tacagtagctat	agaataact	
	*	* * *	** ** * **	*** * * *	* ** **	* * *

id=273356 gene=K10B3.9 name=mai-1 segment=chrX_3114438_3114725_-1 type=E3

C. Ele	ttttaggt	catcatctctgctccatctgctgatgctcca-:::-----	ATGtCGTcGGAG	tcaccacgagaagtagcat...695...ctcaataaaggt	tgtatatt
C. Bri	ttccaggt	tatcatctctgctccatctgctgacgctcaa:::cgccaccaaaagaccgtcgacggaccatccggaagctc	TGGAGaGACGGACGT	-----ggagctggacagaacatcat...503...tccaataaaggt	tgtatatt
C. Bre	ttacaggt	tatcatttctgctccatctgctgacgccccaa:::tgccaccaaaagactgttgacggaccatccggaagctc	TGGAGaGACGGACGT	-----ggagctggacaaaacatcat...504...cacaataaaggt	tgtatatt
C. Jap	ttgcaggt	catcatctctgccccatcagctgacgccccaa:::tgccaccaaaagactgttgacggaccatccggaagctc	TGGAGaGACGGACGT	-----ggagctggacaaaacatcat...517...ttaaataaaggt	tgtataaa
C. Rem	ttccaggt	catcatctctgctccatctgctgacgccccaa:::tgccaccaaaagaccgttgacggaccatccggaagctc	TGGAGaGACGGACGT	-----ggagctggacaaaacatcat...501...ctcaataaaggt	tgtatatt
	** ** **	***** ** **	* * **	* * * * *	*****

id=273362 gene=K10B3.9 name=mai-1 segment=chrX_3113440_3114213_-1 type=E3 VIEW

Figure 107:



```

C.Ele caatcagg ttatcaaggttgagagtccttgacGCTTCTTCTGTTGTGTCacgttccagttgacttgatg...2038...caacttttagg ttatgaac
C.Bri caatcagg ttatcaaggttgagagtccttgacGCTTCTTCTGTTGGTGtcgcttctggacggcacac--...1536...attattacagg taatgaat
C.Bre caatcagg ttatcaaggttgagagtccttgacGCTTCTTCTGTTGGTGtcacgttccggtttactca--...2711...cctaattccagg taatgaat
C.Jap caatcagg ttatcaaggttgagagtccttgacGCTTCTTCTGTTGGTGtcacgttgggaggcatcac--...1262...tcctgtccagg tgatgaac
C.Rem caatcagg ttatcaaggttgagagtccttgacGCTTCTTCTGTTGGTGtcacgttccggacggcaccg--...2015...catgtttcagg taatgaat
*****

```

id=104739 gene=F16B3.1 name=egl-2 segment=chrV_1295417_1297528_-1 type=IN

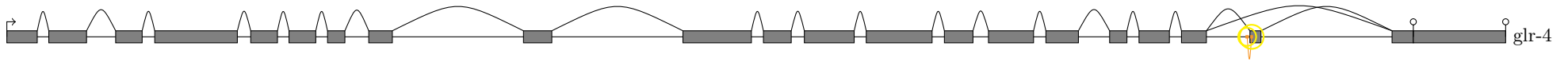
```

C.Ele caatcagg ttatcaaggttg...1816...ctacttgcatgctat-----acacGACAaTAACAGAAAGAAGCaca-cgtccccctatatca...213...caacttttagg ttatgaac
C.Bri caatcagg ttatcaaggttg...1256...tctccttgcatgcaat-----tcacCACCaTAACAGAAAGAAGCaca-tgtgtccccaccctgtc...269...attattacagg taatgaat
C.Bre caatcagg ttatcaaggttg...2325...-----tgcattgcaaaacaaccgacacCACCaTAACAGAAAGAAGCacattgtgtcccc-ctgtata...375...cctaattccagg taatgaat
C.Jap caatcagg ttatcaaggttg...996...-taccctgcatg----atcccacc-ACATTAACAGAAAGAAGCacc-tgtccccatcaccagct...257...tcctgtccagg tgatgaac
C.Rem caatcagg ttatcaaggttg...1617...ccttgctgcatgcaaa-----acatCACCaTAACAGAAAGAAGCaca-tgtccccccccctac...387...catgtttcagg taatgaat
*****

```

id=104739 gene=F16B3.1 name=egl-2 segment=chrV_1295417_1297528_-1 type=IN VIEW

Figure 108: CS=7



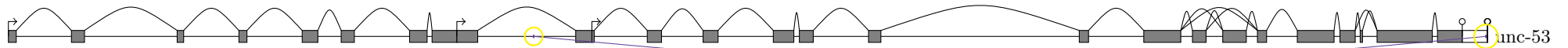
C.Ele	gacactgc	tgggcaagaagt...109...ttctggcgaaaatcctgatt	TTGCatGAAAATTC	-cccgaat	ttt	cgcaactt
C.Bri	gacactgc	tggacaagagat...105...tccggccagaaatcctgatt	TTGCatGAAAATTC	gccagaat	ttt	cgcaactt
C.Bre	gacactgc	tggacaggagat...100...tccggccagaaatccttatt	TTGCatGAAAATTC	g-ccagaat	ttt	cgcaactt
C.Rem	gatacggc	tggacaagagat...120...tccggccagaaatcctgatt	TTGCatGAAAATTC	g-cagaat	ttt	cgcaactt
	** ** *	*** ** * *	* * * * *	*****	*****	*****

id=4739 gene=C06A8.9 name=glr-4 segment=chrII.7786381-7786546_-1 type=IN

C.Ele	gacactgc	tgggcaagaagt...127...tttgcataaaaattctccc	GAATTT	CGCAA	ctt
C.Bri	gacactgc	tggacaagagat...124...-tttgcataaaaattcgcca	GAATTT	CGCAA	ctt
C.Bre	gacactgc	tggacaggagat...118...tttgcataaaaattcg-cca	GAATTT	CGCAA	ctt
C.Rem	gatacggc	tggacaagagat...138...tttgcataaaaattcg-gca	GAATTT	CGCAA	ctt
	** ** *	*** ** * *	*****	*****	*****

id=4739 gene=C06A8.9 name=glr-4 segment=chrII.7786381-7786546_-1 type=IN VIEW

Figure 109: CS=3.84



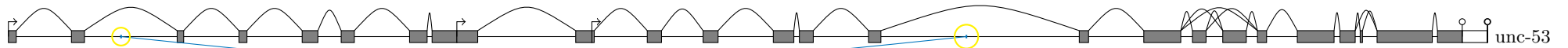
C.Ele	ccacgtct	atgtcgaagctt...463...--ataaagactcttcgcgaaa-----	AATGttGCAAcGGAAGT	Gatattcc-gagcatttttcga...345...catcttcgttt	ttacatag--			
C.Bri	ccacatct	atgtccaagctt...546...-cctcgttttcttttttctc----	AAAAATGttGCAAcGGAAGT	Gatattcgtggatgtccttctg-...317...tatctcttctat	attcttcg--			
C.Bre	ccacgtcc	atctccaaatta...391...atttcgctattctttcctca----	GAAATGttGCAAcGGAAGT	Gatattcctaaagcatttttct-...544...-tttcttctct	ttttaccggt			
C.Rem	ccacgtca	atttcaaaactt...355...-cattgaagctcttcctcttc	GAATAcAAAATGttGCAAcGGAAGT	Gatatttcggagcatttttcg-...348...tcctgtcgttac	tttcatac--			
	**** **	** ** * *	*	**	*****	**	*	*

id=305157 gene=F45E10.1 name=unc-53 segment=chrII_11069767_11070656_-1 type=IN

C.Ele	agcatcag	accatcgacaac...165...--aacctttttcttttcgaaa	CATTTCCcaTTGcCATT	---aatagtcaaat	tgaataaa		
C.Bri	agcatcaa	accatcgacaac...119...--aacctcttcctctttcgaa	CATTTCCaaTTGcCATT	TTT-tattatgaat	cgaataaa		
C.Bre	agcatcag	accatcgacaac...135...tttaaacc--	tcctcttttcgaaCATTTCCaaTTGcCATT	TTT-ctttatgaat	cgaataaa		
C.Rem	agcatcag	tccatcgacaac...140...--caacctcttccttttcgaa	CATTTCCatTTGcCATT	TTTtataaaa	cgaataaa		
	*****	*****	**** * * *	*****	*****	**	*****

id=305190 gene=F45E10.1 name=unc-53 segment=chrII_11058048_11058273_-1 type=E3 VIEW

Figure 110: CS=5.92



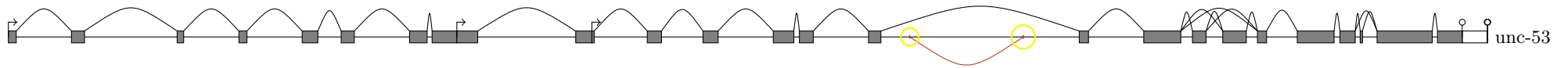
C. Ele	ggtttctc	agcttattaatg...283...--gccgggaggctccaagaga-----	AAGA aa GAGAAAAGAG ----	TTTGT Taaatgta---ataattggtcact-...2931...attcgaatagc--	ccatttca
C. Bri	cgtctctc	aacttattaatg...3093...gtctttgaatgatatcctgt-----	GAAAGAAGAGAAAAG - AGAGGGATA ---	tctg--tcatcttcattcatct...191...attcctcctaact	ctttta--
C. Bre	tgtttctc	aacttattaata...302...-----attgtcccggagcggaaaa	AGAA a AGAGAAGAAAAGAGGGG -----	cgccgagagttaatgttat...2555...--ttctttcattaa	tcgcttca
C. Rem	agtttctc	aacttattaatg...442...acacttgtgttacgtttaga-----	AAAGGAGAA AAAG -----	tgtgctccagttgaattac--...3338...--tccacctaata	ccattaaa
	** ****	* *****	*	** ** * **	* * * * *

id=305144 gene=F45E10.1 name=unc-53 segment=chrII_11080483.11083783.-1 type=IN

C. Ele	cgagcaca	gaacggctatcc...1159...cattaagccgagaacaacg	AACGGG gt TTCTTTTCTC c TCTT -----	accatcttttggcgaatt...1976...ttatcaaatttc	taaattta
C. Bri	cgtgcaca	gaacggctatcc...405...ccttcctccctcctaagtgt--	TATT Ta CTCTTTTCTCTTTT -----	ttaacgaagatctatcgg-----...2871...ttatccaatttt	ttatttcc
C. Bre	cgtgctca	gaacggctatcc...122...cgaaagacggttgatagca---	TCTC TT TCTCTCTCTTT g TTCT ctgtcaaccaagacatc-----	...2506...ttttcaaatttt	cagtggtt
C. Rem	cgtgccca	gaacggctatcc...1447...tttagttcgcgcacttctc-----	CTTTTCTC c CTTT -----	gtcatttacataatcttttc-----...1189...aaaaccaatttc	taaatttc
	** ** *	*****	*	** ** *	* ** **

id=305170 gene=F45E10.1 name=unc-53 segment=chrII_11063437.11066659.-1 type=IN VIEW

Figure 111: CS=5.6



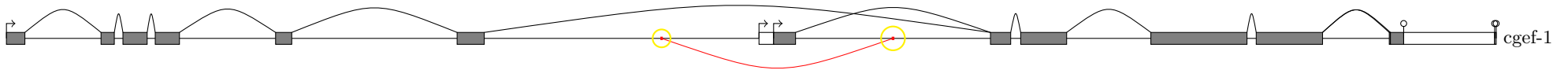
C.Ele	cgagcaca	gaacggctatcc...215...	cacagacatctattcatgcg	CGAAGTGCAATTTGGTTC	-ctaagatgagaggaggagg---	...2925...	ttatcaaatttc	taaattta
C.Bri	cgtgcaca	gaacggctatcc...168...	ccagcacatccattcatgcg	CGAAGTGCAATTTT	-ggttcctttcctttccagag-----	...3117...	ttatccaatttt	ttatttcc
C.Bre	cgtgctca	gaacggctatcc...178...	-agacacatccattcatgcg	GAAGTGCAATTTTG	gtttcacgaaactgaagag-----	...2461...	ttttcaaatttt	cagtggtt
C.Rem	cgtgccca	gaacggctatcc...162...	aagacacatccattcatgcg	CGAAGTGCAATTTGGTTC	---aaactggaagagagaagaag...	...2467...	aaaaccaatttc	taaatttc
	** ** *	*****		*****				** ** *

id=305170 gene=F45E10.1 name=unc-53 segment=chrII_11063437_11066659_-1 type=IN

C.Ele	cgagcaca	gaacggctatcc...2203...	-----gtagtacgcaacgacgacct--	GAACCgAGAATTGCA	gTTTCG	aaactttattgtttcttctt...	...933...	ttatcaaatttc	taaattta
C.Bri	cgtgcaca	gaacggctatcc...1882...	-----aaaagaagaagaagaag-----	AGAATTGCA	gTTTCG	aatctttctttcttcttctt...	...1400...	ttatccaatttt	ttatttcc
C.Bre	cgtgctca	gaacggctatcc...1518...	-----tgagaggaaccgccacaaa-----	CGAATTGCA	tcTTTCG	caatttctttcaacaattc-...	...1119...	ttttcaaatttt	cagtggtt
C.Rem	cgtgccca	gaacggctatcc...1547...	tccccctccgagagg-----	tga GGAACCAAGA	atTTGCA	gTTTCG	atgttttcgtcttcgccgtc...	...1078...	aaaaccaatttc
	** ** *	*****	*		*****	**** * * * *		** ** *	** ** *

id=305170 gene=F45E10.1 name=unc-53 segment=chrII_11063437_11066659_-1 type=IN VIEW

Figure 112: CS=5.6



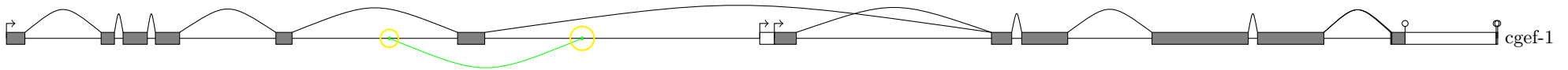
C.Ele	caaaaacg	aggtaggaattc...	1366...	-----g---ctcgttcatgatatgctcc-----	ATCATTcg	GTTGTCTC	ACGCGAACA	ctcgaaaacact-catctct...	2355...	ctcttcgaactt	ttcacttg		
C.Bri	caagacag	aggtgagcaaca...	962...	-----cagatttctttca-gacagga-----	CTTTTTCTTTTC			-----aggttgtaacaacat-tattt--...	3825...	cttctctttttt	tatgcttt		
C.Bre	caaagtgg	aggtgaggatta...	577...	-----accacttttaccctccgggg	GCAAa	AATAGg	GCAC	-----tcacgttacactatatatt...	2152...	ttctttattctt	tacctcgt		
C.Jap	taagaccg	aggtagaacca...	378...	gtctataagaaacttacctt-----	AAGATAGGAT	gGTTT	tcTTTC	caTCTTCTTTCTTT	-----	attttgcataaca---atgtca...	2120...	ctccttctcatt	ttcacttt
C.Rem	caagtccg	aggtgagaatac...	826...	-----ca---ctgttccatgatatgctc-----	CGTTGTCTC	ACGCGAACA	ctcgaaaacact-catcctc...	1883...	ctctttaatttt	tcgatttt			
	**	*	****	* *				*	*	**	*	*	**

id=329104 gene=C14A11.3 name=cgef-1 segment=chrX_2790117_2793927_1 type=IN

C.Ele	tcaatatg	aggtgagtatta...	1786...	gatttaggtgtttcgctaata---	TGTTTGCGT	ttAGAA	TGGTGATGAT	-----	tttttcttgttgcgcaag...	603...	ctcaggtttttc	agctcgac	
C.Bri	tcagtatg	aggtgagtcttg...	598...	ctttttaa---ttaactaagggg	GAAAGGAAAGAAAG			-----	acaatttctgtcaagagg-	1924...	ctcaggttttcc	agcagcag	
C.Bre	tcagtacg	aggtgagtatca...	2444...	tccctaaa---attgcaaacatt	GTGTa	CTATTg	TTGC	-----	actcaccataatgagcggga...	213...	tccaggttcac	atcaagac	
C.Jap	tcagtatg	aggtgagtttcc...	940...	---ttgaa---cgctaaaggcattgg	AAGGAAGGAAAGA	aGGA	AAGGGCATTTTA	ctTCTT	caaatgatataatcatccg-	3951...	cttaggtttttc	agcagcag	
C.Rem	tcagtatg	aggtgagttttt...	2048...	gatttggtgtttcgctaata---	TGTTTGCGT	ttAGAAT	tGGTG	-----	atgcttttttgcgaaaacg-	600...	ctcaggtttttc	agaatgac	
	***	**	*	****	***	*	*		*		****	*	**

id=329107 gene=C14A11.3 name=cgef-1 segment=chrX_2794118_2796596_1 type=IN VIEW

Figure 113: CS=5.4



```

C.Bri  gctgaacttggttaagttcta...1880...--tcagcagttcgatcatgca--TATAAaTGAGAAGAAAGAGAAaGTTCggcgttcaaacgaatagat-----...255...cctcaatttccagatcgaa
C.Bre  tttgaacttggttaagttgga...1451...tgtatagcgcatttattgtt-----GTTTCgCAAAAAGTtGCGA----tctgggaattggaagaact-----...163...aaccttttttcagattgag
C.Jap  attgaaactggttaagtaaga...1175...--ttgt---gttctatcatgcatgcaAAATGAGGAGAATAAGGAGACG-----aaaaagaagaacgttcgtg...325...ttttttcttccagatcgaa
C.Rem  tctgaatttggttaagttcac...1405...-----gttcgatcatgcatgtaaatGAGAAGAAGAAAAGAAatgttcgcgttcaaacgaa-----...262...aaaaaatcttccagatcgag
      **** *****                *  ** *                *  **                **  ***                *  ** ***** **

```

id=329102 gene=C14A11.3 name=cgef-1 segment=chrX_2787690_2789975_1 type=IN

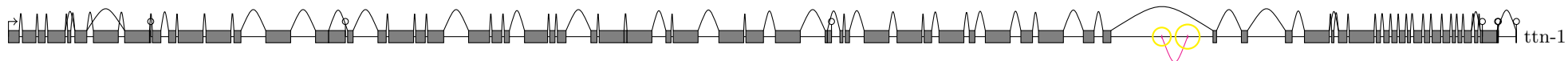
```

C.Bri  caagacagaggtgagcaaca...959...ttccagatttctt-tcagaca---GGACTTTTTCTTTCAaggTTGTA-----aacaattatttgcttctag...3817...cttctcttttttatgcttt
C.Bre  caaagttgaggtgaggatta...967...-----tttcta-ctggtcaacaagttTCGTttACTTtT---TTGAAACtgtacaattcaatcgttt-----...1757...ttctttattctttacctcgt
C.Jap  taagaccgaggttaagaacca...506...--tggttttctatccagttggcTGTCTTCTTATTCTtCCTCATT-----ttcatccacgcgacctacc...2006...ctccttctcattttcacttt
C.Rem  caagtccgaggtgagaatac...2079...--aaaattgcca-acactcttc---TTCTTTTCTtTC---TTTTC-----tttcaaaaatctgaagcaaa...631...ctctttaatttttcgatttt
      **  ***** ** *                ** *                *  * * **                *                *  *  ***  *

```

id=329104 gene=C14A11.3 name=cgef-1 segment=chrX_2790117_2793927_1 type=IN VIEW

Figure 114: CS=4.8



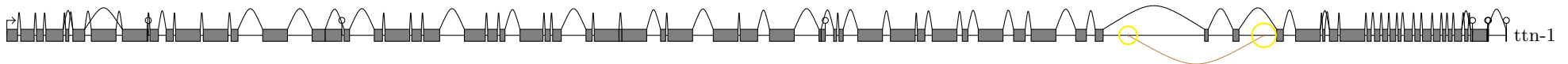
C.Ele	attctcag	gttagttaaga...1656...	-----tgtgatacacagatgattta-----	-----	CTTTTCTTCTTCTTCTTCTTCTC	ccggtttttgggggataaat-----	...3244...	tctaaattacag	gtcgtcca	
C.Bri	attctctg	gttagtttattt...262...	-----gtcgagaagaattggaatc-----	-----	AGCTTctTCTTcGTCTTTTTCTTCaTTCTC	-----ag--atgctgcaaaaagattg...	.4633...	tttgaatttcag	gtcgacca	
C.Bre	attctcag	gttagtttattt...340...	-----atggaaagaaagtaagaga	GTAGAAAGAGAGAGAGAAAGAAaAAGAGagAAAGTG	-----	-----cactggaaaagtattcccgt-----	...4549...	gctttatttcag	gtcgtcca	
C.Rem	attctcag	gttagtttattt...1597...	cgtaacttgatcaataatca-----	-----	CTTTTCTTCTTCTTCTTCTTCTC	CCGTTTTTG	aggaatgacatcagcacaac--	...3294...	ttattatttcag	gtcgtcca
	***** *	***** *	** *			*	* * *		*** **	**** **

id=239409 gene=W06H8.8 name=ttn-1 segment=chrV_6134507.6144004_-1 type=IN

C.Ele	attctcag	gttagttaaga...4242...	gccaccagtgtctacga-----ccct-----	-----	GGAGAAGAGAGGAAGAAGAAGAAG	-----	caaaagaagaagccacgcct-----	...659...	tctaaattacag	gtcgtcca
C.Bri	attctctg	gttagtttattt...329...	ttgaaatgagaaggaaa-----	-----	AGGAGAGAAGAtGAAAGATaAAGAcAAGTT	-----	cccgtttaagtgaatttgt-----	...4565...	tttgaatttcag	gtcgacca
C.Bre	attctcag	gttagtttattt...1647...	gataatcattccgatgatat-----	-----	CACTTTTTCTTcTTCTTTTTCT	CTCTCGTTTTGT	ggaataacatcagcacaaca...	3241...	gctttatttcag	gtcgtcca
C.Rem	attctcag	gttagtttattt...4139...	-----tgttgaaacgaatggctcc	CGGGcaAACGGaGAGAGaGGAAGGAGGAAaGAAGAAGAAGA	-----	-----c-gtaggagaagcgtgtctt-----	...745...	ttattatttcag	gtcgtcca	
	***** *	***** *	*		*		*		*** **	**** **

id=239409 gene=W06H8.8 name=ttn-1 segment=chrV_6134507.6144004_-1 type=IN VIEW

Figure 116: CS=2.4



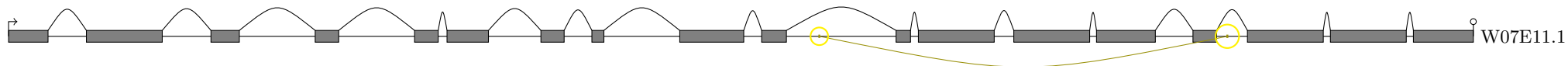
C.Ele	attctcag	g	ttagttaaaga...996...	ttttgtgatc	tttgaagtg	TCATcCGAATGTTG	-----	gagtc	ccgatgaga	accttc...3913...	tctaa	attacag	gtcgtcca			
C.Bri	attctctg	g	ttagt	ttattt...799...	tgcatc	ccatccaactg	---TTGTCATTgTTACAATACACCA	ccaata	cgtgctg	gaatac---...4104...	tttga	atttcag	gtcgacca			
C.Bre	attctcag	g	ttagt	ttattt...994...	---ttt	gtgatc	tttgaagtgc	ATTTCcGAATGTTT	-----	gaagtc	cagatgaa	aatctt-...3918...	gctt	atttcag	gtcgtcca	
C.Rem	attctcag	g	ttagt	ttattt...936...	---ttt	gtgatc	tttgaagtgc	ATTCCGAATGTTTG	-----	aagtc	cagatgaga	aatcttc...3975...	ttatt	atttcag	gtcgtcca	
	*****	*	*****	*	*	*	*	*	*	*	*	*	***	***	***	***

id=239409 gene=W06H8.8 name=ttn-1 segment=chrV_6134507_6144004_-1 type=IN

C.Ele	gtattcag	g	tgagg	gatagtactctt	taaaattg	aatgt:::~	-----	GA	-----	GTA	AATTCGATGG	-----	ggc	gattgga	agtaag	cca...226...	agct	agtttcag	gtcactga					
C.Bri	gaattcag	g	gtgtg	-ttttatgatt	gaaaatttc	cgcg:::~	ggcg	aat	ttcg	gaaccccccccc	cctcat	gtg	gttac	TGGTATT	GTGAGAT	-GATAA	-a---	aaac	gaaagtaga	acgaa-...57...	ttt	cttttcag	gtcaccga	
C.Bre	gaattcag	g	tacg	-tt-----	-----	-----	-----	AA	-----	GC	gaATTcAtGAAT	a---	gaaca	agtat	caactatt-...1335...	ttct	ctttgtag	gtcaccga						
C.Rem	gtattcag	g	tgag	atttcg	tgtttttta	aatgaaa	actt:::~	gaa	agattat	atgac-----	-----	-----	-----	TAA	-----	GC	caATTCCGAAT	-act	ttgtg	caaattg	gagag-----...202...	agt	gagttcag	gtcaccga
	* *****	**	*							*	*	*		*	*	*		*	*	**	**	*****	**	

id=239413 gene=W06H8.8 name=ttn-1 segment=chrV_6131033_6133032_-1 type=IN VIEW

Figure 117: CS=3.6



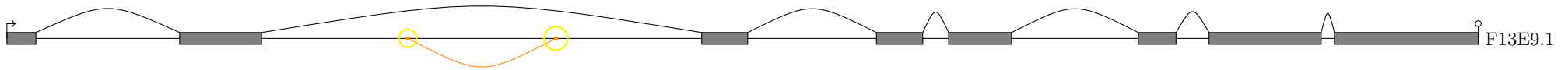
C.Ele	gtaagcca	aaatcccctaaa...168...aaaaagaggctgaactaaat	TGAGTCAGTCAaGTTc	agaaaagactaatttgttga...724...gcaggtgactca	aaaacact
C.Bri	gtaagcca	atattgcctgga...150...---aaggaagagagctaaattga	GTCAGTCAaGTTc	agaatagactaatttgaaga...1039...tcaggtgactcc	aaaaccct
C.Bre	gtaagtca	aaacgcctcgag...177...---gaaaagaagaactaaattga	GTCAGTCAaGTTc	agaaaagactaatttgcctga...614...tcaggtgactca	aaaactct
C.Rem	gtaagtca	aaaacgcccgga...159...gcggggaagaagaactaaat	TGAGTCAGTCAaGTTc	agaatagactaatttgttga...608...tcaggtgactcc	aaaacatt
	**** *	* * *	** *****	***** **	***** **** *

id=131518 gene=W07E11.1 name=W07E11.1 segment=chrX_10098035_10099006_1 type=IN

C.Ele	gtaagata	ttc-----tacta---gacaacccaaaacaaaacaatgaaactgaagaaatggc	-----aaaaa-----agga--GAACaTGACgTGACTTG	ttgtaattagctttattgag...98...tcagttcgtcga	gaagaagg
C.Bri	agaatcta	att-----tcgta---aaagactgaaaacaagacaatgaaactaaaggaagagggaagat	tttgtttgagaatgagaaatcccagcagacaGAACaTGACgTGAC	acactgtaattagctttatt---...87...tcagtttgcga	gaagaagc
C.Bre	gaggtaaa	ttttatattaatcaaagtatagagactgaaaacaaaacattgaaactgaaactagagaa	-----t-----aaaaa-----cagacaGAACaTGACgTGAC	actctgtaattaactttatt---...110...tcagtttgcga	aaagaaga
C.Rem	ttggtgta	att-----tcgga---aaagactgaaaacaaaacaatgaaactgga---agagaa	-----tcgaataaaaaa-----cagacaGAACaTGACgTGACTTG	ctgtaattagctttattgga...109...gcagtttgcga	gaagaagc
	* *	* * * * *	** *****	***** *****	***** *****

id=131528 gene=W07E11.1 name=W07E11.1 segment=chrX_10101940_10102142_1 type=IN VIEW

Figure 118: CS=5.92



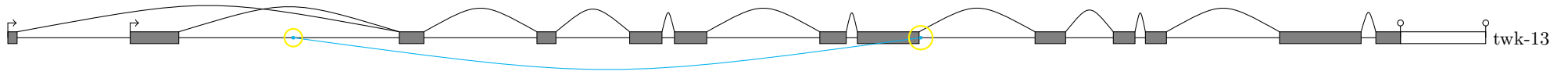
C. Ele	gtaagttt	tcgagaaaatat...1635...gcaagtgtgccatt-tggtga----	GAAAaG	----	AAGAAAGaAA	----	GG	----	aaggagttttgaaaagagcg...3272...tcaggagatcca	ctcgatcg
C. Bri	gtgagtta	tttataagcaaa...2327...-----gaacatgagaagaaatgatg	GGGAAA	----	aaGAAGaAAA	----	GGCTA	ctactcgctctattcaaat...	2577...gcaggagatcca	ctcgattg
C. Bre	ataaactt	tataaagagagg...1606...-----tgccattctcgtggaagaag	GAGAAA	----	aAGAGAAGATT	tt	GAGAA	aagaaaacttccggtggggg...3294...gcaggaaatcca	ctcgatcg	
C. Jap	taaatctc	ttctgggaatgc...1632...-caaaaagtagatgttgtcaa----	TGAGat	CCAAC	AAATAGCA	----		gcaacaag--gtacgagatgta...3273...gcaggagatcca	ctcgatcg	
C. Rem	gtaagttc	agggaaaaataa...368...-----agaacaatgtacaatagat-	ACGGAGtc	CCAAGAATGtc	CATT	----		gacaagaagaacgtagagga...4533...gcaggagatcca	ctcgatcg	
		* *		*	*	*	*	*	***** *****	***** *

id=116794 gene=F13E9.1 name=F13E9.1 segment=chrIV.10865225.10870842.1 type=IN

C. Ele	gtaagttt	tcgagaaaatat...4932...actaatgaatggttctagta-----	CCTTTTTTCaFTTC	-----		-----	:::::a	-----	tcg
C. Bri	gtgagtta	tttataagcaaa...3332...acctagaattatacagagac-----	TAGTCTTTCTTTTTC	-----	gaagagaaacattgaaaa	-----	agttttatttccg:::::a	aagaccaacagggtaaatgaaatgaaggcgcaccatcat	
C. Bre	ataaactt	tataaagagagg...2101...agaacgaatcaacctctcac---	TTCTCGGCTTCTTCTTaTTCTC	ggtgagc	ataagctatagttgagtgagatgttccactgtc:::::a	agtaagggatagtgaggagaaggagatgtagtcg---			
C. Jap	taaatctc	ttctgggaatgc...4631...-----gatgtatttcttagc	caaaa--TGCTcATTaTTGGCTCG	-----		aggttctctctc:::::a		tcg	
C. Rem	gtaagttc	agggaaaaataa...4670...-----gatgtatttctcgagctaaa	AATGcTCATTaTTGGCTCCGT	-----		tgcttttctctc:::::a		tcg	
		* *		*	**	*	*	*	*

id=116794 gene=F13E9.1 name=F13E9.1 segment=chrIV.10865225.10870842.1 type=IN VIEW

Figure 119: CS=3



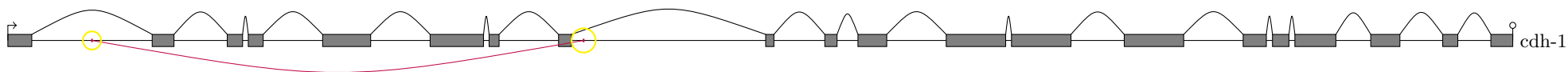
C.Ele	cgaagaac	tgaggttgtag...1121...actcgtggt---gacctaatccc-AGACACTAc--TC-AAaAAGT	-agtatggtaataattcaaaa...437...aaagtttatttt	tcagtgcg
C.Bre	cgaagagt	tgaggtgaagtga...1379...---gtgtctcgcgcctaataccc-AGACACTAc--TC-AAaAAGT	-agtatggtaataattcaaaa...507...agaatctaattt	tcagtgcg
C.Jap	agaggaac	tcaggtagtca...2323...atccgagtg---gagacaaaagtTAGGtCCAAGTATCAAGcAAGTg	aaaataactccttttatcagg...417...ttttatggttt	tcagcgcg
C.Rem	cgaagagt	tgaggtatgttc...993...a---gtgtc---gacctaatcccaga-CACTAc--TCAAAaAAGT	-agtatggtaataattcaaaa...465...aaattctcattt	tcagtgcg
	** **	* **** **	* ** * ** * * * * * *	* * *** **** **

id=85933 gene=R04F11.4 name=twk-13 segment=chrV_12326557.12328196_-1 type=IN

C.Ele	gcACTTTT	GATAGTaaGTTT	--tttttttta-----acgcaagc:::::aaaa---actgtcatcaaataatattttt	ccagatat
C.Bre	gcACTTTT	GATAGTgaGTTT	-----tttttga-----:aaaatctgcgttttatcaaccaaaaatattt	ccagatat
C.Jap	gCACTTTT	GATAGTTGGT	TTTgcttttttgagtgcgtaatgacgtaataagctacaacaat:::::aaaa---gtttttgagaaaaaaatt---	-----
C.Rem	gaACTTTT	GATAGTG	-----::::::-----	-----
	* *****	*****		

id=85945 gene=R04F11.4 name=twk-13 segment=chrV_12322482.12323045_-1 type=IN VIEW

Figure 120: CS=8.04



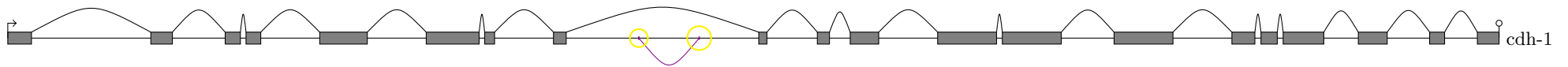
C.Ele	tctaaggt	gagggtttacca...	523...	gaagataattgcaacgcat--	GTCCTTT	----	TTCTTCTC	-----	cgctccagtgccccttag-----	...	3054...	atgttttcagtt	cctgaaag		
C.Bri	tcaaaggt	gagtatTTTTga...	910...	aatatagtttaaaatgttc	TAAATaTCTTg	GAAATTC	TTCCAAACTT	gaAAAA	-----	ctaattttttcttcttt-----	tt...	1705...	taaatttcagtt	cctcaaag	
C.Bre	tctaaggt	gagggtTTTTga...	547...	tgaatagaatagaggaaaa	-----	TG	GGAAGAAGAA	AAAGA	-----	agagacaaaaaagaaaagga	...	2468...	ataatttcagtt	cctaaaag	
C.Jap	tctaaggt	gagcattttgag...	362...	-----	ccctattcattctgccgaat	-----	GGTGga	AGAAAAGAA	tGAAGGAAGG	aatgaacggagcggttcgga	-----	...	4538...	caatttcagtt	cctcaaag
C.Rem	tcgaaagt	gagcattttaat...	66...	-----	agaattccaatcggtctgg	TCCTCT	----	TTCTTTCTTTTCT	-----	gaacgg-----	tcggaaatgaata...	1832...	atgttttcagtt	cctgaaag	
		** ** *											* *****	** ** *	

id=233609 gene=R10F2.1 name=cdh-1 segment=chrIII_2911163_2914819_1 type=IN

C.Ele	-gttaaggt	tagttattgatt-----	...	55...	gccggcggtttttctgcggc-----	-----	GAGGcA	-----	GAAAgAGGGAAT	tccctggagtcgaataactc-----	...	4852...	cagctttcaggt	tgtcgcca	
C.Bri	-gttaaggt	gggtactttttt-----	...	2602...	gctatgagaatttttggaa-----	-----	ATTTTGGGGTTTGGAAAGAGTTTCAAGAg	GTTTA	-----	aactagagattttggaggaa...	2289...	tttttccaggt	ggtcgcca		
C.Bre	-gttaaggt	acgtctttattt-----	...	1623...	caacatattcgtcccttac-----	-----	TCTTcTTCTTCTCTCA	-----	ccggcggtctgttggggacg-----	...	3285...	acttttcaggt	tgtcgcca		
C.Jap	tgtcaaggt	atgcatttttt-----	...	2325...	catgtcgagcatactagcac	CTTTgc	TCTTCTTCTT	TTCTCACC	-----	ccc-----	gtcgtggcgcccgccg--	...	2575...	gtttttcaggt	ggtcgcca
C.Rem	-----	aggtacttttttctgctt...	...	151...	atgacatacgacggggaggg-----	-----	AGGGAAAcGAAG	-----	aAGAGAGGGGA	aggaagtgattaataattt-----	...	4751...	aacttttcaggt	tattgcca	
		* * *											** *****	* ** *	

id=233623 gene=R10F2.1 name=cdh-1 segment=chrIII_2918763_2925275_1 type=IN VIEW

Figure 121: CS=6.5



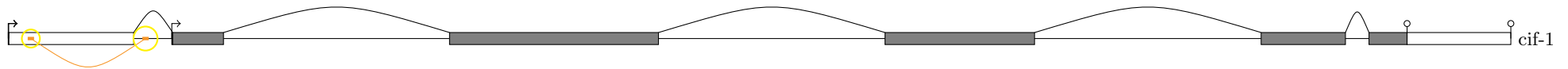
C.Ele	-gttaaggt	tagttattgatt----	...2915...	aaagtgcagaggacataaaa-----	TTTTTCGGGAAAA	-----	tttgattatcgggtacaatt-----	...1996...	cagctttcaggt	tgtcgcca		
C.Bre	-gttaaggt	acgtctttattt----	...54...	-taatatagcggagaaaagggg--	GAGGAAAAGTTTCaaAAAG	-----	aaagaaattcc-----	caagagtcc...	4852...	acttttgcaggt	tgtcgcca	
C.Jap	tgtaaggt	atgcattttt----	...2326...	-atgtcgagcatactagcacc--	TTTGCTTcTTC	-----	TTcTTCT	-----	cacccccgtcgtggcgccc----	...2579...	gtttttcaggt	ggtcgcca
C.Rem	----aggt	actttttttctgctt...	2631...	-ttgttatcattagataaagc	TGATcGAGAGCTTTCAGAAAAGTATAATTATGCCT	-----	atgcttgcttt-----	caattgggt...	2259...	aacttttcaggt	tattgcca	
	****	**		*	*	***	*		** *****	* ****		

id=233623 gene=R10F2.1 name=cdh-1 segment=chrIII_2918763_2925275_1 type=IN

C.Ele	-gttaaggt	tagttattgatt----	...3860...	a---taattgagcaatgagcaac-----	TTTTTCGAAAAA	-----	catcttcagtcc--tactcttg...	1053...	cagctttcaggt	tgtcgcca		
C.Bre	-gttaaggt	acgtctttattt----	...3845...	a-----ataaaaaaattcaaatg-----	CTTTccGGAATTTTCTTC	-----	aagtaagaacattccgaat-----	...1061...	acttttgcaggt	tgtcgcca		
C.Jap	tgtaaggt	atgcattttt----	...4745...	ggcc-----gcaaaacacaacaaaa	AGAAAAGAAAA	-----	GaaGCGAA	-----	ta--aataatagagagcggg...	160...	gtttttcaggt	ggtcgcca
C.Rem	----aggt	actttttttctgctt...	2765...	accccaacttgctga----	aacca--GGGCATGATTATACTTTTCTGAAAGCTCTCGTCA	-----	ca--ctgaatccgagaatccga...	2126...	aacttttcaggt	tattgcca		
	****	**		*	*	** *	*	*	** *****	* ****		

id=233623 gene=R10F2.1 name=cdh-1 segment=chrIII_2918763_2925275_1 type=IN VIEW

Figure 122: CS=4.8



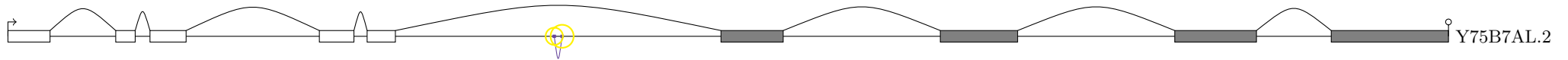
C.Ele	taat	ttt	c	ggctcgtctctattcgc----	ATGAGCGGAGGAGtAGTGCACA	g	CAA	ACTTCAA	aaagctcgttctctccaccta...	194...	ccgcgaaataaa	ggtgaatg		
C.Bri	-----	-	gac--	tttctagcttctt	TGTATGAGCGgtGGAGT	AGTGCAC	ag	CAA	ACTTCAA	aaagcttgttctctcaacct...	192...	gcgcaaaataaa	ggtgattg	
C.Bre	--ct	ttt	t	acac--	ttctagtcctttt	gtATGAGCGGAGGAGtGGTGCAC	ac	CAA	ACTTCAA	aaagcttgttcttcaacata...	191...	gcgcaaaataaa	ggtgattc	
C.Jap	ttct	ttt	t	ggattcttctactttc---	gcatgagcggg	GGAGTGGTGCACA	g	CAA	ACTTCAA	aaagctcgttctctccacg--...	193...	gcgcgaaataaa	ggtgaata	
C.Rem	caat	ttt	t	ggat--	tttctagtttcctt	gatGAGCGGAGGAGtc	GTGCACA	g	CAA	ACTTCAA	aaagctcgttcttcaacata...	191...	gcgctaaataaa	ggtgattg
				***	*****	*****	*****	*****	*****	*****	*****	*****	*****	

id=76491 gene=K08F11.3 name=cif-1 segment=chrIV.4710472.4710747_-1 type=E5

C.Ele	gaaataaa	ggtgaatga-----	g	TTGAAGTTT	Ga	TGTGCATTt	CTCC	tt	TTGCTCGT	tcaca-gttccatattttctaaactgcatgtacaatattt	cagatggc		
C.Bri	aaaataaa	ggtgattga-----	g	TGAAGTTT	Gaa	GTGCATTa	c-	c	CTCTTGCTCAT	GCA---tgtttccccttttaattgtaattggtgttgcctt	tagatggc		
C.Bre	aaaataaa	ggtgattct-----	g	TTGAAGTTT	Gaa	GTGCGTt	CTCCT	CT	GCTCAT	-taataattttccggttccgcatgctacgtttt---tttcc	cagatggc		
C.Jap	gaaataaa	ggtgaataatgagtg--	g	AAAGTTT	Ga	TGTGCATCACTCT	---	---	at	ttattagtttaacccttcttcaaagtgt-tatgtattttg	ttgta--		
C.Rem	taaataaa	ggtgattga-----	g	TTGAAGTTT	Ga	TGTGCAT	tc	CTCCT	g	TTGCTC	---taaa-ctttatataat-taaaatgcatgtacaattc	cagatggc	
	*****	*****	*	*****	*****	*****	*	*	*	*	*	**	*

id=76492 gene=K08F11.3 name=cif-1 segment=chrIV.4710388.4710471_-1 type=I5 VIEW

Figure 123: CS=5.4



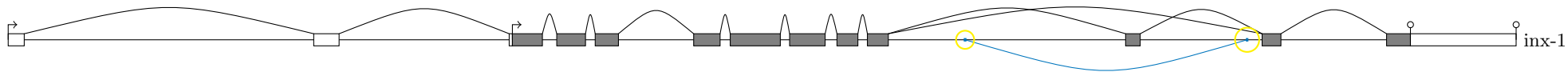
C.Ele	gagagagg	ttagtgttgta...572...tcaccaat--tgcccaaattcc-----	CATTTTCATCTCTCGTA	TATGA	atGAGATGAAGATG	ttccatgcgtcgagagcagc...	4316...	tctattttcaga	gaatgacc
C.Bri	acgatatg	taagttttgtc...262...tcaccgat--cgcccaga--ttcc-----	CATTTTCATCTCTCG			aatgatgaacgagatgaaga...	4648...	ataattttcagg	gaatgacc
C.Bre	tagagagg	ttagttcattta...587...--aaattctacacaaaatcgct	GTTGACAAC	TTTTCTCTAGCT	cTTTCcCTTCTaGAGATA	cgagcgctcgagtagagg--...	4299...	attttttcaga	aatgaca
C.Jap	aaggcatg	tgagtgtttgtt...311...tcgccgat--cgcccaga--tgcc-----	CATTTTCATCTCG			cgaatgatgaacgagatgaa--...	4601...	acgcttttcaga	caatgacc
C.Rem	aagagaag	ttagtttaatct...389...t--ccaag--cttcaaggcgct-----	TCTCGTTC	tGAAA		ttattaagttttggttcaa--...	4522...	gttattacaga	gaatgaca
		* * * * **			** * *		*	** ** *	*****

id=62915 gene=Y75B7AL.2 name=Y75B7AL.2 segment=chrV_1335939_1356931_-1 type=I5

C.Ele	gagagagg	ttagtgttgta...572...-----tcaccaatgccc	CATTTTCATCTCTCGTA	TATGA	atGAGATG-AAGATG	-----	ttcca--	tgcgctcgagagcagc...	4316...	tctattttcaga	gaatgacc
C.Bri	acgatatg	taagttttgtc...286...-----ttcatctctcgaatgatgaa			CGAGATG-AAGATG	-----	ttcca--	tgcatcaagtgcg	4626...	ataattttcagg	gaatgacc
C.Bre	tagagagg	ttagttcattta...3530...-----gccctaactt--tgaacgcta	TATCTC		cAGAAGGAAAaa	AGCTAGAAAAAAGTTGTCAAC	tgcaat	ttgtgtaaaattt--...	1356...	attttttcaga	aatgaca
C.Jap	aaggcatg	tgagtgtttgtt...335...-----ttcatctcgcgaatgatgaa			CGAGATG-AAGATG	-----	ttcca--	tgcgctcaaagccg	4577...	acgcttttcaga	caatgacc
C.Rem	aagagaag	ttagtttaatct...4010...gaagcaggatgttttattt	TTTTC		tGGAAtgTGAGA	-----	tgta--	caagaaatcag	898...	gttattacaga	gaatgaca
		* * * * **			* * * *		* *	* * * *	** ** *	*****	

id=62915 gene=Y75B7AL.2 name=Y75B7AL.2 segment=chrV_1335939_1356931_-1 type=I5 VIEW

Figure 124: CS=4.8



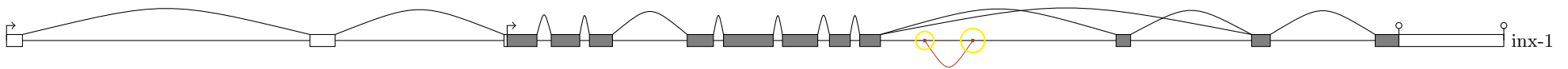
C.Ele	atcgtgtc	aggaaggtgagc...317...tgctgtaaaaaaatgcgcc---	CGGCCCC	TGAAA	cgcata-acagcctatcaaac...728...attgtaaccgat	ttgaagat												
C.Bri	atcgggtc	aggaaggtgagc...414...---aaaacaggagagcgcttcac	CGGCCCC	TGAAA	tacaacaaaagcctaac-aac...714...attgtaaccgat	ttcaagat												
C.Bre	accgggtc	aggaaggtgagc...298...-cttgtaaaaggaaagcgccc---	CGGCCCC	CTGAAAA	cgccta-acagcctatccaac...687...attgtaaccgat	ttcaagat												
C.Rem	atcgggtc	aggaaggtgagc...305...-gtctgtaaggaaagcgccc---	CGGCCCT	GAAAA	cgccta-acgcctatccaat...717...attgtaaccgat	ttcaagat												
	* ** **	***** **	*	*	***	*****	**	*	*	*	*****	*	*	*****	**	*****	**	*****

id=184775 gene=C16E9.4 name=inx-1 segment=chrX_6946614.6947736_-1 type=IN

C.Ele	cctccagc-	caacacgtatgt...507...-ttgatttgataccaaccga-	TTTCAAGGGGTGG	-caaacgcaatg--aatg-----	cctgt-gtgacaggc----	ggctcctacaaatttcattagataaccta	aaacgcttgcca-c	ttacagag
C.Bri	gatataac-	aatcacgtatgt...490...--tttttgaaacc-aaccgatt	TTTCAaGGGGTGG	-ccaaacgcaatcctcgtctgtct--	cctgtcctgacagg----	gctaccaaaagtctccttacaaacttcaag	tttaact--t	tttcagag
C.Bre	-ctccaaca	tcacacgtatgt...535...gatttttgatacc-aaccga-	TTTCAAGGGGTGG	ccaaacgcaatg--aatgtgtcctgtcctg	ccttgacaggtcacgattcatgtaaatct-	-----	aaatgctcgtcgtt	ttgcagag
C.Rem	agaataaaa	caccacgtatgt...525...ttgattttgatacc-aaccga-	TTTCAaGGGGTGG	-ccaaacgcaatg--aa-----	tgccctgtcctgacaggcc-	ccaaacgcaatg--gtct-----	taatttgc-ttatt	ttgcagag
	*	*****	*****	***	*****	*****	*****	*****

id=184777 gene=C16E9.4 name=inx-1 segment=chrX_6945920.6946544_-1 type=IN VIEW

Figure 125: CS=3.6



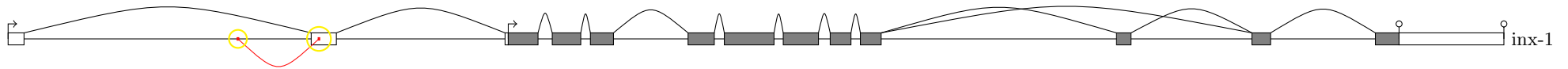
C.Ele	atcgtgtc	aggaagtgagc...157...taagtcaaatgagtggccga-	CGAATcCAATcCTAAAGGCAT	---atcatttc--tattg--tttccag---...880...-attgtaaccgat	ttgaagat		
C.Bri	atcgggtc	aggaaggtaac...244...--attgg---gtgtggccgacgtac-	TCGATcCTAAAGGCATATC	atcatttc--ttctaattttcc---...877...-attgtaaccgat	ttcaagat		
C.Bre	accgggtc	aggaaggtaac...138...agatcgaaatgggtggccga-	CGAAcTCAATcCTAAAGGCATATC	at--tttc--ttatg--tttccagaa-...837...-attgtaaccgat	ttcaagat		
C.Jap	atcgggtc	aggaaggtaac...89...agaaaataa-aaatagcaaaa	GGAATCAAATCGCTAAAGGCATAT	---cagttcaactttattttatc-----...814...catcgtaac-at	ttcaagat		
C.Rem	atcgggtc	aggaaggtaac...146...agatcgaaccgggtggccga-	CGAATtCAATcCTAAAGGCATATC	a---tttc--ttatg--tttccagaat...864...-attgtaaccgat	ttcaagat		
	* ** **	***** **	* ** * *	*** *****	*** * ** *	** ***** **	** *****

id=184775 gene=C16E9.4 name=inx-1 segment=chrX_6946614.6947736_-1 type=IN

C.Ele	atcgtgtc	aggaagtgagc...393...-----tgtgtccaccatccaccgaa---	GTGCCCTTTAGtGA-TTGATTCG	attc--tttg---ccattcaactg...645...-attgtaaccgat	ttgaagat		
C.Bri	atcgggtc	aggaaggtaac...504...-----gtgtccaccacctttccacc	GATGTGCCCTTTAGtGA-TTGA	----tttc--ttcgattccgacccaa---...617...-attgtaaccgat	ttcaagat		
C.Bre	accgggtc	aggaaggtaac...371...--gtttttgtgtccaccaccac-----	GATGTGCCCTTTAGtGA-TTGATTCG	attc--atgtg---ccca-tcaactg...605...-attgtaaccgat	ttcaagat		
C.Jap	atcgggtc	aggaaggtaac...323...tagttttgtgtccaccact-----	ATGTGCCCTTTAGTATTGATTC	ctgc---ctattctaccctctt...580...catcgtaac-at	ttcaagat		
C.Rem	atcgggtc	aggaaggtaac...375...--gtttttgtgtccaccaccac-----	GATGTGCCCTTTAGtGA-TTGATTCG	attcaatttg---ccca-tcaact...636...-attgtaaccgat	ttcaagat		
	* ** **	***** **	***** **	* * * * *	* * *	** ***** **	** *****

id=184775 gene=C16E9.4 name=inx-1 segment=chrX_6946614.6947736_-1 type=IN VIEW

Figure 126: CS=3



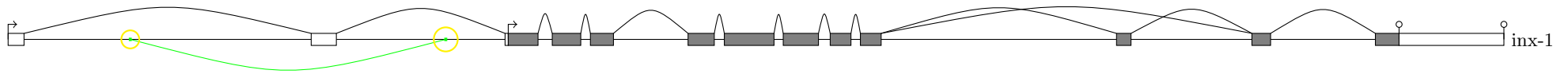
C.Ele	attcgacc	gcctaggttagt...4409...	tgaaaaagaagagtaggaac-----	CAATaCG	TTTGCAT	g	gcgaaac-caactcaacttat...318...	---atattttctcat	ttttagca	
C.Bri	atccgacc	gcctaggttagt...2666...	-----accaagtcatagcc-aagtct	ATTGCGCA	g	TTTTGAGTTG	c	cttaagctaaatattatatt...2083...	ataaaaaaatt---g	ttttagca
C.Bre	atacgacc	gcctaggtcagt...4021...	ggataaagaagagttggaac-----	CAATaCG	TTTGCAT	g	gcgaaactcaactcaactta-...	324...---taatcgttcccg	ttttagca	
C.Rem	attcgact	gactaggtcagt...1637...	-----catagtcatacccaagctct	ATTGCGCA	g	TTTTGAGTTG	c	cttaagctaaatattatatt...2124...	---taattttaactt	ttttagca
	** ** ** *	* * * * * **		** * *	*** *		** * ** * *	* *	*****	

id=184756 gene=C16E9.4 name=inx-1 segment=chrX_6951477_6956281_-1 type=I5

C.Ele	tttctcat	ttttagcat	caaaaatctcaagaa	ATGCGAACGATTG	a	accacggttcacgctatcc...52...	ctcaacaaggac	agaaaggt	
C.Bri	aaaaattg	ttttagcata	CAAACTCAAGA	aa	TGCGaaCGAT	t	gaaccacggttcacggtat--...	54...ctcaacaaggac	agaaaggt
C.Bre	cgttcccg	ttttagcat	caaaaatctcaagaa	ATGCGAACGATTG	a	accacggttcacggtatcc...52...	ctcaacaaggac	agaaaggt	
C.Rem	tttaactt	ttttagcata	CAAACTCAAGA	aa	TGCGaaCGAT	t	gaaccacggttcacggtat--...	54...ctcaacaaggac	agaaaggt
		*****		*****		*****	*****	*****	

id=184757 gene=C16E9.4 name=inx-1 segment=chrX_6951357_6951476_-1 type=E5 VIEW

Figure 127: CS=2.4



```

C.Ele  attcgacc gcctaggttagt...2860...---gttggtagtggtgtcgtcgcCCT-CaGAAGAtGCGTtgATTGcgagtctcacttacgagacg-----...1860...---atattttctcat ttttagca
C.Bri  atccgacc gcctaggttagt...3280...gcgtttccttctggtgtcgc---CCTCCCGAAGAtGCGTtgATTGcgactctcacttaccagaca-----...1468...ataaaaaaatt---g ttttagca
C.Bre  atacgacc gcctaggtcagt...2593...ttccttggtagtggtgtcgc---CCT-CaGAAGAtGCGTtgATTGcgagtctcacttacaaggca-----...1745...---taatcgttcccg ttttagca
C.Rem  attcgact gactaggtcagt...2260...tctactggtagtggtttcgc---CCT-CaGAAGAtGCGTtgATTGcgAGTTtacttacgacactcttg...1495...---taattttaactt ttttagca
** **** * ***** **                * * **** **      *** * ***** * ***** * *                * * *****

```

id=184756 gene=C16E9.4 name=inx-1 segment=chrX.6951477.6956281.-1 type=I5

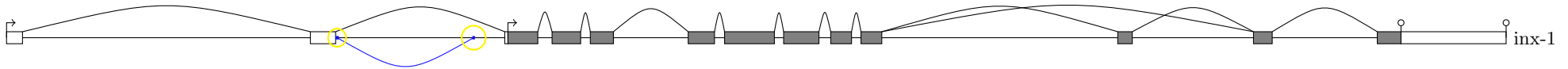
```

C.Ele  acaaggac agaaaggtgagt...1492...---aaaaggattataactcaattTGATATGCTCTTCggGAGGtatic--ctcctgacgagatgga...251...aagtagtttca ttgcagtt
C.Bri  acaaggac agaaaggtgagc...1537...---aaaaggattataattcaattTGATATGCTCTTCGGGAGGcatcctctcctgacaagatg--...282...tggtgattgtgt ttgcagtt
C.Bre  acaaggac agaaaggtgagt...1048...---aaaaggattataattcaattTGATATGCTCTTCggGAGGcatc--ctcctgacgagatgga...257...tggtgattctct ttgcagtt
C.Rem  acaaggac agaaaggtgagt...907...ttctaaaaggattataattcAATTTGATATGCTCTTCggGAGGcatcctctcctgacgagatg--...240...tggtgaccttt ttgcagtt
***** ***** **                ***** ***** * ***** *****                * * * *****

```

id=184758 gene=C16E9.4 name=inx-1 segment=chrX.6949531.6951356.-1 type=I5 VIEW

Figure 128: CS=4.8



```

C.Ele tttctcat ttttagcatacaaatctcaagaaatgcgaacgattgaaccacgttgcacgctatccagttcatcccagcagtgccgcacctcacgacactaagttctcaagacat
C.Bri aaaaattg ttttagcatacaaatctcaagaaatgcgaacgattgaaccacgttgcacggtatccagttcatccaagcagtgccgcacctcacgacactaagttctcaagacat
C.Bre cgttcccg ttttagcatacaaatctcaagaaatgcgaacgattgaaccacgttgcacggtatccagttcatccaagcagtgccgcacctcacgacactaagttctcaagacat
C.Rem tttaactt ttttagcatacaaatctca-----
*****
C.Ele acctcAACAagGAC AGaaAGG-----t
C.Bri acctcAACAagGAC AGaAAGG-----t
C.Bre acctcAACAagGAC AGaaAGG-----t
C.Rem ----GAAAtgCGA AcGATTGaaccacgttgcacggtatccagttcatccaagcagtgccgcacctcacgacactaagttctcaagacttacctcaacaaggacagaaggt*
      * * * * *

```

id=184757 gene=C16E9.4 name=inx-1 segment=chrX.6951357.6951476.-1 type=E5

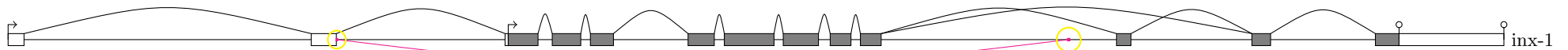
```

C.Ele acaaggac agaaagtgagt...1632...aaacctttcgagtttcatcc----ACC-TCTGTCTGTTtaacatattgttttttct...117...aagtagttttca ttgcagtt
C.Bri acaaggac agaaagtgagc...1699...-----tttcattctctccctatcccACCTTCTGTCTGTTtcgcatcttttttcttcatc...125...tggtgattgtgt ttgcagtt
C.Bre acaaggac agaaagtaagt...1185...aaacctttcgagtttcatcc----ACC-TCTGTCTGTTtcgcatcttttttcgccct...126...tggtgattctct ttgcagtt
C.Rem acaaggac agaaagtgagt...363...ggcgcctgtcaggaaattcc----CAATTTTCGTTTC--gcattctctttttcttctat...794...tggtgatccttt ttgcagtt
***** ***** ** * * ** * * * * * ** ** ** * * *****

```

id=184758 gene=C16E9.4 name=inx-1 segment=chrX.6949531.6951356.-1 type=I5 VIEW

Figure 129: CS=2.4



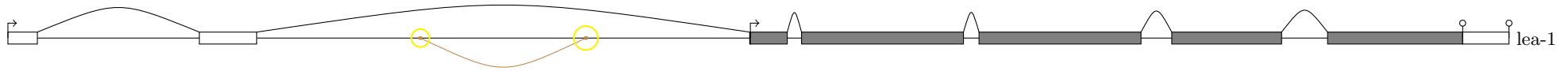
C.Ele	tttctcat	ttttagcataca...76...ctaagttctcaaagacatac	CTCAACAAGGAC	AGAaaggt
C.Bri	aaaaattg	tttttagcataca...76...ctaagttctcaaagacatac	CTCAACAAGGAC	AGAaaggt
C.Bre	cgttcccg	tttttagcataca...76...ctaagttctcaaagacatac	CTCAACAAGGAC	AGAaaggt
C.Rem	ttaaactt	tttttagcataca...76...ctaagttctcaaagacttac	CTCAACAAGGAC	AGAaaggt
		*****	*****	*****

id=184757 gene=C16E9.4 name=inx-1 segment=chrX_6951357_6951476_-1 type=E5

C.Ele	atcgtgtc	aggaaggtgagc...845...gttctttcatagtgccctgtg	TTTGTCCgc	TTGTga	TGGG	tggtc-atgtgtgaaaatctt...195...attgtaaccgat	ttgaagat
C.Bri	atcgggtc	aggaaggtgagc...941...tatctttcctagtgccctgtg	TTTGTCCgc	TTGTga	TGGG	tggtc-atgtgtgaaaatctt...181...attgtaaccgat	ttcaagat
C.Bre	accgggtc	aggaaggtgagc...804...tttctttcttagtgccctgtg	TTTGTCCgc	TTGTga	TGGG	tggtc-atgtgtgaaaatctt...177...attgtaaccgat	ttcaagat
C.Rem	atcgggtc	aggaaggtgagc...833...gttctttcctagtgccctgtg	TTTGTCCgc	TTGTga	TGGG	tggtc-atgtgtgaaaatctt...183...attgtaaccgat	ttcaagat
	* * *	*****	*****	*****	*****	*****	** *****

id=184775 gene=C16E9.4 name=inx-1 segment=chrX_6946614_6947736_-1 type=IN VIEW

Figure 130: CS=1.2



C.Ele	cgaagcga	aactcatcaaacactgatgagtc	cagcgt	aaagt:::ctctctgttctctcactgtatctctctccgctcccgttt	TGTGGTATTTCGAAATTT	-----	agtcta	atagga	atatttca--...3604...tttattacagaa	tacaacgc
C.Bre	cgaggcga	aactcatcaaacactgatgactccagcgt	aaagt:::-----	TTTCTtCTTCTTtTTTCTTC	-----	gtctttc	caccct	atctat...4747...cttctcacagaa	tacaacgc	
C.Jap	ggaggaga	aactcatcaacgctgatgagtcgagtg	aaagt:::cgc-----	gaagctccgccacttttgctt	-----	TTCTTcttTTTTGcCTCGAATTTTCaAAAT	ctcaattg	cgctccattgac...3196...cgattttcagac	tgaacgc	
C.Rem	ggagacga	aactcatcaaacactgatgactccagcgt	aaagt:::-----	GCTCCTcTTTCTCTTTTTTGTCTTTTTTG	-----	cccctct	gccaaccg	gacaa-----...4896...cctatttcagaa	tacaccgc	
	** **	*****	*****	** **	***				* ****	* * **

id=61893 gene=K08H10.1 name=lea-1 segment=chrV.10013418.10020518.1 type=I5

C.Ele	cgaagcga	aactcatcaaca...2809...-tttttggatttttctgttc	AAAATTTCGAAATtGC	TACA	-----	aatttta	aat	tgaactcg-----...2096...tttattacagaa	tacaacgc
C.Bre	cgaggcga	aactcatcaaca...2365...gatcagaaggaagaaaaaa	GA	AGAAAttGAGAAGAGAAA	-----	aaagt	gaaaac	gggggcaa-----...2540...cttctcacagaa	tacaacgc
C.Jap	ggaggaga	aactcatcaacg...2199...-atgtacataaacaacaaaaat	GTTTcGAAATTTGAGTAAAAA	cGAGGAA	aatgac	aaaata	aattgaatt-----...2697...cgattttcagac	tgaacgc	
C.Rem	ggagacga	aactcatcaaca...1931...tttcagtgccaccactgat	CAGA	aGGAGGCaAAAAAGAGAAAAcGGGGC	-----	caaac	ggatgc	cctcccc...2960...cctatttcagaa	tacaccgc
	** **	*****	*	**	**	**		* ****	* * **

id=61893 gene=K08H10.1 name=lea-1 segment=chrV.10013418.10020518.1 type=I5 VIEW

Figure 131: CS=3.84



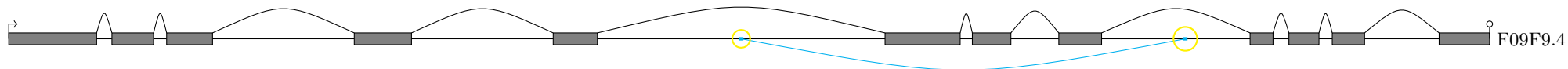
C.Ele	cacatcaa	gttaaattgtgc-...36...acatgtaaatattggtg-----tcAAATTAccTATTTcCACATTTTTGGC	tctatttttgtaaatcatca--...842...aaataattttat	ttataaac
C.Bri	cacatcga	gttagcggttgc-...62...-----ttggttaaactacacacttc-----CACATTTTTGGC	tctaata--gttgtacctaata...918...aaataattttat	ttatgtaa
C.Bre	cacatcaa	gct-agctgtgcg...76...-----ttgtcgaatcatcttcttc-----CACATTTTTGGC	tctctttattttgtactgta--...874...aaataagtttat	ttatgaag
C.Rem	aacatcga	gttagacacttc-...77...-----accttcgtcgcagacac--cttc-----CACATTTTTGGC	ctctcctaattg-attgtaat...933...atataattttat	ttataacc
	**** *	* * * *	** ** **	*** ***** ** * * * **** *****

id=23565 gene=T28B11.1 name=T28B11.1 segment=chrV_10712142.10713110.-1 type=E3

C.Ele	cacatcaa	gttaaattgtgc-...907...tgaaaaaaaaaccataaaat-GCCAGAAAATGTGcGAATAaaTAATT--tat	ttataaac
C.Bri	cacatcga	gttagcggttgc-...995...agaaaaaaaaatcccaaaaat-GCCAAAAAATGTGcgaataa--ataattttat	ttatgtaa
C.Bre	cacatcaa	gct-agctgtgcg...964...aatggaaaaaatctaaaaat-GCCAAAAAATGTGcgaataa--ataagtttat	ttatgaag
C.Rem	aacatcga	gttagacacttc-...1023...tggaaaaaaaaaccaaaaaaTGCCAAAAAATGTGcgaataaatataattttat	ttataacc
	**** *	* * * *	**** * **** ***** ***** * ****

id=23565 gene=T28B11.1 name=T28B11.1 segment=chrV_10712142.10713110.-1 type=E3 VIEW

Figure 132: CS=2.4



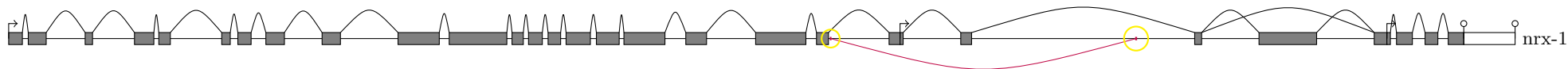
C.Ele	ggagccag	gtgtgtttcact...461...----	agggatgtcctgttccaatg--	TGCAGAT-GTTtTTCTT	ctgatgaatag--ttgatataa-...899...	ttcttttttcag	tggaaaga
C.Bri	ggaaccag	gtacttgttttg...1178...---	ttcactcttcatacttcaa----	GTGGATTGTTttGCAT	---agcaatagtctcatcataac...129...	ttcaaattgcag	tcgaaaga
C.Bre	agaaccag	gtgcgtttcatt...1281...taattcac---	ttcgtatttcaa----	GTGGATTGTTttGCAT	---agcaatagtctcatcataag...116...	tctgtttttcag	tggaaaga
C.Jap	agaaccag	gtgcgtttcttt...1319...-aattctc---	tttccgacttcga----	GTGGATTGTTttGCAT	---agcaatagactcatcataac...161...	tccgtttttgcag	ttgaaaga
C.Rem	agaaccag	gtgcgttttttt...506...-----	tccttccttctcctcaaaaagg	TGCAGAT-G-TTTTCTT	ttgaaagacactctgaatgc---...941...	tttgtttttgcag	ttgaaagg
	** ** ** *		* * * *	* * * * * * *		* * * * *	* * * * *

id=24308 gene=F09F9.4 name=F09F9.4 segment=chrX_4124527.4125966_-1 type=IN

C.Ele	cgtgag	gtagttaatt...248...gggagcagcaattgagacaac	AAGAAtGACATgTGTA	gaaggttttgacaagaatga-----...196...	tttgattgcag	atgctgat
C.Bri	aattagag	gtatgaagtcc...374...agtctcatgttctaattaaa	ATGCAACAcATTcAC-	aa----cttg--aagaatggaaggaa...88...	taacatttttag	atgcagat
C.Bre	cattcgag	gtatgtttatat...389...ctcctcatgttctaattaaa	ATGCAACAcATTcAC-	aa----cttggaatactaggcggc--...63...	ctctattttcag	atgccgat
C.Jap	aattcgaa	gtatgttttcat...391...tacggcatgttctaattaaa	ATGCAACAcATTcAC-	aa----cttgccatgaaaggaaga--...125...	ttacaattccag	atgccgac
C.Rem	tgtagag	gtatgtttattt...269...ggagcagcaattgagacaac	AAGAAtGACATgTGTA	gaaggttttgacaagaatga-----...203...	tactttttcag	atgctgat
	* ** ** *		* * * * * * *		* * * * *	* * * * *

id=24314 gene=F09F9.4 name=F09F9.4 segment=chrX_4123239_4123762_-1 type=IN VIEW

Figure 134: CS=5.4



```

C.Ele  atggtgagagca-----:~::~-----CTTTTTCTTcATCT-----tcccacacaattctttcctc...3131...atttcaggttct aaccgcat
C.Bri  atggtgagagccgtttttcttacttcttccaca--caaa::::------TCTTCaTCTgCTTCTT-----ca---tttgaaaatttccgcat...3500...tttcaggttcc aaccgcat
C.Jap  atggtgagcccc----tttttcttttctgtttttctt:::::ttcagtttttgtataaagttgaatgaaaattaattgcgaTTCTTCTTCTTCTTCaCTTTA-----gaattctcc---ttcttttttag...2541...tcttcaggtctcc aaccgcat
C.Rem  atggtgagagtc----ttctgcttcttccacaccccaa:::::atgaactttttgtttgacgtgaagaccggcagagta-----AAAAGttTGAAAaAAAGtcaaatttttgactatgttt-----..1621...atttcaggttcc aaccgcat
*****
                                     *
                                               *
                                                         * **** *
                                                                 *****

```

id=2152 gene=C29A12.4 name=nrx-1 segment=chrV_10832329.10835510.1 type=IN

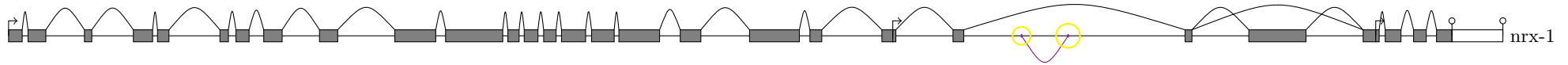
```

C.Ele  caghtaag tacttttattct-----..2305...ccagcagcttaagctg-----acc-----AGATatGAGAAGaaGAAGacacgtccaatgtttccggt---..1886...ttttcaggattc ttctcgcc
C.Bri  ----acg  t-cttttatttttctat...3013...tcacagatataggaggcgga-----AAGAAGaAGAAGAAGA--agaagaagaagaag---aag...1078...tttcaggattc ttctcccc
C.Jap  caggttag tccgtgaacttg-----..3175...--tt---tgtgcgaaaacgaaaaag-----TAGAGGAGGAAGAAGAAGAAGAA----gaagaagaagaagcgtcaaa..1727...atttcaggattc ttctcacc
C.Rem  caghtacg ttcttttcttat-----...690...--ataaaaggtgcga---gaaaactCTTTTTTCGctCTTTI-----tctttctttttatgagtcg-----..4182...attttaggattc ttctcacc
* * * * *
                                     *
                                               *
                                                         * **** *
                                                                 *****

```

id=2157 gene=C29A12.4 name=nrx-1 segment=chrV_10838141.10842413.1 type=IN VIEW

Figure 135: CS=3.12



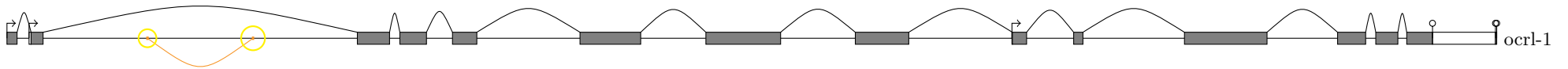
C.Ele	caghtaag	tactt-----ttattcttcag:::::gcagccgcctctccggaggctactggacaaatcataaaag-CATCATTITTTCAAAT-----	gaatatgaatattttgaat-----	...3003...	tttccaggattc	ttctcgcc
C.Bri	acgtcttt	tattt-----tttctattcgg:::::gccgccttcctactggagaca-----	CTTCTcTTTCTCTTTTC-----	...2682...	tttcaggattc	ttctccc
C.Bre	caggtacg	tccat-----tcattttt-----	TGGGGTcCCTTcTTCTTCAACACCAGATcCATGCAaATCG	...4186...	atttcaggattc	ttctctcc
C.Jap	caggttag	tccgtgaacttgatggcgggtattatcgttgcc:::::attctttgttcgattggagcgagtttgcacgctttTITTTCTTCTaTTTCTCTCTgTTTTTTTC	-----gtctggaaaagagaagacg...	...1943...	atttcaggattc	ttctcacc
C.Rem	caggtacg	ttctt-----ttcttat-----	ATCCccCCTTCAACACCAAAAC-----	...4872...	atatttagattc	ttctcacc
		* * * * *	* * * * *		** *****	***** **

id=2157 gene=C29A12.4 name=nrx-1 segment=chrV.10838141.10842413.1 type=IN

C.Ele	caghtaag	tacttttattct-----	...1591...	actccaccggaatctttga-----	ATTTcGGAAaGAATGATG-----	gattaagagacggaacaaa...	2599...	tttccaggattc	ttctcgcc	
C.Bri	-----acg	t-ctttattttttctat...3011...	---tgt---	cacagatataggagcg-----	GAAGAAGAAGaAGAAG-----	aagaagaa-----	gaagaagaaga...	1079...	tttcaggattc	ttctccc
C.Bre	caggtacg	tccattcatttt-----	...4145...	gatgtgtccggagagaccac	TGGTGTGCATGTGTTTGTTGTTGaaAAGGAAaAAGGGTCTCTG	gggtgttctttgaaaatgt---	...25...	atttcaggattc	ttctctcc	
C.Jap	caggttag	tccgtgaacttg-----	...3177...	tgtgcgaaaacgaaaagta-----	GAGGAGGAAGAAGAAGAAGAAGAAGAA	gaagcgtc---	aaaaatttcgtg...	1718...	atttcaggattc	ttctcacc
C.Rem	caggtacg	ttcttttcttat-----	...4833...	-----cgcagagaccacgggtgtgt---	GTTTGTGTTGaaAAGGGGAT-----	cccggttc---	gaaaatttcct-....	33...	atatttagattc	ttctcacc
		* * * *		* * *	* * *	* *	* *	** *****	***** **	

id=2157 gene=C29A12.4 name=nrx-1 segment=chrV.10838141.10842413.1 type=IN VIEW

Figure 136: CS=3



C.Ele	cagtaaaa	ggtgagtttct...2388...tttgatttggtttttttttt-----	GAGAA	GAAGAGG	gaaaagtgaaa--agaatata--...2524...ggttttatttca	gagaaaaat
C.Bri	cagcaaaa	agtgagtttctt...669...-----ttt-gttctcgggatgtatga-----	AGGGT	gtGAGAAAGAG	---agccaactttcatcgagtgg...4240...ctgctgatttca	gggaccaa
C.Bre	cagtaaca	agtgagttttca...1430...-----gaagacaacgacaccaggta	GAATGAG	GAAGA	AAGAAAGAA--tgattcaaa--agaatatgaa...3472...cggttggttga	gggaaaaa
C.Rem	cagtaaaa	agtgagttttca...500...atgaaattggagtctcggg-----	AGGAG	aAGAAGAGG	---aagtcatgttcagaatacaaa...4411...ccgcaatttga	gagaaaaac
	*** ** *	*****	***		* * *	** ** * ** *

id=36197 gene=C16C2.3 name=ocr1-1 segment=chrI_9720898.9727924_-1 type=IN

C.Ele	cagtaaaa	ggtgagtttct...3874...acgacgacagcgacaacgag-----	CTTCTCTCTT	-----	ttccctttaacatctcagtc...1039...ggttttatttca	gagaaaaat
C.Bri	cagcaaaa	agtgagtttctt...3398...aaagccaaaatgcttggatc-----	CTT	agTTCTC	tgACTCT---ctcgcctccttacttattc...1509...ctgctgatttca	gggaccaa
C.Bre	cagtaaca	agtgagttttca...3704...tcttttgctgctgctgctgc-----	TTCT	ccTTCTCTTTTCATT	caacggatccatctcgtcgtc...1199...cggttggttga	gggaaaaa
C.Rem	cagtaaaa	agtgagttttca...3156...-----tctctgcctctctctcactc	TCTC	TTCT	TTTCT-----ctctcgtctttttcgtct...1754...ccgcaatttga	gagaaaaac
	*** ** *	*****	*	***	*	** ** * ** *

id=36197 gene=C16C2.3 name=ocr1-1 segment=chrI_9720898.9727924_-1 type=IN VIEW

Figure 137: CS=3.84



```

C.Ele  aagaaaaa ggatgagaagaa...447...cgtcgatcataggtaatgct---AGTGTGCTCTACTGAACCTTTT-----ctctattttaaagcaaacg
C.Bri  aaaaagaa agatgagaagag...108...gctcataaggtactagcacc---TAAGTGCCTCTACTGAACT-----tccactccccttcaga--aagtg
C.Bre  aagaagaa ggaggagaaacg...149...acct---agcatccaacttcagt-AAGTGCCTCTACTGAACT-----cttatttcctt-----gg
C.Jap  agaaaaaa gagcggaaaaaa...216...---cctagaaccccgtcgtgaaAAGTGCCTCTACTGA-----tg
C.Rem  aagaataa agatgagaaaag...165...---tagaggtaccactttttgaa--GTGCGCTCTACTGAACTtaATCTTcacacattctattcggt--gagtg
*  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *

```

```

C.Ele  cgctctactgaactttttaaataatgatttcttgtagcgcataagaagttagtagagcgcacttgatccttt-caactttttta attaaaaat----
C.Bri  cgctctactgaact-----ttgcgctgtag-----agatagttcagtagagcgcacttgtagttacaacaaatcta attttcaa----
C.Bre  cgct-----agttcagtagagcgcactttccctatt---gagttaca agtagaaa----
C.Jap  ggcggggccg-----gggaattcagtagagcgcacttgtaggca-ctaaaaatgta tttaaaaattha
C.Rem  cgctctactggacttat-----acttttagacgcttctgagatagttcagtagagcgcacattgctttgt---gtgattca aatatgac----
*  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *

```

id=293575 gene=W07G1.1 name=W07G1.1 segment=chrII_13938026_13938635_-1 type=IN

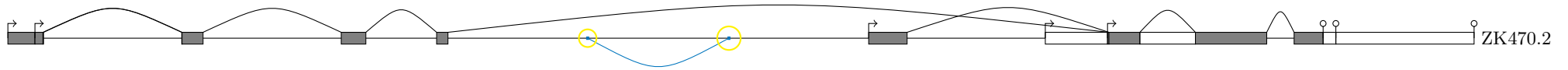
```

C.Ele  aagaaaaa ggatgagaagaa...536...---tgatttcctttagcgcata-----AGAAAGTTCAGTAGAGCGCACT---tgatc-----ctttcaactttttta attaaaaat
C.Bri  aaaaagaa agatgagaagag...179...---g-aactttgcgctgtagagat-----AGTTCAGTAGAGCGCACTTG---tc-----agtttacaacaaatcta attttcaa
C.Bre  aagaagaa ggaggagaaacg...185...actccttatttcttggcgct-----AGTTCAGTAGAGCGCACTT---tccctattgagtt---acaagtaga -----aa
C.Jap  agaaaaaa gagcggaaaaaa...251...---a-tggcggggccgggaaat-----TCAGTAGAGCGCACTTgctaggcactaaaaatgtatttaaaaattha
C.Rem  aagaataa agatgagaaaag...244...---tta-tacttt-----tagacgcttctGAGATAGTTCAGTAGAGCGCAC--attgctttgtgt-----gattca aatatgac
*  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *

```

id=293575 gene=W07G1.1 name=W07G1.1 segment=chrII_13938026_13938635_-1 type=IN VIEW

Figure 138: CS=11.1



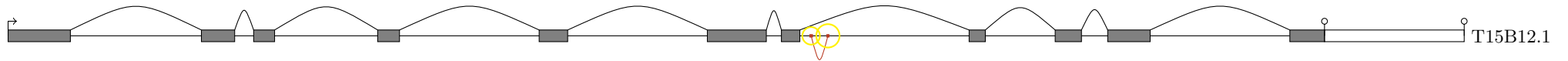
C.Ele	aacgtcag	gtcagtc	caatta...1929...-----	tttttattgtgtt	gtgtgt	-----	GTTTCTTTTCT	-----	tttacagtagctg	gttatg...2984...	acgacagttc	atcgcatt					
C.Bre	aacgtcag	gtcagcca	atct...1881...----	ttgctcagctt	cgacagctg	-----	ATTGCATCTCTTT	-----	ttttc	aaaacgttc	ccttg...3029...	acgacagttc	atcgcatt				
C.Jap	aacgtcag	gtcagttt	gtt...113...----	ggctagctgg	catggcg	gtt	-----	GAAA	CTGAG	TCAAA	-----	ccatgcttt	tcgcgagaag	-----	...4796...	acgacagttc	atcgcatt
C.Rem	aacgtcag	gtcagtc	caatt...183...	gggtacatt	cagaaac	gttt	TACA	CTTT	CTTGCGGTTTCTTTCTTCTC	taaatcag	ttttt	ctaaaac	-----	...4708...	acgacagttc	atcgcatt	
	*****	*****		*				*	*	**	*	*****	*****				

id=152709 gene=ZK470.2 name=ZK470.2 segment=chrX_4137876.4145390.1 type=IN

C.Ele	aacgtcag	gtcagtc	caatta...2866...----	ccttttcacc	--gcctac	atat	AGAAAGAGAAGC	-----	cgaaag	aaaactag	tcat----	...2047...	acgacagttc	atcgcatt				
C.Bre	aacgtcag	gtcagcca	atct...3480...	tcaat	ttttat	ggcttttc	-----	AGAAGAA	aG	-----	ATG	CAAT	-----	aaacag	attatgg	tatcact...1428...	acgacagttc	atcgcatt
C.Jap	aacgtcag	gtcagttt	gtt...2736...	cgaaag	attgttc	ctgcttt	-----	TTTGA	tCTCG	aTTTT	-----	ttttt	ctct-----	tgagct	tcggt...2173...	acgacagttc	atcgcatt	
C.Rem	aacgtcag	gtcagtc	caatt...4004...	tgtgact	ctccgt	cggctct	-----	GAGAAGAAAAGAAATTG	aCTAAGAAAGTGTA	cccatg	acg-----	tggtc	gttagc...	...890...	acgacagttc	atcgcatt		
	*****	*****		*	*						*		*****	*****				

id=152709 gene=ZK470.2 name=ZK470.2 segment=chrX_4137876.4145390.1 type=IN VIEW

Figure 139: CS=2.4



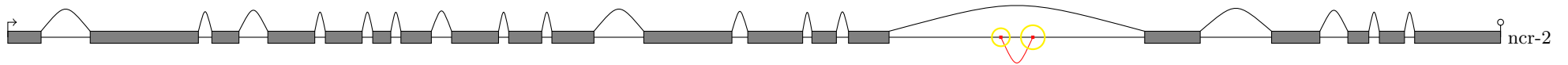
C.Ele	taaagtgt	gagt-----	-----tgaattaaaaataaaaaagta--	TAGCAGCgaGTGGT	ttcgatccaccgacctctgg...	940...	ttttttcagcc	gaaccaa	
C.Bri	taaaatgt	gagtcttaacagactaaaagtacttaaaaagactaaaataggtctaacagctaaacaaaaaaaaaaaaagagatc	TAGCAGCgaGTGGT	ttcgatccaccgacctctgg...	982...	atttttcagcg	gagccaaa		
C.Bre	tgaagtgt	aggtttttgtttggatagattctgatatctaagaaaaa-----	agtaaaagaaaaacaaaaagatc	TAGCAGCgaGTGGT	ttcgatccaccgacctctgg...	1740...	tcagttgcaaca	gagccaaa	
C.Jap	tacgatgt	aagt-----	-----aatg-----	tttgcaaaaaagt-----	CTAGCAGCgaGTGGT	ttcgatccaccgacctctgg...	2038...	tttatttcagcc	
C.Rem	ttaagtgt	aagt-----	-----caaactc-----	-----aaacag-----	-----ttaaagaaaaacaaaaagatc	TAGCAGCgaGTGGT	ttcgatccaccgacctctgg...	2875...	catgtttcagca
	*	***	**		* ****	*****	** ** *	** ** *	

id=211545 gene=T15B12.1 name=T15B12.1 segment=chrIII.5294912.5295923.1 type=IN

C.Ele	taaagtgt	gagttgaattaa...	55...	gcccgacgcttccactgc	GCCACGCTGCTG	-caaaa-acaacaccctcatt...	881...	ttttttcagcc	gaaccaa
C.Bri	taaaatgt	gagtcttaaca...	107...	gcccgacgcttccactgc	GCCACGCTGCTG	tcgaga-agagtgtggtggg-	923...	atttttcagcg	gagccaaa
C.Bre	tgaagtgt	aggtttttgttt...	92...	gcccgacgcttccactgc	GCCACGCTGCTG	tcgaga-aaaaagggtgggag-	1681...	tcagttgcaaca	gagccaaa
C.Jap	tacgatgt	aagtaatgtttg...	52...	gcccgacgcttccactgc	GCCACGCTGCTGG	cgagagactgctgcaggag-	1978...	tttatttcagcc	gagccaaa
C.Rem	ttaagtgt	aagtcaaactca...	71...	gcccgacgcttccactgc	GCCACGCTGCTG	tcgaga-acacaggtgaaccg-	2816...	catgtttcagca	gagccaaa
	*	***	**		*****	* * * *	** ** *	** ** *	** ** *

id=211545 gene=T15B12.1 name=T15B12.1 segment=chrIII.5294912.5295923.1 type=IN VIEW

Figure 140: CS=6



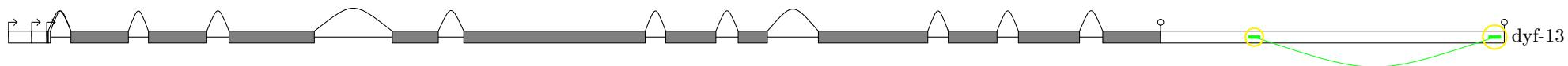
C. Ele	taggttat	ttgcaaggacaa--...463...-ctcctggctgtccgtctggt	CCGGctGGCCAGGtGCTCCtGGGGCT	cctgctggaccggttctcc-----...1284...caggtgacccat	caaacgca
C. Bri	aaaatagt	ttgcggtttga--...1252...-tgtcacaacagaaagcatta	TTTCCGcGTTAAACTG	-----tttgtgggtggacaaaagt-----...497...caggtgatccat	ctaagcc
C. Bre	aataaaat	ttacggagtgat--...1282...acgccacatcaaaagt-atta	TTTCCctGTTAAACTGttTGTG	-----aggttgatgaaaaaagaaaa...364...caggtgacccat	ccaacgcg
C. Rem	cggaatgt	tctc--attagaaa...1493...-ttcatcactgaaatcatta	TTTCCgtGTTAAACTG	-----tttgtgaggttgaagaaaga-----...238...caggtgatccga	ccaatgcc
		* * *	* * * **	* * ***** **	* ** **

id=29831 gene=F09G8.4 name=ncr-2 segment=chrIII.8262273.8264110.1 type=IN

C. Ele	taggttat	ttgcaaggacaa--...615...tctactcctggctcaccagc	AGCTCCtGGAGCtCCTGGtGGT--CCTGG	--tggctcctggtggcagtttt...1132...caggtgacccat	caaacgca
C. Bri	aaaatagt	ttgcggtttga--...1345...catttttcagacatgcgttt	-----TAGTTgTAACtgGGAAA	caaacggattggggaagaa...403...caggtgatccat	ctaagcc
C. Bre	aataaaat	ttacggagtgat--...1360...-----aaagttacggttgagacaag	---CGTATAGTTgTAACcGGGAAG	caaatcggattgggagaaga...287...caggtgacccat	ccaacgcg
C. Rem	cggaatgt	tctc--attagaaa...1587...tggttagaagagaacattt	-----TAGTTgTAACcgGGAAG	caaatcggattcaaatagat...143...caggtgatccga	ccaatgcc
		* * *	* * * * * * **	* * * ***** **	* * * * *

id=29831 gene=F09G8.4 name=ncr-2 segment=chrIII.8262273.8264110.1 type=IN VIEW

Figure 141: CS=3.84



C. Ele	acgcataa	cgttaatatcat...152...tatccgaacacagaaacttc	AGTCGTCAGCTGAACATGAAGAttGACA	aagaagacgatcagcagcaa----	1071...acccaagctcga	ctcaaata
C. Bri	tctcataa	tgttgatctcaa...134...catccatgaatgaatcttc	AGTCGTCAGCTGAACATGAAGAttGACAAAGA	agacgatcagcagcaacaga...	1080...acccaagctcga	ctcgaata
C. Bre	tctcataa	tgттаатсtсaa...144...gaacagtгgaatгaатсttc	AGTCGTCAGCTGAACATGAAGAttGACA	aagaagacgatcagcagcaa----	1076...acccatgctcga	ctcaaata
C. Jap	tctcataa	cgtgccactaac...147...atgсgttcgattгgаtсttc	AGTCGTCAGCTGAACATGAAGAttGACA	aaggagacgatcagcagcaa----	1078...aaccagctcga	ctcaaata
C. Rem	actcatca	tgtaaатсttac...154...gatccattgаatгaатсttc	AGTCGTCAGCTGAACATGAAGAttGACA	aagaagacgatcagcagcaa----	1083...aaccgгctcga	ctcgaata
	* * * *	** * *	* * * *	*****	* * *	*** **

id=185611 gene=C27H5.7 name=dyf-13 segment=chrII.7167472.7168786_-1 type=E3

C. Ele	acgcataa	cgttaatatcat...1240...---ttatttaaatt--gctcatta--	TGTTttTCTTTGTtGTTGGCTGACGACT	caaccaagctcga	ctcaaata
C. Bri	tctcataa	tgttgatctcaa...1230...ttgtattctaatt--gctcaa	TTTTgTGTTttTCTTTGTtGTTGGCTGACGACT	caaccaagctcga	ctcgaata
C. Bre	tctcataa	tgттаатсtсaa...1237...---aattttctatt--gctcaattg--	TGTTttTCTTTGTtGTTGGCTGACGACT	caaccatgctcga	ctcaaata
C. Jap	tctcataa	cgtgccactaac...1243...----atttaactttatctaattg--	TGTTttTCTTTGTtGTTGGCTGACGACT	caacc-agctcga	ctcaaata
C. Rem	actcatca	tgtaaатсttac...1255...---gatttttaatt--gctcaaatg--	TGTTttTCTTTGTtGTTGGCTGACGACT	caacc-ggctcga	ctcgaata
	* * * *	** * *	* * * *	*****	*** **

id=185611 gene=C27H5.7 name=dyf-13 segment=chrII.7167472.7168786_-1 type=E3 VIEW

Figure 142:



```

C.Ele aatTTTT ttcgtcatttttgcctgaaatgttcgtttcttctcaattttcttgattttaaGAGTAGAT: TGAGAAT agtggatgattctagtctgat-----..67...cggctctccac ggctgagg
C.Bri aatTTTT ttggcgatTTTtcgctgaaatgctagatccttctcaatttttaacggaatttaTGAGTAGAT: TGAGAAT agtggatgattctagtctgat-----..68...cggctctcgac ggctgagg
C.Bre aatTTTT ttcgctgttttgaacgaaatggttgttcttctcg---tttttggattttaTGAGTAGAT: TGAGAAT agtggatgattcaagtctgat-----..67...cggctctcacac ggctgagg
C.Rem aatTTTT c---cgctatttcccctgcatggttgagtttctgcctcttttccaattt-TCGAGTAGAT: TGAGAAT agTATAT gattcatgtcattcaggtc...60...cggctactcctt ggctgagg
*****      * ** * * ** * * * * * ** * ** ***** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * ** * **

```

id=120204 gene=T01C3.7 name=fib-1 segment=chrV_15002009_15002178.-1 type=E5

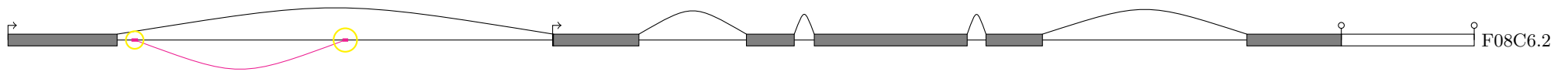
```

C.Ele aatTTTT ttcgtcattttt...111...-----actctaagtgaatg-ggataATTCTCAATCTtACTCggctctccac ggctgagg
C.Bri aatTTTT ttggcgatTTT...112...-----ctctaagtgaatgaggataATTCTCAATCTtACTCGgctctcgac ggctgagg
C.Bre aatTTTT ttcgctgttttt...108...-----actctaagttgaatg-ggataATTCTCAATCTtACTCGgctctcacac ggctgagg
C.Rem aa-ttttt tccgctatttccc...102...ctataactttaagttaaatg-GTGTAAATCTCAATCTtACTCGGctactcctt ggctgagg
** ***** * * *** ** ***** * ** * ** * ** * ** * ** * ** * ** * ** * ** * **

```

id=120204 gene=T01C3.7 name=fib-1 segment=chrV_15002009_15002178.-1 type=E5 VIEW

Figure 143: CS=2.4



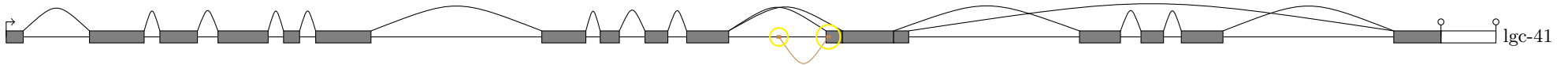
C. Ele	agtaagtc	aac----	aataccatgtga--	attagcttg:::--	-----	AAAGG	GAAGA	atGGAA	----	atggataggttgaaggaaa...	4913...	----	cgttcagaaag--	a	tgcccaa	
C. Bri	agtaagtc	aaa----	aataccatgagaatgattagcttg:::--	-----	-----	GAAGA	GAAG	aaGGAAA	AT--	tagaacaacataaaatagga...	4901...	-----	tcagacagacca		tgcccaa	
C. Bre	agtaagtc	aacaaaaa	ataccatgtgaatgattagcttg:::--	-----	-----	GAAGA	GAAG	AAAGAA	GAAG	caaacgacaacttggctgt...	528...	-----	tcagtgccagaa		tgcccaa	
C. Jap	agtaagtc	aacaaaaa	agaccatgtgaatattagcttg:::--	-----	-----	AGGG	GAAGA	aaGAAG	CG	GAAAGT	aagcagacagaggaagaaa...	4900...	aatgtttcaga	----	a	tgccgag
C. Rem	agtaagtc	aac----	aataccatgtgaatgattagcttg:::--	-----	-----	GAAG	AGGA	aaAGA	AG	cgtaagaagcggcagaaag...	4127...	-----	tcagaagcaaca		tgcccaa	
	*****	**	**	*****	**	*****							****	*	** * **	

id=292384 gene=F08C6.2 name=F08C6.2 segment=chrX_7572330.7578717_1 type=IN

C. Ele	agtaagtc	aacaataccat...	3753...	tcta	atcg	gcatt	caaatc	-----	TTCTTCTT	CaTCTT	-----	accac	tctctctctctc...	1157...	----	cgttcagaaag--	a	tgcccaa										
C. Bri	agtaagtc	aaaaataccat...	2221...	--tag	ttgc	---tt	caaat	ctcaac	GTTTT	CCTTT	atTTT	CTTC	-----	agatt	ccta	agaata	atcag...	2684...	-----	tcagacagacca		tgcccaa						
C. Bre	agtaagtc	aacaaaaa	atac...	4454...	gca	atc	accg	ctc	ctt	cat--	CTTCTT	CTCT	TTTT	TCTT	CT	acgt	caatt	ctca	cg	cac...	448...	-----	tcagtgccagaa		tgcccaa			
C. Jap	agtaagtc	aacaaaaa	agac...	2363...	atta	gat	ctg	acc	ctg	aca	----	GTTTT	CTCT	TTTT	T	gTCTT	ttt	at	ccg	att	gttc	gatt...	2541...	aat	gtttcaga	----	a	tgccgag
C. Rem	agtaagtc	aacaataccat...	2145...	cag	agt	ctc	ag	ttt	catt	----	CTCT	Ca	TTCT	CTTCTT	CT	-----	at	cta	ata	aca	ca	aattc...	2022...	-----	tcagaagcaaca		tgcccaa	
	*****	**	**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	****	*	** * **	

id=292384 gene=F08C6.2 name=F08C6.2 segment=chrX_7572330.7578717_1 type=IN VIEW

Figure 144: CS=4.8



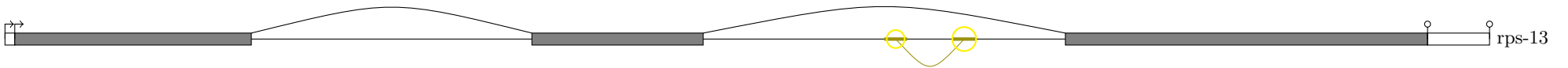
C.Ele	gta--agata	tggcaatagact-...100...-----acttttgacgacgcacgat	CCAAATAGTTTCTTGC	actc--atTTTTtgtttccac...105...ccagcaaggac	tatttggt
C.Bri	gta--agttt	gagtgaaaaact-...103...----cagaatgttacc--acgcacga	ACCAAAATAGTTTCTTGC	actctcccctgctcccctct--...123...ccagcaaggac	tatttggt
C.Bre	gtaagaattt	cag--attcgat-...108...----tccaggttttgc---acgcacga	ACCAAAATAGTTTCTTGC	atccg-aatatttcattttct-...120...ccagcaaggac	tatttggt
C.Jap	gta--aggcg	ggcggaaaatct-...101...tgttcacgattt-----ctgcacga	GCCAAATAGTTTCTTGC	acc--agtttcagttatgcat...85...ccagcaaggac	tatttggt
C.Rem	gtaagagttt	ga---agacactg...91...----tccagattttgc---acgcacga	ACCAAAATAGTTTCTTGC	accataccttcttatttcc--...100...ccagcaaggac	tatttggt
	*** *	* *	*****	*	*****

id=111546 gene=C39B10.2 name=lgc-41 segment=chrX.10456717.10457001.1 type=IN

C.Ele	gta--agata	tggcaatagact-...244...aggtcaaatctgaattcca	GCAAGGGAC	TATTTGGT
C.Bri	gta--agttt	gagtgaaaaact-...266...gaaaaacaataaaattcca	GCAAGGGAC	TATTTGGT
C.Bre	gtaagaattt	cag--attcgat-...268...tggtcaataatgaattcca	GCAAGGGAC	TATTTGGT
C.Jap	gta--aggcg	ggcggaaaatct-...226...gcctcaatactgaattcca	GCAAGGGAC	TATTTGGT
C.Rem	gtaagagttt	ga---agacactg...231...tggtcaaatctaattcca	GCAAGGGAC	TATTTGGT
	*** *	* *	*****	*****

id=111546 gene=C39B10.2 name=lgc-41 segment=chrX.10456717.10457001.1 type=IN VIEW

Figure 145: CS=7



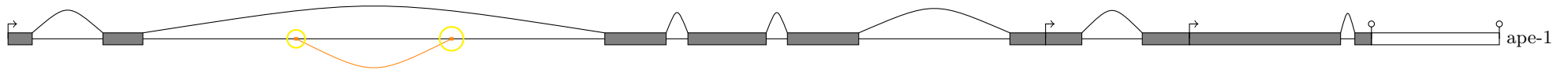
C.Ele	cctcaagt	ccaagtaataa...71...-tcaaatgagcaatatgaaa-	TATC	TGTT	TGGG	tgagggtgaactgtatttag...72...--aattattgtttt	ttcagga
C.Bri	cctcaagt	ccaagtaaaaa...71...-tcaaatgagctatatagaa-	TATC	TGTT	TGGG	tgagggtgaattgtatttag...81...ttaattgt--tttt	ttcagga
C.Bre	cctcaagt	ccaagtaatta...71...gtcaaatgagctatat-gaa	TATC	TGTT	TGGG	tgagggtgaacgtaattag...77...ttactttc--tttt	ttcagga
C.Jap	cctcaagt	ccaagtgagat...72...-caaaactgagcaataagaac-	TATC	TGTT	TGGG	tgagggtgaattgtctttaa...76...tcaatttt--gatt	ttcagga
C.Rem	cctcaagt	ccaagtgagaa...76...-tcaaatgagctatatagaa-	TATC	TGTT	TGGG	tgagggtgaattgtatttaa...75...caacattt--tctt	ttcagga
	*****	***** *				** **	*****

id=85643 gene=C16A3.9 name=rps-13 segment=chrIII_6374301_6374522_-1 type=IN

C.Ele	cctcaagt	ccaagtaataa...113...taactgtatttagattagat	CTCAA	AACA	GATG	acagttttcg---tagaaactag-...30...--aattattgtttt	ttcagga
C.Bri	cctcaagt	ccaagtaaaaa...113...taattgtatttagattagat	CTCAA	AACA	GATG	acaattctagtttagaaat---...39...ttaattgt--tttt	ttcagga
C.Bre	cctcaagt	ccaagtaatta...114...taaactgtaattaggttagat	CTCAA	AACA	GATG	acaattcatc---attagattaga...34...ttactttc--tttt	ttcagga
C.Jap	cctcaagt	ccaagtgagat...114...taattgtctttaaattagat	CTCAA	AACA	GATG	acaattcaa---tataaaatatt...34...tcaatttt--gatt	ttcagga
C.Rem	cctcaagt	ccaagtgagaa...118...taattgtatttaattagat	CTCAA	AACA	GATG	acaatttaggtagttgtatc---...33...caacattt--tctt	ttcagga
	*****	***** *				** *	*****

id=85643 gene=C16A3.9 name=rps-13 segment=chrIII_6374301_6374522_-1 type=IN VIEW

Figure 146: CS=3



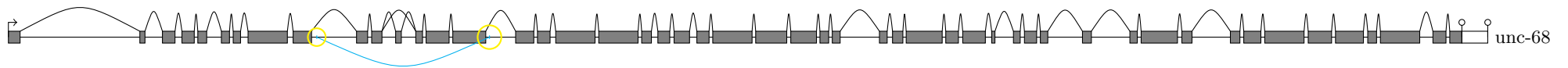
C.Ele	acgagtta	gttttttt	gtt...463...	-----tcgaagatcagaacggata	GGAATG	CATCAGAGATT	--attagtctcgctg-atacct----	...4445...	gtttcagatgt	caaaaccg	
C.Bri	gcgagtga	gttttttttt	g...484...	-----gaagatcaaaaacggataga	AATG	CATCAGAGATT	--agga-aaaagagagaatgac--a--	...4426...	tttgcagatgt	ccaaaccg	
C.Bre	aagagtga	gttttcgtaaa	...3479...	a-----ggaaga-cgaaggttttat--	CGCT	tCGCAATCTTTT	Gacttgagtcttctggtcatt...	1426...	tttgcagatgt	cgaaccg	
C.Jap	acgggtgg	gtctttctcaa	...37...	atthttaatgagaga--agaaa-----	AAGA	AGGAGGAGAAGGCG	--att--ttccgcaactatccgtt---	4870...	gatttcagatgt	caaaaccg	
C.Rem	acgagtaa	gttttatttca	...458...	---tgggttgaagatcaaaaac	GGAT	aGGAATG	CATCAGAGATT	--atgatagtagag---atgactta--	4445...	tcttcagatgt	cgaaccg
		** **	** ** *		***	**	*		*	** *****	* *****

id=126403 gene=F46F3.4 name=ape-1 segment=chrV.11676370.11681654.1 type=IN

C.Ele	acgagtta	gttttttt	gtt...3547...	---cg---cgcaatc-tttttgacttg--	AGTC	TCT-GGTCATTCT	-----caaacatttctcactcttcc...	1361...	gtttcagatgt	caaaaccg	
C.Bri	gcgagtga	gttttttttt	g...3527...	---g---cgcaatc-tttttgactcg--	AGTC	TCT-GGTCATT	-----ctcattcattcaccctcct--	1383...	tttgcagatgt	ccaaaccg	
C.Bre	aagagtga	gttttcgtaaa	...3777...	aaacgataggggaata---taga	TAGAG	gAGAT	TGCGCGCG	-----cgcatgtggtcgaaaagct--	1128...	tttgcagatgt	cgaaccg
C.Jap	acgggtgg	gtctttctcaa	...2335...	---agttgtgc-----tttctagtgc--	TGCC	TTTCTgTCTTTCTT	-----ccggttgtttgttttaag-----	2571...	gatttcagatgt	caaaaccg	
C.Rem	acgagtaa	gttttatttca	...3488...	---g---cgcaatc-tttttgactcg--	AGTC	TCT-GGTCATTTT	CATT	cttctcctcatttccaact-----	1415...	tcttcagatgt	cgaaccg
		** **	** ** *		*	*	*	*	*	** *****	* *****

id=126403 gene=F46F3.4 name=ape-1 segment=chrV.11676370.11681654.1 type=IN VIEW

Figure 147: CS=3



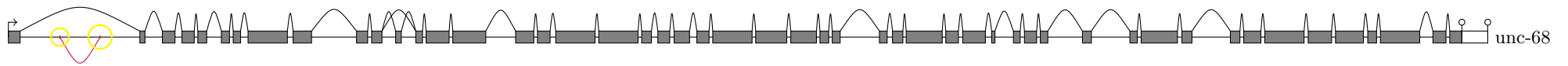
C.Ele	gcagttag	gtttgtagttttcccattctgtttgttgttatt---	ttttccaactagaagtg	AGTT	CGAGTGGT	----	ttttttatccaattttccat...615...	cttcaatttcag	aagaagtc
C.Bri	gcagtcag	gtatgtcatttcctattttcgttt-gttgttctcttttattttttcgactagaagtg	AGTT	CGAGTGGT	----	tttccttttataaatttaact...641...	tttgaatttcag	aagaagtc	
C.Bre	gcagttag	gtatgtcatctctcttt-ttatttcttcattttatttt-----	ttttctactagaagtg	AGTT	CGAGTGGT	----	ttttcctttatactttaact...628...	tatcaattccag	acgaagtc
C.Rem	gcagttag	gtatgttatcactttttatcgttttgttattatattta-----	ttttcaattagaagtg	AGTT	CGAGTGGT	ttttctccttttataattt-...	614...atccatttcag	acgaagtc	
	**** *	** ** *	* ** * * * **	**** * *	*****	** * * * **	* ** ** *	****	*****

id=64156 gene=K11C4.5 name=unc-68 segment=chrV_6919201.6919913_-1 type=IN

C.Ele	agttcgcg	gtaagtgtaaaatgtaaataac-----	tctgccccat	GCCAggCTCGAACT	ggcgaccttggcattcccta...301...	aaatttttccag	gttggctt
C.Bri	agttcgag	gtacgaaaaaaaaacaaaaaatatcct---	aaaaaatatctgccccat	GCCAggCTCGAACT	ggcgaccttggcatgcccta...294...	tgttgttttcag	gatggtcg
C.Bre	agttcgag	gtgagcaaaaagaaaaagaaaaagaa----	aaaagaatctgccccat	GCCAggCTCGAACT	ggcgaccttggcataaccta...260...	tctcttttacag	gatggtcg
C.Rem	agtcagag	gtaagagcagaaaattaacaaaaacattaacaaaaacaatctgccccat	GCCAggCTCGAACT	ggcgaccttggcatacccta...306...	tttaatttacag	gatggtcg	
	** * * ** * * ** * **		*****	****	** ** *	****	*****

id=64168 gene=K11C4.5 name=unc-68 segment=chrV_6917178.6917557_-1 type=IN VIEW

Figure 148: CS=3.6



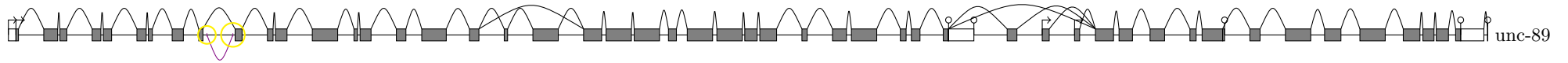
C. Ele	tccgaacg	gtagt	tttatt...2031...	-----	aagga	gaaataattgaaa	TTT	----	GTGC	----	ATATAT	gag--	tggtg	cccagggtggcg...	1975...	ttttatt	ccag	ggagacat
C. Bri	tccgaacg	gtagt	gaaact...1363...	-----	aattg	caaatctcgtaaaa	-----	AGAGc	GACAAa	AGAG	aaagatg	ctgttt--	tattgta...	2724...	taataatt	ccag	ggagacat	
C. Bre	tccgaacg	gtagt	gttttt...359...	...	agtgc	caattggcaaatct	-----	CGTA	aaAGAGc	GAC-AAAGAG	gaagctctt	gttt--	tattgta...	2815...	tgaatt	ccag	ggagacat	
C. Rem	tccgaacg	gtagt	tcaatt...504...	...	agtgc	caattggcaaatct	-----	CGTA	aaAGAGc	GAC-AAAGAG	gaagctctt	gttt--	tattgta...	3694...	tactatt	ccag	ggagacat	
	*****	*****	*		**	***			**	*	*	*	*	**	*	*	*****	*****

id=64140 gene=K11C4.5 name=unc-68 segment=chrV_6924789.6928871_-1 type=IN

C. Ele	tccgaacg	gtagt	tttatt...3011...	...	cgaaat	tttgattcgg---	acag	GTATATG	----	Cg	ACAGG	aatctgag	caaatcgaatct	-----	...	994...	ttttatt	ccag	ggagacat
C. Bri	tccgaacg	gtagt	gaaact...2653...	...	atctcc	gtccgccttccaa	CTTTT	TGTCCTCT	-----	actac	gcacataca	acccat	-----	...	1436...	taataatt	ccag	ggagacat	
C. Bre	tccgaacg	gtagt	gttttt...1691...	...	atctcc	gtccgccttccaa	CTTTT	TGTCCTCT	cc	TACG	-----	cacataca	accataaacgt...	1484...	tgaatt	ccag	ggagacat		
C. Rem	tccgaacg	gtagt	tcaatt...2935...	...	atctcc	gtccgccttccaa	CTTTT	TGTCCTCT	cc	TACG	-----	cacataca	accataaacgt...	1264...	tactatt	ccag	ggagacat		
	*****	*****	*		**	*	*	*	*	*	*	*	*	*	*	*	*****	*****	

id=64140 gene=K11C4.5 name=unc-68 segment=chrV_6924789.6928871_-1 type=IN VIEW

Figure 149: CS=3.84



```

C.Ele  aaatatgg taagtttctttt...31...gaccattgtcaatagagatcGGATtCGACGAGCTCG-----ttaactttgtgttcgga-----...1036...aatttttctagc tgctgaac
C.Bri  aagtatgg taagtcctaaaa...45...ggggtaacaacagtaatcGGATtCGACGAGCTCGtaACTTTTTTC-----gtgttcggat-aaatgagtgg...955...acgatttctagc tgccgaac
C.Bre  aaatatgg tgagtcgttcat...70...atttgtgacaacagtaatcGGATtCGACGAGCTCGtaACCTaCTTTTT-----gtgttcggatgaaatgagta...1084...aactgttatagc tgccgaac
C.Rem  aaatacgg taagtcacttcg...64...tgcggtaacaacagtaatcGGATtCGACGAGCTCGtaACTTTTTCTTGTGTcggatggaggaataagttga...1237...atcatttatagc agcggaac
** ** ** * ***                * ** * *****                               * **                * ** ***** ** ****

```

id=274177 gene=C09D1.1 name=unc-89 segment=chrI.4046105_4047251.1 type=IN

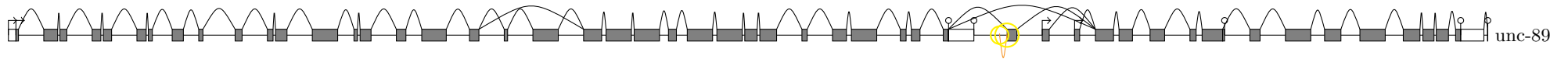
```

C.Ele  aaatatgg taagtttctttt...1056...-----gataccgaggaaggaggtctCGAGCTCGTCGATCCatcatggtgtaagttttcataaaataaa--ttcaaatttttctagc tgctgaac
C.Bri  aagtatgg taagtcctaaaa...986...-----tcgagttaaccgataccgagGAAGgAGGTctCGAGCTCGTCGATCCatcatggtgtaagtttttaaatgtccaattttcaacgatttctagc tgccgaac
C.Bre  aaatatgg tgagtcgttcat...1143...-----atcgagttaactgaaaccgaAGAAGGAGGTctTGAGCTCGTCGATCCatcatggtgtaagttttcg-atttctaattctaaaactgttatagc tgccgaac
C.Rem  aaatacgg taagtcacttcg...1293...tttattattatcgaattaactGATACcGAGGAAggAGGTctCGAGCTCGTCGATCCatcatggtgtaagttttaa---ttaa---aaatcatttatagc agcggaac
** ** ** * ***                ** ***** *****                               **                ** ** ***** ** ****

```

id=274177 gene=C09D1.1 name=unc-89 segment=chrI.4046105_4047251.1 type=IN VIEW

Figure 150: CS=4.8



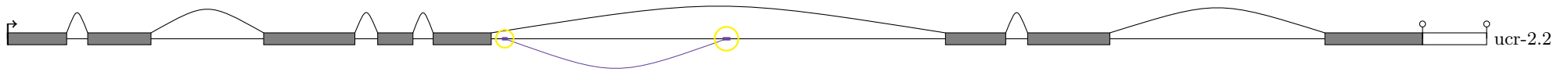
C.Ele	ctaacta-t	cccacaccctgt...520...--cgaagccagcccccaact-----	CAATTACCACC	AGCGT	---cccctgtccaagtgaatcgt...116...ggtaattgcagg	ttggcggc	
C.Bri	ctaacta-t	cccacaccctgtgt...503...ttcgagatcgtgtgtct--cggt	CAGCCAAC	GCAATTACCACC	AGCGT	---cccctgtccaagttaagaga...152...gtaaattgcagg	ttggctgc
C.Jap	ctaactt-c	ttcaccaccctgt...402...gcacagagccgacccgccca-----	CAATTACCACC	AGCGT	cgtcccgtgtccttgcatt---.253...ggtaattgcagg	ttggcggc	
C.Rem	ctaactatt	cccacaccctgtg-...520...gagaagatcgttgatt--cggt	CAGCCAAC	TGCAATTACCACC	AGCGT	---cccctgtcccagttgattag...131...gtatattgcaga	ttggctgc
	*****	** * *				** * **	*****

id=274229 gene=C09D1.1 name=unc-89 segment=chrI.4078810_4079526_1 type=IN

C.Ele	ctaacta-t	cccacaccctgt...665...-----aggcactttcccctctcta	ACGCTGGTGGTAA	-----	TTCagg	ttggcggc
C.Bri	ctaacta-t	cccacaccctgtgt...692...cccccatagaatttct-----	ttaACGCTGGTGGTAA	ATTGC	agGTTGGCTG	-----c
C.Jap	ctaactt-c	ttcaccaccctgt...683...-----tagaatagctcccctaatta	ACGCTGGTGGTAA	-----	TTCagg	ttggcggc
C.Rem	ctaactatt	cccacaccctgtg-...688...ccctcgttaata-----	ctcaattaACGCTGGTGGTAA	ATTGCAG	TGGCTG	-----c
	*****	** * *			**	*

id=274229 gene=C09D1.1 name=unc-89 segment=chrI.4078810_4079526_1 type=IN VIEW

Figure 151: CS=7.6



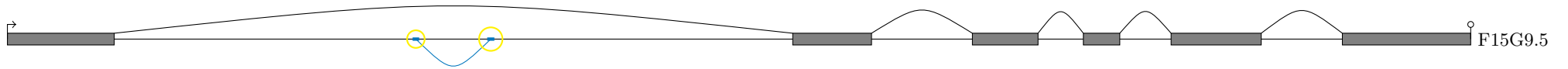
C.Ele	gagttctt	gaaa-acgaatatttat-----	:::::-----	TCAG-----	TGGAGTTGGAT	aacaaagtcataaataatgt...1763...	aggaggagaag	tgcgcaga
C.Bri	agcttttt	ttga-aagtaaatattatcagtgagtcggat:::::	cctcggctcttggttgggtggtggaacagagtaggctggctc	AGCTGGGA	AGCTGGAG	atggataagatggagatgga-----...1596...	aggaggagaag	tgcgcaga
C.Bre	aggtat	gagagaacatatatatttat-----	:::::-----	TCAG-----	TGGAGTCGGAT	aacaaaaataaataat...1748...	aggcggagaag	tgcgcaga
C.Rem	tgttttat	gaga-aatatatttatcagtgagtcggat:::::	cctcggctcgttgggtggtggaacggagtagctggctc	AGCTGGGT	AGCTGGAGATGGAT	agcttgagatggatagctt...1618...	agggtggagaag	tgcgcaga
	* *	* * * ** **		****	*****	** *	**** *****	*****

id=279324 gene=T10B10.2 name=ucr-2.2 segment=chrX.15174957_15176782.1 type=IN

C.Ele	gag---ttctt	gaaa-acgaatat...743...	aagtcctggctctcccaacc	ATCCTGGCTC	-----	TCCTGGCTC	-tccagcttgtcctgggaagt...1000...	aggaggagaag	tgcgcaga	
C.Bri	-agctttttt	gaaa-gtaaat--...588...	caaatatgatatacctggcg	CTCCTGGCT	-----	tTCCAGCT	tgtcctggcattcctggga--...1159...	aggaggagaag	tgcgcaga	
C.Bre	agg---tattt	gagagaacata-...718...	gagtccagtctctccaagcc	ATCCTGGCTC	-----	TCCTGGCTG	-tcctgttgtcctgggaagt...1015...	aggcggagaag	tgcgcaga	
C.Rem	tgt---tttat	gaga-aatatat...710...	ctctccgtgttgcctggaa	GTCCA	gTCTC	tcCAAGC	ATCCTGGCT	-ctcctggcttcc-ggcgct...1047...	agggtggagaag	tgcgcaga
	* *	** * **	**	*** **		* * **	*** * ** * **	**** *****	*****	

id=279324 gene=T10B10.2 name=ucr-2.2 segment=chrX.15174957_15176782.1 type=IN VIEW

Figure 152: CS=2.4



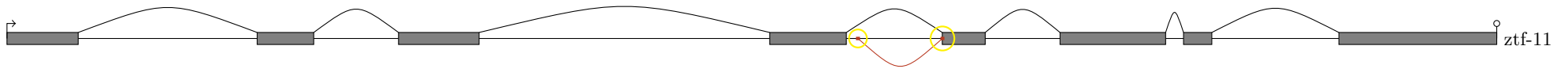
C.Ele	tatgtagg	aacaacacgtaagtccatttgc--aa-ctaataat:::gtagtgaagtgcaattggcgcttac-----tttttcca--CCTTCTTTTTCG	ctagacccttttactctccc-----...1766...taataagattac	tttttcag
C.Bri	tatgccgg	aacaacacgtaagcccattttcaaactcatat:::gtagtgaagtgcaattggcgctcttttcttttttttttTCCCAAGGGcATAT	--caaactccctccgatcatga-----...1577...ttaccagctgac	tttttcta
C.Bre	tatgcaga	aataacacgtagtccattttc--aa-ctcat:::-----TCCCAAGGGcATAT	--caaaaccgaggagtgtccgg-----...1562...taatgagattac	ttttttag
C.Jap	tatgccgg	aataacacgtggg-----:-----TTCTTTCTTTCTT	-----cccttatttctagagatagc...3319...tttcaatcatga	tattccag
C.Rem	tatgcaga	aataacacgtaagtccattttcaaaa-cgctt:::-----TTCCTTCTTTTC	--gaaaagtcacttgtgtatg-----...2674...taataagattac	tttttttc
	**** *	** ** *	* * *	** **

id=324763 gene=F15G9.5 name=F15G9.5 segment=chrX_9734373_9737513_-1 type=IN

C.Ele	tatgtagg	aacaacacgtaa...1422...----gttgccacatacact---tcttt--TGGAAAAAGaAAGG	-----gtccatgcacactctcagtc...1641...taataagattac	tttttcag
C.Bri	tatgccgg	aacaacacgtaa...1407...ggagggtaaccttaagaga-----ATATATCCCTTGGGA	-----acgtttttgggctttttca--...1387...ttaccagctgac	tttttcta
C.Bre	tatgcaga	aataacacgtta...1539...gaggagtaaccttaagaga-----ATATCCCTTGGGA	-----acattttggctttttttcga--...1367...taatgagattac	ttttttag
C.Jap	tatgccgg	aataacacgtgg...504...----ttctctttgggagt-----ttgaacAAGAAAGAAAGAA	agacactaacttttagcttt-----...2806...tttcaatcatga	tattccag
C.Rem	tatgcaga	aataacacgtaa...1537...-----cacttacactgagtcactga-GAAAAAAGAAGGGG	gagtaaccttaaggagaat----a--...1476...taataagattac	tttttttc
	**** *	** ** *	* * *	** **

id=324763 gene=F15G9.5 name=F15G9.5 segment=chrX_9734373_9737513_-1 type=IN VIEW

Figure 153: CS=4.8



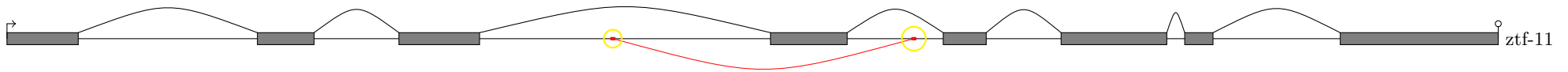
C.Ele	tcagacgt	ggtaag---gactttttgaaca	GAAAGTTGGGAC	---cctacagtaatcctctgaag-----	...205...tcccaactttca	gaaggcaa
C.Bri	tcagacgt	ggtaggtttattgtc-----	GAAAGTTGGGAC	---aaaatacagaag-----aaggccta...	...339...tcccaactttca	gaaggaaa
C.Bre	tcagacgt	ggtaggtttcttttttgaaaa	GAAAGTTGGGAC	---gttgaaaaaaaaaccattta-----	...327...tcccaactttca	gaaggcaa
C.Rem	ttcgacgt	ggtaggtcaacttttttgaga-	GAAAGTTGGGAC	gtgaaatagaaaagt---ttaag-----	...403...tcccaactttca	gaaggcaa
	* *****	*** * * *	*****	* * *	*	***** ***** **

id=199134 gene=F52F12.6 name=ztf-11 segment=chrI.9905843.9906110.-1 type=IN

C.Ele	tcagacgt	ggtaaggacttt...	.223...tccatttgagcgggtac--taa	GTCCCAACTTTCa	gaaggcaa
C.Bri	tcagacgt	ggtaggtttatt...	.354...--ttccatatcagtactttaa	GTCCCAACTTTCa	gaaggaaa
C.Bre	tcagacgt	ggtaggtttctt...	.348...acactaccattcaattc--taa	GTCCCAACTTTCa	gaaggcaa
C.Rem	ttcgacgt	ggtaggtcaact...	.423...--cattaaattcagttctctta	GTCCCAACTTTCa	gaaggcaa
	* *****	*** * *	* * * * *	*****	***** **

id=199134 gene=F52F12.6 name=ztf-11 segment=chrI.9905843.9906110.-1 type=IN VIEW

Figure 154: CS=6.24



```

C.Bri  tcgtcaaaggtaaaggaagg...325...-----gaaaagacactaggaccaccAACTTtGATGGATTActattattgtttt---cacacct-----atthtttc-----ttccagagcccac
C.Bre  ttgtcaaaggtaaagagtga...785...aagaaggaggggat-cgacc-----cAACTTtGATGGATTActattattgtttt---catgattcgaaaactgttat-----tttcagagcatga
C.Jap  acgtcaaaggtaaagagcaa...511...gatattgcgtgtgcgtgacc-----AACTTtGATGGATTActattattgttttccaccaccgct---ttctttc-----ttccagatggacg
C.Rem  aagggaagagtgggagagag...509...-----gaggggacaccaccacatacAACTTtGATGGATTActattattgtttt---cacttct-----ttttcttttcttaactgttttttctaattttcagagcccac
      * ** ** *                *      *      ***** ** * * * ** **

```

id=199132 gene=F52F12.6 name=ztf-11 segment=chrI.9906325_9907136.-1 type=IN

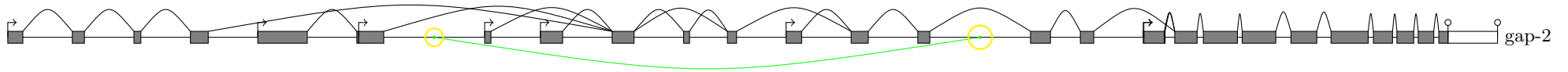
```

C.Bri  tcagacgtggtaggtttatt...139...tctttcatggatatattctc-----TAATtCCATTAAGTT--tatatttcttacccaacaca-----...181...tcccaactttcagaaggaaa
C.Bre  tcagacgtggtaggtttctt...158...-----gatatatcttttcacttctaTAATtCCATTAAGTTtctttctccctcact---cccaa-----...156...tcccaactttcagaaggcaa
C.Jap  tccgtcgtggtgagttttca...50...gagtttgatg-agacactca-----TAATtCCATTAAGTT-----cctccct---ttcaaaaagggtg...187...tcccaactttcagaaggcaa
C.Rem  ttcgacgtggtaggtcaact...145...tcactacacatatattctc-----TAATtCCATTAAGTT--t-tcttacttacttaaccac-----...244...tcccaactttcagaaggcaa
      * * ***** **                *      **      ***** ** * ** ** ***** **

```

id=199134 gene=F52F12.6 name=ztf-11 segment=chrI.9905843_9906110.-1 type=IN VIEW

Figure 155: CS=6.72



C.Ele	gtacgct---t	tttttggttta...4565...gagaaaaatgaattgaaat-----	GAGGA at G	-----	AGGcGAGAAGAAA	---aagagtaagaacaatactct...339...agagactctttc	ggtaattc
C.Bri	gtacgctttgt	tttttggat---...270...-----tgatctgaagggttac---tgtac--	GGAAGGGGA ca AAAAC ag TAAGGGGA ct GAATG a GAAA a GAGGAG	---	caattataa-aacaattcact...4610...agaaaattctcg	ggttaaaa	
C.Jap	gtatgtttaa	ttaacggct---...3458...-----caatgtttccgtccgcgaaa	AAGAA gg	---	AAGAAAAGAGAAA accataataa-atcaaacca---...1448...agaaaatagttg	ggtagtag	
C.Rem	--atgctagat	gttggatattt-...87...-----ag--tggggcgcaccaacgctc-	AAAGGA	-----	AGGcAAAAGT -----ccgcaatatgtataccgcg-	ggtagatc	
	* * *	* * *	*		* *	** * *	*** * *

id=11171 gene=ZK899.8 name=gap-2 segment=chrX_9480861.9487320.1 type=IN

C.Ele	gtagt	tttactatttg...3011...caaaacttgatgtgtcac-----	TTTCa TTCTTCTTCCTT	-----	cttatttttcaatattctac...1895...ccagcctgcgca	aaaccatg	
C.Bri	gtaagttt	tttttcagagt...99...-----ttttccttcttctcatctt	TTCTTTTCCATTC cc TTTTTTGGTTTT ac TCCC a TTCT	---	tctacttttttgggtggcgg...4784...tcagcctccgtc	gcagtatg	
C.Jap	gtgagttt	ttttcttgcca...3411...-----cctttttcttctcctttgtc-	TTTTCTTT t TCTT	---	TTCT ggatcacattttc---tcatag...1496...tcagccttgcgca	aaacgatg	
C.Rem	gtaagtga	atgttcttctca...2929...caaaactcttttcttctccc-	ACTTTTCTTC g TTTT	-----	cgaccacatattc---gttcgc...1981...tcagcctgcgcc	taaccatg	
	** ** *	*	* *		* **	**** * **	* ** *

id=11187 gene=ZK899.8 name=gap-2 segment=chrX_9503975.9510467.1 type=IN VIEW

Figure 156: CS=3.6



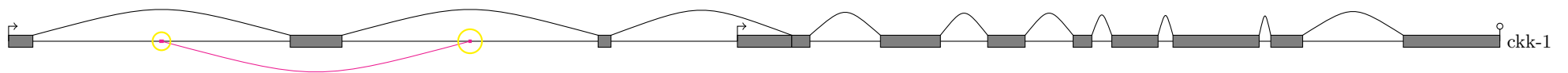
C.Ele	tttatccg	agtaagtc	ca...217...	-----cg	ttcgag	tggata	atggaa	TTTTGAAGATGATG	TCCT	TTCT	cttcgaa	atag---	aaatag	gga...2452...	tcgta	at	tttca	gatctgga	
C.Bri	tttatccg	agtaag	tatta...266...	-g	cgctc	gctcgag	tggata	TGGAat	TTTGAAGATGATG	TCCT	-----	aaaatg	ggggaga	agagag	g...1647...	aaaat	tcttca	gatctcga	
C.Bre	tttatccg	agtaag	tc...250...	-----	gactc	gagtgga	atgga	ATTTTGAAGATGATG	TCCT	----	aacccg	aatgg---	gaagag	ga...1411...	taaa	at	tttca	gatcttga	
C.Rem	tttatccg	agtaag	tc...237...	agag	tcgctc	gagtgga	atgga	ATGGAat	TTTGAAGATGATG	TCCT	----	aaaccg	aatag---	gaagag	gg...1382...	gtaa	at	tttca	gatctcga
	*****	*****	** *		*	*****	*****	*****	*****	*****	*****	****	*	** **		*	****	*****	**

id=48293 gene=Y71F9B.8 name=Y71F9B.8 segment=chrI_2738645.2741401_-1 type=IN

C.Ele	aatctaaa	ggtgag	caactc...74...	atg	cta	atgag	taggta	at-AGAA	aaAGGACATC	GTCTTCGAAA	----	ccagat	gtctt	ctgtct	tatt-...	64...	ggaaa	atttca	gaccctca
C.Bri	aatctgaa	ggtgag	caactc...113...	-----	atgag	taggta	ataggg	aaaAGGACATC	GTCTTCGAAATCA	----	gtcaag	ccatc	cttctt	tttc...	112...	aagtt	cttca	gacgctga	
C.Bre	aatctaaa	ggtgag	caacc...119...	-----	cta	atgag	taggta	atagaa	---AGGACATC	GTCTTCGAAAT	----	cgaggg	gccat	cattct	tca...	90...	aagtt	acttca	gacactga
C.Rem	aacctgaa	ggtgag	caacc...109...	-----	cta	atgag	taggta	atagaa	---AGGACATC	GTCTTCGAAATTCAT	----	cgaaga	aatc	atcctt	ctccg...	107...	aagtt	gattca	gactctga
	** ** *	** ** *	*		*	*****	*****	*****	*****	*****	*****	** ** *	** ** *	** ** *	** ** *	** ** *	** ** *	** ** *	** ** *

id=48295 gene=Y71F9B.8 name=Y71F9B.8 segment=chrI_2738266.2738492_-1 type=IN VIEW

Figure 157: CS=5.04



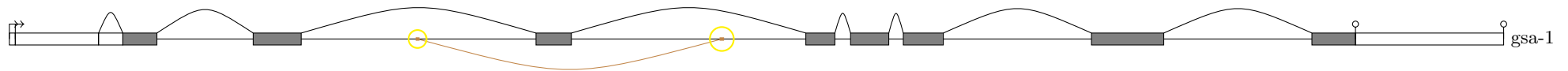
C.Ele	agtgggta	gttttttatat...3032...-atgaaacatttgagtttat-----	TCCTaaTTTTTTTtTGCA	-----	aaaattcaaattcgttggt-...1874...atttcaggatg	gtgggcga
C.Bri	aatggtaa	gctcttgtttta...2507...-taatcaattcttgcccaaaa-----	T-----TTTcTCTCTTTC	-cac-----	tctcttcttcagattg-...2404...tctttcaggatg	gtcggcga
C.Bre	agtggtag	gtacacctttt...4268...tttgcattgctcgagctgcga-----	ATTCaCCAAAGAA	cacggaattttcttctctt-----	...644...atttcaggatg	gttggcga
C.Jap	agtgggta	gtgcgctattcg...789...-tggcttatcgcaatgattaa	TGAACaaGAAAATTCGAGAAAtAGAGaaAAAATG	aCGGATGTGAGtAAAT	-----gcgttcattgaatggcgcg...4086...atttcaggatg	gtcggcgg
C.Rem	aatggtaa	gtgcacttttta...2811...-tctcatatcgacgtcatcca-----	TTCgTTTTCGTcaTTTT	-ctc---	cgttattcctcatgacg--...2096...cctttcaggatg	gtcggcga
	* ****	* *		*	**	***** ** ***

id=193377 gene=C05H8.1 name=ckk-1 segment=chrIII_5635533.5645057_1 type=IN

C.Ele	taatgtga	gttttagaggg...2728...-----gtgacttttgattttacctt-----	TGCAAAAAAGAGGA	acttcctaagaaa-----	ttcaaga-----	...1234...catttcagctcg	ctgcaaca
C.Bri	taatgtga	gttttaaggga...280...---caaatgttaattgattttcc-----	AGAAAGAGAAAAA	-----	aagcaaaatactgttaaaa-----	...3801...ttttcagctcg	ccgccacc
C.Bre	taatgtga	gttttgttttat...2466...nnnnnnnnnnnnnc-----	TTTTTTGGGGAT	-----	ccaggttcttagtaacgta--...2446...atttcagctcg	ccgccaca	ccgccaca
C.Jap	aagtgtta	gtttgcttttt...1284...---cgaataacccccattatcg	ATTtTTCAtCATCCGgCATTTC	cCTTTtTTTCTCGAATgTTTCGTCA	-----	attctcttcattcgccgc...3592...ttttcagctca	ccgccaca
C.Rem	taatgtaa	gttcttttagac...1545...attggaatgagactaaaggc-----	AAAAGACGAAAAGAGA	---	aaaagaagaagac---aagagta-----	...1605...catttcagctcg	ccgccaca
	* ** *	***				** *****	* ** **

id=193379 gene=C05H8.1 name=ckk-1 segment=chrIII_5645263.5649302_1 type=IN VIEW

Figure 158: CS=6



```

C.Bri taaacaggtttgtagttcat...826...--tcgttg---aaatattgatcgat-----AGGGGGGAGGAAGAAGAAGAAGGCACtgctgctgggctgctcgagg...605...gttttcttcaggtgatgcga
C.Bre taacaggtatgtttccgtt...703...-gatcgatgggcagaaaacgg---GGGGcGAGAAGGAAaGAAGAAGAAGAAGaGAAG----aagaggcgaaggcactggcc...253...tgttttgtaggtgatgcga
C.Jap taaacaggtacgtaaatatt...2783...-gtccgtcgtccggagcgcac--TGCCaTTAAAcCGGTAAGC-----ctcagtcggtcgttgcggag...354...ctgtttgtaggtgatgcga
C.Rem taaacaggtatgttttgaa...656...acatcgttg---aaatattgatcGATGAAGaaAAGGGAGGAGAAGAAGAAGGA-----aaaaggggggtggcttcggg...223...tgttttgtaggtgatgcga
*** ***** **                ** * * *                * *                * *                ** * *****

```

id=47933 gene=R06A10.2 name=gsa-1 segment=chrI_1069092_1069416_1 type=IN

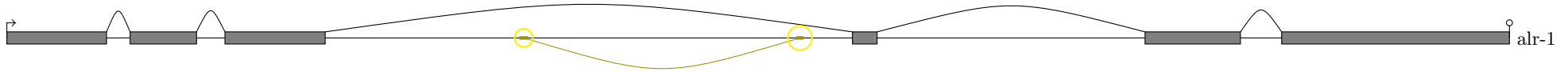
```

C.Bri gatgcaggtgtggagttgga...1558...tgatgtgataaaaatgctat----GTGCCTTC-TTCTTCTTTCTCTCTCTctcttcttttgcctcttg-----786...atattttcaggtaatgcta
C.Bre tatgcaggtcaataagagaa...441...----ggctatggggcccccagaaTTTCcgTCTTCTTCTTCTTCTTCTTCTTgccttcttcttcttctgtc-----505...gataattgcaggtaatatta
C.Jap catgcaggtctgcgctgcta...90...tttttagacactgcctgcgc-----GCTTATCGatTTTAAGGCG-----ttaaagagtggctgatatta...500...gatgattgcaggtaatattg
C.Rem tatgcaggttcggaattgaa...1306...gcacaagagaagagaccgc---CCTTCTTCTTTTTCTTccCTCTTcaCTTCATT-----atatgaagagagagaaaagg...527...ataaattgcaggtaatctg
***** *                * *                * * * * *                * *                *

```

id=47935 gene=R06A10.2 name=gsa-1 segment=chrI_1069579_1070370_1 type=IN VIEW

Figure 159: CS=4.32



C. Ele	cagatgtg	ttcactcggtaa...322...-ttaattgaagaagcaca	TCATTtGCTCAA	taTTAGA	-gagggccatttagttttacg...599...-acaccgaaa--tc	ttttgcag
C. Bre	cagatgtg	ttcactcggtaa...332...-ttaattgaagaagcaca	TCATTtGCTCAAT	-ataagagaggaccactttat-----...548...tacaccg-aaa--tc	ttttgcag	ttttgcag
C. Jap	cagatgtg	tttactcggtaa...415...ttaattgaagaagcac-aac	TCATTtGCTCAA	tgTTAG	tagaagggaatatttataa--...341...-acattgacaaaatt	tgtatt--
C. Rem	cagatgtg	ttcacgcgtaa...351...-ttaattgaagaagcaca	TCATTtGCTCAA	taTTAG	-agagatccattctatgtagt-...575...--accgaaaaatct	ttttgcag
*****	** ** *	*****	*****	** ** * * *	* * **	* *

id=297760 gene=R08B4.2 name=alr-1 segment=chrX.11123952.11124955.-1 type=IN

C. Ele	cagatgtg	ttcactcggtaa...858...aggtccggtctcaattcaga	TCTAATTGAGCAATGA	caattgctccggcgtggtgc...66...-acaccgaaa--tc	ttttgcag	
C. Bre	cagatgtg	ttcactcggtaa...815...---cgggtcgcaattcagaccta	ATTGAGCAATGA	caattgctctggcaagcaac...66...tacaccg-aaa--tc	ttttgcag	
C. Jap	cagatgtg	tttactcggtaa...694...-ggtccggtcgcaattcagac	CTAATTGAGCAATGA	caattgctccaaccattcaa...65...-acattgacaaaatt	tgtatt--	
C. Rem	cagatgtg	ttcacgcgtaa...867...-ggtccggtcgcaattcagac	CTAATTGAGCAATGA	caattgctccggcaagcaac...62...--accgaaaaatct	ttttgcag	
*****	** ** *	*****	*****	* * * * *	* * **	* *

id=297760 gene=R08B4.2 name=alr-1 segment=chrX.11123952.11124955.-1 type=IN VIEW

Figure 160: CS=3.84



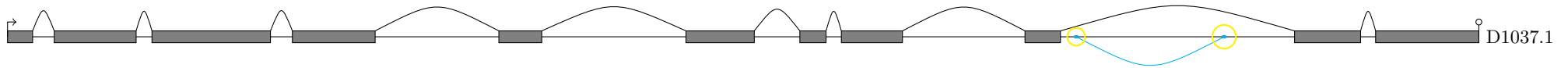
C.Ele	gcttgggg	atcctctcgtcgttgtaagaacgttcgaatctgg-----	ATGATtc	AACCAACGTCAA	taaccatagtcacctgctt---...417...attataataaac	tgaattgg
C.Bre	gcttgggg	atcgtctcgtcgttggtaaataat-ccatccatccatcgccga-----	ATGATtc	AACCAACGTCAA	ctctctacgccgccctac---...471...attgtaataaat	tgttttgg
C.Jap	gcatgggg	atcgtcgcgtcgttgtaactcggttttgcactctgcaaatcccgccatgtttctatgtac	AACCAACGTCAA	aa---atagcctcctccctcat...391...aatataataaat	aaataatt	
C.Rem	gcttgggg	atcgtctcgtcgttggtaact-accttcgcc--tcg-----	ATGATtc	AACCAACGTCAA	aattcatagtcttctgctgg---...483...attataataaat	tgttttgg
	** *****	*** ** *****		* *****	* * * *	* * *****

id=118406 gene=C08H9.2 name=C08H9.2 segment=chrII_9886479_9886982_-1 type=E3

C.Ele	gcttgggg	atcctctcgtcg...418...--aatccatccgtttt-caccac	TTGACGTTGGTT	ttATCAT	acat-at-----ttttattataat---cat---tataataaac	tgaattgg
C.Bre	gcttgggg	atcgtctcgtcg...459...tttccccaacac---acacac	TTGACGTTGGTT	ttATCAT	acat-attatacgaatatttattataatattgtgtgaataat---tgtaataaat	tgttttgg
C.Jap	gcatgggg	atcgtcgcgtcg...396...---ccacaccacttttcccccac	TTGACGTTGGTT	-----ttatcatgattatcaacatcaacataatgttgattgataatttaataataaat	aaataatt	
C.Rem	gcttgggg	atcgtctcgtcg...465...gtccccgcacacac---ccccac	TTGACGTTGGTT	ttATCAT	acat-attatacagatatttattatgatattgtgtgaataat---tataataaat	tgttttgg
	** *****	*** ** *****	** *	*****	** ** * * * * *	** * *****

id=118406 gene=C08H9.2 name=C08H9.2 segment=chrII_9886479_9886982_-1 type=E3 VIEW

Figure 161: CS=4.8



C.Ele	gaaaaagg	tatgt-----gtggtctcggaaaattgta---ttaaattatctcaa-----	AAATCGGCACATTCTGC	-cgattttcattttgtgaaaa----...853...ttccttttcagg	accaattc
C.Bre	taaaaagg	tttgttgagaatTTTTTTTTtaagttgagctttttgagccgTTTTTtacagactccaattagct	CAAATCGGCACATTCTG	-ctgattt---attcatgaagaga---...449...tcttttttcagg	atcaattc
C.Jap	caaacgag	tatg-----tttttagttaaaaatgaa---tgaaaaat-----cgctc-----	CAATCGGCACATTCTGCG	cgagaagcaaagcgtggcgg---...359...caattattcagg	acctattc
C.Rem	tagtcgaa	tt-----tttatgaccaggaatgtgtggttatactatttct---caatca-----	ATCGGCACATTCTGCT	-gattc---ttcgtgaaagatt...336...ttttatttcagg	atcaattt
	*	* * ** * *	***** **	** ***** * * **	

id=160790 gene=D1037.1 name=D1037.1 segment=chrI_3688579_3689518_1 type=IN

C.Ele	gaaaaagg	tatgtgtggtct---...648...--gtatgagtaataatacctaaa-	GCAGAATGTGTGGATT	ctatctacatcatcatca-at...211...ttccttttcagg	accaattc
C.Bre	taaaaagg	tttgttgagaa---...118...---gttcatggctaatttga	CAGAGTGTGCCGATTG	tgacatcatcatcttcatat...365...tcttttttcagg	atcaattc
C.Jap	caaacgag	tatgttttttag---...111...tgttttccctgattctccta--	TGCAGAATGTGCCGATTG	tgctgttccaagtcttcc-ac...253...caattattcagg	acctattc
C.Rem	tagtcgaa	t---ttttatgacc...88...--tgcttcacaattgattttaa	AGCAGAATGTGCCGAT	atggattttcttcttca---...260...ttttatttcagg	atcaattt
	*	* * * * *	**** * * * *	* * * * * ***** * * **	

id=160790 gene=D1037.1 name=D1037.1 segment=chrI_3688579_3689518_1 type=IN VIEW

Figure 162: CS=11.68



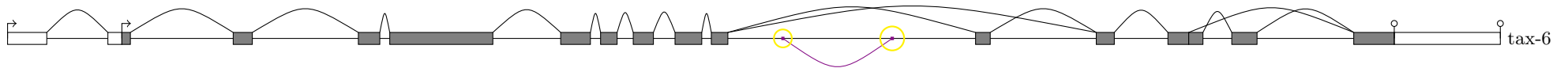
C. Ele	cacctgaa	ggatgaaactc...109...-----gcaatggataacgcgtctgc	CTACGgaGCAGaaGATT	gcaggttcgaatcctgccgt...289...aaaaagtttgca	gaagcttt
C. Bri	cacctgaa	ggtaagtgtcaa...102...cgtggcgcaatggataacgc	TTCTGcTACGgaGCAGaaGATT	gtaggttcgaatcctgccgt...396...aatgaaatttca	gaatcatc
C. Bre	cacctgaa	ggtaattattag...145...-----gcaatggataacgcgtctgc	CTACGgaGCAGaaGATT	gtaggttcgaatcctgccgt...372...tcattttttaca	gagggatt
C. Rem	cacctgaa	ggtaagaaaacg...172...-----gcaatggataacgcgtctgc	CTACGgaGCAGaaGATT	gtaggttcgaatcctgccgt...1263...tttgatttttca	gagggttt
	*****	****	*****	*****	** ** *

id=176489 gene=C28A5.4 name=ceH-43 segment=chrIII_4449205_4449683_-1 type=IN

C. Ele	cacctgaa	ggatgaaactc...135...agcagaagattgcaggttcg	AATCCTGCCGTGG	tcgaagcttgtaa----ctaatt...267...aaaaagtttgca	gaagcttt
C. Bri	cacctgaa	ggtaagtgtcaa...134...agcagaagattgtaggttcg	AATCCTGCCGTGGGAA	actctttttactgtgttt...369...aatgaaatttca	gaatcatc
C. Bre	cacctgaa	ggtaattattag...171...agcagaagattgtaggttcg	AATCCTGCCGTGG	tcgaaactctttt----ttttcc...350...tcattttttaca	gagggatt
C. Rem	cacctgaa	ggtaagaaaacg...198...agcagaagattgtaggttcg	AATCCTGCCGTGG	tcgaaacgctttt----ccaatt...1241...tttgatttttca	gagggttt
	*****	****	*****	*****	** ** *

id=176489 gene=C28A5.4 name=ceH-43 segment=chrIII_4449205_4449683_-1 type=IN VIEW

Figure 163: CS=4.8



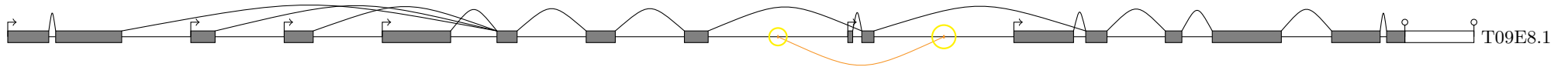
C.Ele	gatgacac	ctttgaaggtat...212...--acgttctc----	cccaagagatgga-----	ATACATGTG--TTT--TTTgCTCGATT	aatttatatatatatttgta...1125...agtcta	caaaa--	attttaag
C.Bri	gacgacac	tttcgaaggtac...246...--aatctctc-tcaattcag	ga-----	GAATACATGTGTTTTCTTCTTGC	-tcgcattcttttaggatctg---...1360...aatcca	ataaaa--	atttaagg
C.Bre	gatgacac	ctttgaaggtaa...214...--athtcccttg	tttcgatt-----	GAAGAGaGAATACATGTGTTTTC	TTTTT-----	catattgct-caat	atgtgaa...1107...aatccaataaataa
C.Jap	gacgacac	ttttgaaggtac...143...-----tgtgc-tcgctcaataggaa-	ACCAAGAGaa	CATACATGTGTTTTT	-TTTgCTCGAT	-atttgatatacatt	tgatga...1433...aagctaataaaact
C.Rem	gatgacac	tttcgaaggtac...199...cctathttccc-----	tcaaaaaga-----	GAATACATGTGTTTTTCTTg	TCGAT	-atatgaatatgat	atgtgaa...1140...-atccaa--aaatct
	** *****	** *****	* *	***** * **	* ** *	** *	** **

id=259854 gene=C02F4.2 name=tax-6 segment=chrIV.10496523_10497947_-1 type=IN

C.Ele	gatgacac	ctttgaaggtat...977...agtacacaaacc----	atgatgtc--	GATTGAGAAAAAACGCATGTAT	-----	T-----	gttgaccttgagcatagcag...360...agtcta	caaaa--	attttaag
C.Bri	gacgacac	tttcgaaggtac...1279...-ccctccattcc--	aaaaacgcc--	GTAAGAAtaGAAAAACGCATGTAT	-----	TT-----	gagccggtattgagtgcaag--...325...aatcca	ataaaa--	atttaagg
C.Bre	gatgacac	ctttgaaggtaa...1002...--aaattccc	gcaaacccca-----	AAAAAAGAAAAACGCATGTAT	-TTcaTTCTTT	tccgaaacaaacag	ttct-----	...318...aatccaataaataa	
C.Jap	gacgacac	ttttgaaggtac...1359...tgtcaaaa	ttttccgaca-----	ATCGAGagAAAAAACGCATGTATG	acCTCTtTGGT	-cggaaggaaagccgatcca-----	...215...aagctaataaaact	tttt---	
C.Rem	gatgacac	tttcgaaggtac...1052...aattcaaatcc--	aaacctaa	ATCGAaAGAGAGAAAAACGCATGTAT	-----	TT-----	ga-ccaaatttgagtgaaga-...288...-atccaa--aaatct	attttaag	
	** *****	** *****	* *	* * *****	*	*	** ** *	**	

id=259854 gene=C02F4.2 name=tax-6 segment=chrIV.10496523_10497947_-1 type=IN VIEW

Figure 164: CS=7



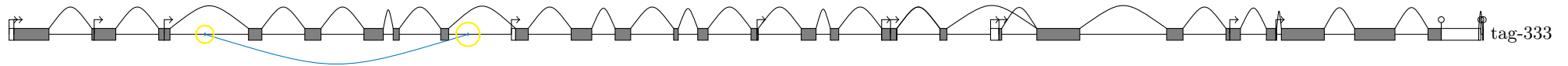
C.Ele	cgagtgag	ttttttatttt...603...-----tcaagcagtaagattgaatt	GAAAGAAGGAAGGA	-----ctcgtccgtccatagtgttc...2386... agcagatatgcg	acgcaaag
C.Bri	tgagtgag	tttttatatttc...1218...cagttcctgtcag--caaactg	TGTTTGTGTTAAGATT	-----catccc--cgcgtcattgaaa---...1340... agcagatatgcg	gaacaaag
C.Bre	cgagtgag	tttttcgttata...1148...--gttcctgtcagaataagcaa	TTTGCGTTTGTGTTAA	-----gactcatagcgcgtcactcg---...1333... agcagacatccg	tccaagag
C.Rem	cgagtgag	ttttctttttt...1921...-----tgaagcacgagtagaagaa	GGAAAaGGAGAAGAAGAAGACA	cGGGCCgtgccaaattggctcccat-----...647... agcagatatgcg	acacaaag
	*****	***** * *	* * *	* * *	***** ** ** * **

id=33523 gene=T09E8.1 name=T09E8.1 segment=chrV_13164455_13167521.1 type=IN

C.Ele	caggttag	tttttttttca...2044...ctattgtccctttcggctct-----	TCTTTTCTTCTTTC	-----ttatgttttgtgtagcgtt-----...2762... attccagcgaag	cgaacctc
C.Bri	caggttag	ttttttttcct...1351...cctctctacctttttccct-----	AATTAGAACAACtaGAACA	actagaacatgaatgcattc-----...2661... attccagcgaag	cgaaccct
C.Bre	caggttag	ttttcattcat...1315...--ttccacatgttcaccattaa	TTAGaaCAACcaGAACatGTAGG	catttgatgtctcacgaatg...2641... attccagcgaag	cgaacctc
C.Rem	caggttag	ttatttttaaa...2216...-----tcaatttcattccgtcaaac	GGTTTtaTGTCtTTTctTCTTCTTCTTCT	-----gcatttcctttattgtctc-----...2244... tttccagcgaag	cgaacctc
	*****	** * **	* * *	* * *	** ***** *****

id=33527 gene=T09E8.1 name=T09E8.1 segment=chrV_13167711_13172595.1 type=IN VIEW

Figure 165: CS=4.32



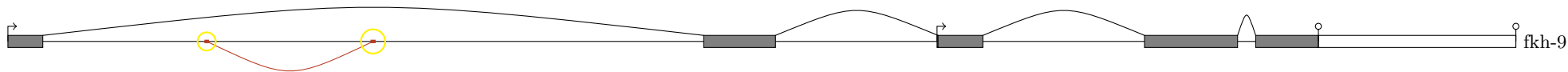
C. Ele	gaggacga	tctttcggtag...360...tctcctgcg---ccatccatgtg	AAATaGAGCGgaGAAG	tgaacgaatggacttgtctc-----...1229...--ttctaataca	ttccaga
C. Bri	gtttagg	tctttcggtag...178...cgttgcgtcggcctatccat	GTGAAATAGAGcGAGAAGAGAA	cg-atggacttgccttcctt...769...--tattaatcact	tttttgt
C. Bre	atggactg	tctttcggtag...245...aacattgcgctccatccat	GTGAAATAGAGcGAGAAG	agaacg-atggacttgccttc-----...521...aatcgttcat---a	ttccaga
C. Rem	gtggacgg	tcttttggaag...820...--agagtaaccgcgccatgtg	AAATaGAGCGAGAAG	cgaacg-atggacttgcctt-----...976...attcctccat---t	ttccaga
	*	***** ** *	*****	*****	*** *

id=268970 gene=C48G7.3 name=tag-333 segment=chrV_14811496_14813163_-1 type=IN

C. Ele	caatgatg	gagcagggtaag...180...-----ccttgcttcttctgtctct	CTTCGTTTCATT	-----agtgag-cattcgttacggca...3347...acaattcacca	aagagccc
C. Bri	cggttatg	gagcagggtag...103...--tcctcccaagctaactcttc	CTCTTCTTTCTCTTTTAcTTTAT	tgcgaggcgcatcattctgg...2064...acaagtctcaca	accacccc
C. Bre	cagtcatg	gagcagggtaag...135...-----tcgaagcttactcttctccg	TTTCTTtCTCTTTTAC	ttttattgcgaggcgctcc-----...2398...acaagtcttct	acaacatt
C. Rem	ctgtgatg	gagcagggtaag...177...ttttattgcgaggcggatca	TTCTTCGTTTCATT	-----agtgatccacagcaccac...3362...acgaatccgaag	aagaagt
	* * **	***** **	*** ** *	*** **	* *

id=268980 gene=C48G7.3 name=tag-333 segment=chrV_14804861_14808463_-1 type=IN VIEW

Figure 167: CS=7.12



```

C.Ele  acatcacg gtaagacacttg...469...--acggggaaagtgtatgtgta-----GATGTtTGTATGTAAAttgtgctgctttgaatgcaa...4441...tcaaattttcag atggattt
C.Bri  gtatccag gtgggctttatt...390...--agtgtgtatgtatgtttgta-----GATGTTTGTATGTAAAttgtgctgctttgaatgcaa...4520...actgtttttcag atggaatt
C.Bre  agcttcag gtaagggatcct...463...caacggggcaagtgtg--tgta-----GATGTtTGTATGTAAAttgtgctgctttgaatgcaa...4447...ttattatttcag atggagtt
C.Jap  ctcttcag gtatagaatgta...366...---ggcatatgattgtttgtattTGCgTcGAGTgtaGATGTtTGTATGTAAAttgtgctgctttgaatgcaa...4531...atgaaatttcag atggattt
      *  **
                * * * * ****
                                *****

```

id=172306 gene=K03C7.2 name=fkh-9 segment=chrX_3820552_3826836_-1 type=IN

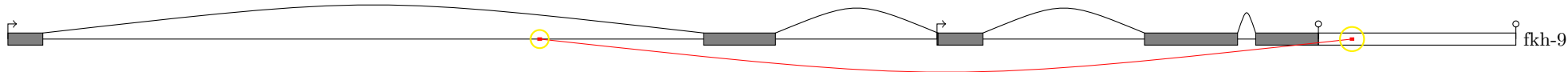
```

C.Ele  acatcacg gtaagacacttg...2015...tgacgcatatccaatgatgtTTGCcaATACAcATATC-----cgttt-gcgtggtcgtttttt-----...2893...tcaaattttcag atggattt
C.Bri  gtatccag gtgggctttatt...1940...tgacgcatatccaatgatgtTTGCcaATACAAATATC-----cgttttgcgtagttcttttt-----...2968...actgtttttcag atggaatt
C.Bre  agcttcag gtaagggatcct...1992...tgacgcatatccaatgatgtTTGCcaATACAcATATC-----cgttt-acgtggaggtttttt-----...2916...ttattatttcag atggagtt
C.Jap  ctcttcag gtatagaatgta...2053...tgacgcatatccaaggtgtTTGCcaATACAcATATCCGTTTtGCGTgctttt-----ttctctcacgcagaa...2844...atgaaatttcag atggattt
      *  **
                ***** ***** *****
                                * **
                                * *

```

id=172306 gene=K03C7.2 name=fkh-9 segment=chrX_3820552_3826836_-1 type=IN VIEW

Figure 168: CS=2.4



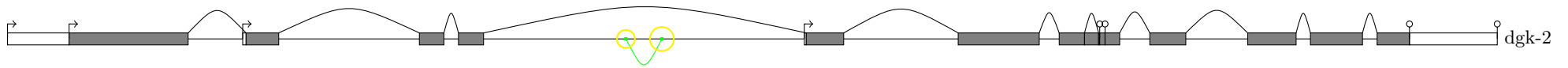
C.Ele	acatcacg	gtaagacacttg...3626...	gtgtgttg	ttttgcattca	GTCAGGCATG	taTGCA	---	cccgcaggcaagcaatttga...1283...	tcaaattttcag	atggattt
C.Bri	gtatccag	gtgggctttatt...3627...	gtctgttg	ttttgcattca	GTCAGGCATG	taTGCA	---	cccgcaggcaagcaatttga...1282...	actgtttttcag	atggaatt
C.Bre	agcttcag	gtaaggatcct...3668...	gtgtgttg	ttttgcattca	GTCAGGCATG	taTGCA	---	cccgcaggcaagcaatttga...1241...	ttattatttcag	atggagtt
C.Jap	ctcttcag	gtatagaatgta...3181...	gcgtggctg	--ccgcgtccatc-	AGGAGCACAACAAT	tctcctccggc--	ttttttccg...	1730...	atgaaatttcag	atggattt
	*	**	*	**	**	*	*	**	*****	*****

id=172306 gene=K03C7.2 name=fkh-9 segment=chrX_3820552_3826836_-1 type=IN

C.Ele	ttcaatag	gcaccgattctg...57...	tgttggttg	-tgctcc---tagtt-	TGCACATGCa	TTGAT	-----	ctcgtgataccaactcatcg...966...	ttgaatacataa	aacacttt-
C.Bri	ttcagtag	gcactgattctt...43...	---ggttg-	tgctccttttagttc	TGCACATGCa	TTGAT	-----	ctcgtgttaccactcaaat...1070...	ttgaatacaaaa	taagtgg-
C.Bre	ttcagtag	gcaccgattcaa...57...	tgttggttg	-tgctc---tagtt-	TGCACATGCa	TTGAT	-----	ctcgtgttactaactcatca...1000...	ttgaatacaaaa	taacttgt-
C.Jap	ttcagtag	gcaccgattcta...38...	tatgcgtcgatacta---	tcatt-	GTTGgTTGTGTCCTC	taattgcacatgc----	attgac-	985...	ctgaatacaaaag	-aatttcta
	***	***	***	***	**	*	*	**	*****	*

id=172315 gene=K03C7.2 name=fkh-9 segment=chrX_3816830_3817931_-1 type=E3 VIEW

Figure 169: CS=3.12



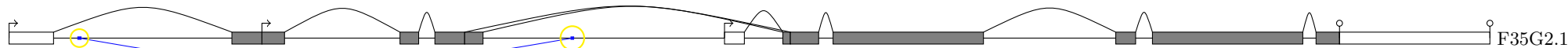
C.Ele	tgctcttg	gtcagtcctttg...	873...	-----	ttcatctttctttcttgaaa-----	TATTAGTtTGATTG	-----	TTTGA	ttctaaaatatttttaactc--...	4009...	tatcgatcttat	ttttagg-
C.Bri	tgttcttg	gtgagttctttc...	1094...	-----	tgaacattcca-----	gagctcttTTC	-TTTC	TTTC	agccctccccaaaaacaat-----	3818...	-aactgtacgct	ttttgaagg
C.Jap	tgctcgtg	gttggtgtttat...	168...	...	cagtttgtgtacattttca-----	-----	GTTT	taGAAActGAAA	-cataaaaaattgcactgtaa...	4310...	taacaatataat	ttctattc-
C.Rem	tgctcttg	gtcagttttcac...	733...	-----	gattgttcgacatgtgagct--	TTC	TTTTCACTT	---	tacctttctcctccgcaagt-----	3439...	caatattacgat	ttttagg-
	** ** *	** ** *			* **		**		* **		* * *	**

id=123802 gene=F46H6.2 name=dgk-2 segment=chrX_4497351.4502317_-1 type=IN

C.Ele	tgctcttg	gtcagtcctttg...	1009...	...	catgtttaaaaa---	taaacgc-----	TCAAAACAAATCGGTTAATA	Aatcattttctttctatc-----	tt...	3874...	tatcgatcttat	ttttagg-
C.Bri	tgttcttg	gtgagttctttc...	2781...	---	gcgtagggaaatttaaatta	GAAAttGAAAcGAAA	-----	cgccaatgtatcagaaatg...	2128...	-aactgtacgct	ttttgaagg	
C.Jap	tgctcgtg	gttggtgtttat...	248...	---	attgcttttgttttccttt-	TTTC	TTTC	atAAAC	-----	cgcttttctagacagtggtt...	4231...	taacaatataat
C.Rem	tgctcttg	gtcagttttcac...	2984...	---	ataaagtttttttgcttcc-	AAAGTGAAAA	GAAA	-----	tagtagacacctatttccaa-----	1188...	caatattacgat	ttttagg-
	** ** *	** ** *			*		* * **				* * *	**

id=123802 gene=F46H6.2 name=dgk-2 segment=chrX_4497351.4502317_-1 type=IN VIEW

Figure 170: CS=3.84



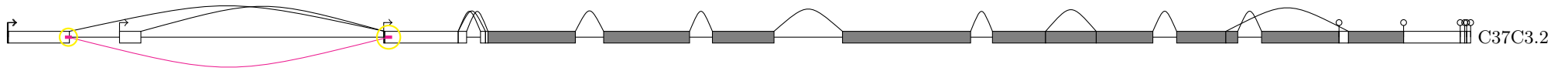
C.Ele	gtaagcac	caaaaatccaaa...39...aactggt---ctcagaatgttta	ACACtGCATGtAGAT	agat-ccatcatgtgatccag----	...2005...tcagaatgcgga	gtccgcac
C.Bri	ttgagcat	cgaaaaacgatg...36...--tggtctcctcagaatgttta	ACACcGCATGtAGAT	atatcccatcatgtgatcca-----	...1695...acagaatgcgga	gtccgcgc
C.Bre	gtgagcaa	cgataaactaac...42...gactggt---ctcagaatgttta	ACACtGCATGtAGAT	atat-ccatcatgtgatcctg----	...1826...tcagaatgcgga	gtccgcac
C.Rem	gagagcac	cgaaaactctct...32...gactggt---ctctgaatgttta	ACACtGCATGtAGAT	atat-----catgtgatccgagtga...	1858...tcagaatgcgga	gtccgcaa
	****	* * *	****	** ***** **	*****	*****

id=295805 gene=F35G2.1 name=F35G2.1 segment=chrIV.12201104.12203226.1 type=I5

C.Ele	gtgagact	atcatcataatg...251...--gcgcacataaacacactggg	ATTCATGTGTGT	----gtgtgtgcacaggttttga-----	...632...cttgaacaagga	gaccgaaa
C.Bri	gtgagcct	ctggtgagaatt...261...ctgcgcacaaatcaatgcg--	ATTCATGTGTGT	-----gctcagattttgatttctg...2651...cctctgaagaa	gatcgaaa	
C.Bre	gcagcttt	ttcattaattag...238...ttgcgcacaaatcacagcg--	ATTCATGTGTGT	gtgtgtgtgtgctcagttt-----	...407...cctctgaagaa	gaccgaaa
C.Rem	gtaagaga	acgaaaattggt...250...ctatgcacagtatcacagcg--	ATTCATGTGTGT	-----gtgctcagattttgatttc--	...442...cctctgaagaa	gaccaaaa
	*	*	*****	** **	** **	** **

id=295813 gene=F35G2.1 name=F35G2.1 segment=chrIV.12204062.12205021.1 type=IN VIEW

Figure 171: CS=4.72



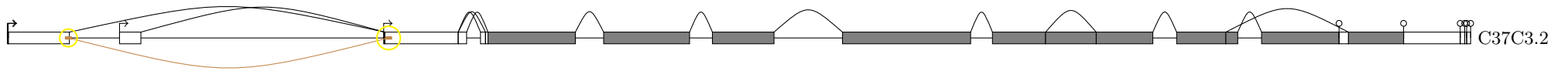
C.Ele	ttttac	ag	aagttcctcttc-...74...cccatttacaattttatgat	CGACaa	CCCTc	AAGAAG	Gtaagcat
C.Bri	ttttgc	ag	aag-catccttct...73...ctcatttgcaattatgat	CGACaa	CCCTc	AAGAAG	gtaagtaa
C.Jap	atthtc	ag	aaa-tctatttct...73...cccatttgcaattatgat	CGACaa	CCCTc	AAGAAG	gtaagcat
C.Rem	ttttac	ag	aag-ccctcttct...72...caaatttgcaattttatgat	CGACaa	CCCTc	AAGAAG	Gtgagcgt
	*** *	** **	***	*	****	*****	*****

id=220254 gene=C37C3.2 name=C37C3.2 segment=chrV_7854974_7855096_1 type=E5

C.Ele	-t	CTTTTTT	AGGGagGTTg
C.Bri	-g	TTTTTTC	AGGGagGTTg
C.Jap	cg-	TTTTTTC	AGGGagGTTg
C.Rem	-t	TTTTTTC	AGGGagGTTg
		*****	*****

id=220258 gene=C37C3.2 name=C37C3.2 segment=chrV_7855730_7855731_1 type=A5 VIEW

Figure 172: CS=1.2



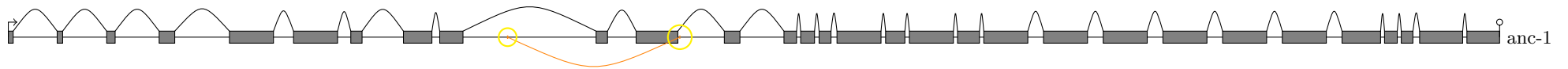
C.Ele	ttttac	ag	aagttcctcttc-...74...cccatttacaattttatgat	CGACaaCCCTcAAGAAG	gtaagcat
C.Bri	ttttgc	ag	aag-catccttct...73...ctcatttgcaattatgat	CGACaaCCCTcAAGAAG	gtaagtaa
C.Jap	atthtc	ag	aaa-tctatttct...73...cccatttgcaattatgat	CGACaaCCCTcAAGAAG	gtaagcat
C.Rem	ttttac	ag	aag-ccctcttct...72...caaatttgcaattttatgat	CGACaaCCCTcAAGAAG	gtgagcgt
	*** *	** **	***	* **** ***** *****	** **

id=220254 gene=C37C3.2 name=C37C3.2 segment=chrV_7854974_7855096_1 type=E5

C.Ele	tTTTTI	AG	GGagGTTG	tccagaaagagaaagaaact...108...tatttatcattt	gtaagtac
C.Bri	tTTTTc	AG	GGagGTTG	tccagaaagagaaagaaact...108...tattaccattt	gtaagtac
C.Jap	tTTTTc	AG	GGagGTTG	tccagaaagagaaagaaact...108...tatctactttt	gtaagtgt
C.Rem	tTTTTc	AG	GGagGTTG	tccagaaagagaaagaaact...108...tatccaccattt	gtaagtac
	*****	**	*****	*** * **	*****

id=220259 gene=C37C3.2 name=C37C3.2 segment=chrV_7855732_7855879_1 type=E5 VIEW

Figure 173:



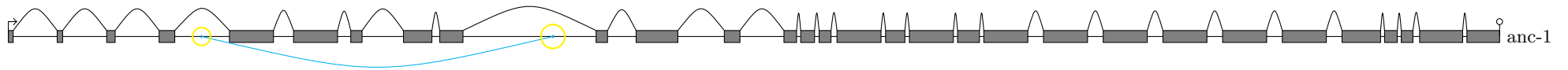
C.Ele	gtgatcag	gtagcatgta...482...aactgtttataggtttttt-----GGTGGcaA---AAAtTGACagttggggggggggggg---...1490...agcattattcag	gtggacac
C.Bri	gggatcag	gtgagtgaagac....75...atgagatcaacgttccttc-----AATGAGAAGAAGAAAGAA--atc--gaattggttcagaggcc...1488...atgaaaattcag	gtggacac
C.Bre	gtgatcag	gtgagtccttc...1268...-----cgttttgagcaagaaaagaaGGAGAAAAAtgAGAAAAAGACcatcatgtatcatatcagag---...50...ttcaaaattcag	gtggatac
C.Jap	gggatcag	gttggtttactt...310...ttcgcgatcccgatcgttgt-----GAGAAaA-----GAAAAGcgccaagaaaaataacga---...1177...gttttttttag	gtggatac
C.Rem	gggatcag	gtgagttacaac...175...aacgtttttataggtttttt-----GGTGGcaA---AAAcTGACagtgaaaaaagagaaaaag---...1343...aaataattcag	attgacac
	* **	** *	* **

id=126810 gene=ZK973.6 name=anc-1 segment=chrI_4327571.4329622.1 type=IN

C.Ele	ttctagagtgag-----tata-----:~::~:-----GTCATTTCCGCT-----catt-----acactctttcattct...2423...t-ttcaattacag	gaggttgg
C.Bri	ttcttgaggtgagg----gtatagtcattttccgctcat::~::~:cataactccaacgatttgtaaaaaatcaaaagaatttcTTCTTCTTCTTCTTTTCGTTttttctcccttcaattgat-----...779...tgttcaatt-tag	gaggttgg
C.Bre	ttcttgaggtgaggagtcagtatagtcattttccgctcat::~::~:tgaaa---caaacttttttttcgaaattcctgggatattTTCTTctTTTCTTTTTTCTCC-----accccaattgattcagtac...651...t-ctcttattcag	gaggttgg
C.Jap	tcttgaggtgag-----tagt-----tcat::~::~:-----CTTTcTCTTTTTTc-----tactgtgtcgacactcgcca-----...4016...t-tgtgttttcag	gaggttgg
C.Rem	ttcttgaggtgagg----tata-----:~::~:-----GTCATTTCCGCT-----catt-----acactctcttcttat...2206...c-tctaatttcag	gaggttgg
	* * **	** * **

id=126814 gene=ZK973.6 name=anc-1 segment=chrI_4330551.4333027.1 type=IN VIEW

Figure 175: CS=5.9



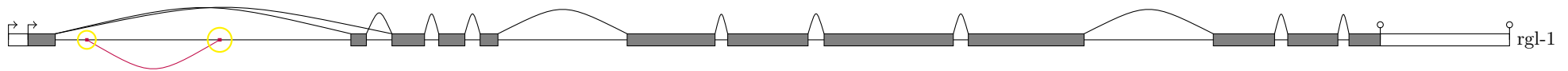
C.Ele	attccag	gtactttttgaa...251...ttgttatgtcta	gattca-----	GAATAGATAGaTTGAAACG	ATATT	tgataaaaagaaggatgaa-----	...279...ctaaaattccag	attgaaac
C.Bri	acttccag	gtaatcttttct...302...-----	atgatacagaaaagaaaagaAGATAGaTTGAAACG	-----	gat--atcgga--agtgagggttt...863...c	ccaaaatttcag	atcgaaac	
C.Bre	acttccag	gtaaccgttttt...313...-----	tgatacagaaaaggaaaaacGATAGaTTGAAACG	-----	gat--attggaagagtgaaggt--...246...t	gtatgattcag	atcgaaac	
C.Rem	acttccag	gtaatctttgac...292...-----	ttaaatgatacagaagtaga---AGATAGaTTGAAACG	-----	gat--attgga--aatgaaggtct...634...a	aattacttcag	atcgaaac	
	* *****	*** **	**** **	*****	*** * ** **		* ***	** *****

id=126800 gene=ZK973.6 name=anc-1 segment=chrI_4324075.4324695.1 type=IN

C.Ele	gtgacag	gtaggcattgta...1510...-----	ctgtttatgtccatacatacAATGTGTTT	CAAAA	CTGTTT	caTTTCa	acacaat-caaggtcacct...449...agcattattcag	gtggacac
C.Bri	gggatcag	gtgagtgaagac...1146...aaa--cgattca	accacttgaa-----	TGTTT	CAAAA	CTGTTT	-----gcatttcgatccaaggtcat---...420...atgaaaattcag	gtggacac
C.Bre	gtgacag	gtgagtccttc...916...cta--caaagaaga	attgggca-----	TGTTT	CAAAA	CTGTTT	-----tgcatttcaac--aa-ctatcaa...406...t	tcaaattcag
C.Rem	gggatcag	gtgagttacaac...1088...acattcgaat--aca	acttgca-----	TGTTT	CAAAA	CTGTTT	-----gcatttcaac--aagacatcca...428...a	ataattcag
	* *****	** *	*	*	*****	** * * * *	*****	* ** **

id=126810 gene=ZK973.6 name=anc-1 segment=chrI_4327571.4329622.1 type=IN VIEW

Figure 176: CS=5.6



C.Ele	gttccggt	atgtacattca....75...-----taggcttgGCCAATAAAATGAAATGGA---AtGGAA---gaacgtatatgc-tttgtgat...4534...tcatcttcagc---a	atatcaca
C.Bre	gttccggt	atgtacatttct...2036...tttcttttcttttcCGcttg-----AATAcgATCCatCTTATcactttctatttgccatttt---...2744...--tcttcagctctc	atatcaca
C.Jap	gttccggt	atgtacatttct....61...-----cgtcCGGCCAATAAAACGAATTGGA---AtGGGAA---cgttctatatgcttttTGTga-...4850...cattcttcagc---c	tcctcctg
C.Rem	gttccggt	atgtacatttct...1455...ctttctctcttttcCGcttg-----AATAcgATCCatCTTATcactttctatttgccatttt---...2444...--tatctgtacatg	ataccaaa
	*****	*****	*
		* *	*** ** ** *
			*** ** ** *
			* *

id=76921 gene=F28B4.2 name=rgl-1 segment=chrX.3215489_3220176_-1 type=IN

C.Ele	gttccggt	atgtacatttca...2671...--tttcatcattatctgtctctgTTCCtcTTCCtcGTTTCtcttcttTgcatttagttca-----...1936...tcatcttcagc---a	atatcaca
C.Bre	gttccggt	atgtacatttct...4612...aagttgaaacttt--tgcttcaATAAGcGGATT---ATT-----agaaatgaagacgcgcaat...171...--tcttcagctctc	atatcaca
C.Jap	gttccggt	atgtacatttct...1166...--atccgtgagataatgccata-----TTTCTCCAATT-----catagcatatcatgtg--aaaa...3747...cattcttcagc---c	tcctcctg
C.Rem	gttccggt	atgtacatttct...3707...aagttgaaacttt--tgcttcaATAAGcGGATT---ATT-----ggaatgaagacgcgcaat...195...--tatctgtacatg	ataccaaa
	*****	*****	*
		* **	*
			*
			**
			*

id=76921 gene=F28B4.2 name=rgl-1 segment=chrX.3215489_3220176_-1 type=IN VIEW

Figure 177: CS=3.84



C.Ele	gcaggttt	gtaccggtattgaccactgtctaagg	TAGTGTAGAGAcAGGGC	agtgccattacttttacc...	131...	aatttcaggtct	aatcaatc
C.Bri	gcaggttt	gtactggtattgaccgctgtctaagg	TAGTGTAGAGAcAGGGC	agtgccccattattatccg...	129...	acttcaggtct	aatcaacc
C.Bre	gcaggttt	gtactggtattgaccactgtctaagg	TAGTGTAGAGAcAGGGC	agtgccccatggattaacaa...	130...	aattgcaggtct	aatcaacc
C.Jap	gcaggttt	gtatcggtattgaccgctgtctaagg	TAGTGTAGAGAcAGGGC	agtgcccagcattcgcgca...	131...	ctttcaggtct	aatcaacc
C.Rem	gcaggttt	gtactggtattgaccactgtctaagg	TAGTGTAGAGAcAGGGC	agtgccccattattgcca...	130...	tcttcaggtct	aatcaacc
*****	***	*****	*****	*		**	*****

id=283667 gene=R13H4.2 name=R13H4.2 segment=chrV_11837526_11837731.1 type=IN

C.Ele	gcaggttt	gtaccggtattg...96...	actactaatccttttctcgcc	GCTCTaTCTCTACACTA	gatattaatgtgagcacagg...	29...	aatttcaggtct	aatcaatc
C.Bri	gcaggttt	gtactggtattg...95...	actactaatccttttctcgcc	GCTCTaTCTCTACACTA	gatattaatgtgagccattt...	28...	acttcaggtct	aatcaacc
C.Bre	gcaggttt	gtactggtattg...94...	accactaatcattttctcgcc	GCTCTaTCTCTACACTA	gatattaatgtgagcctgct...	30...	aattgcaggtct	aatcaacc
C.Jap	gcaggttt	gtatcggtattg...96...	actactaatcatttctcgcc	GCTCTaTCTCTACACTA	gatattaatgtgagccaagc...	29...	ctttcaggtct	aatcaacc
C.Rem	gcaggttt	gtactggtattg...95...	actactaatccttttctcgcc	GCTCTaTCTCTACACTA	gatattaatgtgagcccct...	29...	tcttcaggtct	aatcaacc
*****	***	*****	**	*****	**	*****	**	*****

id=283667 gene=R13H4.2 name=R13H4.2 segment=chrV_11837526_11837731.1 type=IN VIEW

Figure 178:



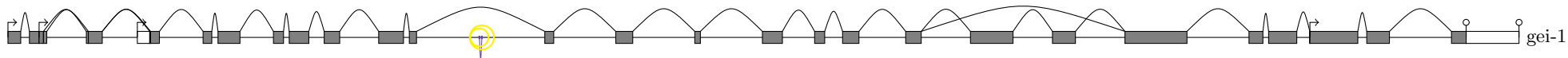
C.Ele	tgcacaaa	gtgggtgatttttagtgaa	----aaa--t:::::gaaaaaaaa-----aaacga-----	TTT--TCAGCTGAAAATT	--acaga-----	ttaaagccaaaattt...4799...	--aacattttcag	ctatggaa		
C.Bre	tgcactag	gtaca-gttttttagcgcaa	----aaaactt:::::gaaaaaaaa-----aaactaattttgaaat-----	ATGAAAAaGCTGAAAAT	-----	agcctgtttttctagccagt---...3570...	--cttattttccag	ctacggaa		
C.Jap	tttacatc	gtaagttgttttctgtttaa	atattaactgc:::::gggaaaaagatttccgggccaagttcatcctgtatttat	GATTTttATTCTGAAAATGttAAAA	-----	atcgatatttcggttgaaa-----...1744...	ttatca--tttcag	ctatggaa		
C.Rem	tttacaaa	gtact-----	:::::	GTATTTGAGgaGAAAGaGCTGAAAATCCG	aaaaa-----	attcaaaaaactgg...4922...	--atattttccag	ttatggca		
	* **	**				* * * * *	*	* *	** ** *	** * * *

id=304852 gene=C35B1.2 name=C35B1.2 segment=chrIV_4090824_4098070_1 type=IN

C.Ele	tgcacaaa	gtgggtgatttt...2692...	---ctgaaattggtttttt---tcg-----	AGTTTT	-----GGCTtGAAAA	atggatttttcagtcacaaaa-----...2216...	--aacattttcag	ctatggaa	
C.Bre	tgcactag	gtacagtttttt...1966...	aaattaataaggattcttaa-----	ATTTTTTCAGTTTT	-----TAT	---ctgaaa-----aaaaatcaattctt...2941...	--cttattttccag	ctacggaa	
C.Jap	tttacatc	gtaagttgtttt...3449...	--tct---ttcgtttttatgaatta---	TTTTTCATTtTT	---CGGGAATtGAATC	cactagtatgcccaaaaat-----...1450...	ttatca--tttcag	ctatggaa	
C.Rem	tttacaaa	gtactgtatttg...1675...	---cttaaatggtgtc--agaatc	TGGATTTCAGCaTTTTTCa	CTCaAATAT	-----tctgcaattgtctgaaaat-----...3220...	--atattttccag	ttatggca	
	* **	**	***	*	*	* * * * *	****	** ** *	** * * *

id=304852 gene=C35B1.2 name=C35B1.2 segment=chrIV_4090824_4098070_1 type=IN VIEW

Figure 179: CS=3.84



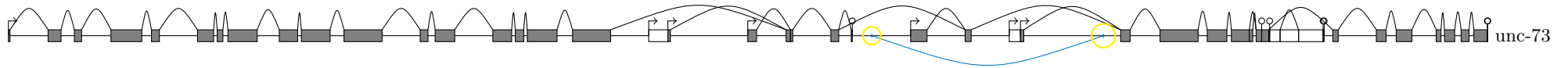
C.Ele	tggctggt	gagtttttttt...1039...-tttgcgacagtttccgatgt	CCTTTGTCACaTATTTGCGCAAAATGcGTGATAGAGCG	gcccctgaacgg---aacagaaa...1191...gaagtttcagaa	cgagatgc
C.Bri	tatctggt	gagtcaacaata...226...tttcatatcac-atccgatcc-	CCTTTGTCACaTATTTGCGCAAAATGcGTGATagAGAGG	----cggagtgttctcattaacac...3073...tgattttcagaa	cgagatgc
C.Bre	tatccggt	tggtttttgttt...331...tttcat-tcaaatccatat-	CCTTTGTCACaTATTTGCGCAAAATGcGTGATagAGAGG	----cggagtgttctcattaacac...1234...aggtttacagaa	agagatgc
C.Rem	tatctggt	gagttgttaciaa...232...tttttgcacatcctatgat-	CCTTTGTCACaTATTTGCGCAAAATGcGTGATagAGAGG	----cggagtgttctcaataaaaa...1247...attatttcagaa	cgtgatgc
	* * **	** ** *	*****	* ** * * * *	** *****

id=24830 gene=F45H7.2 name=gei-1 segment=chrIII.3348160_3350492.1 type=IN

C.Ele	tggctggt	gagtttttttt...1036...tttttg-cgacagtttccga	TGTCCTTTGTCACaTATTTGCGCAAAATGcGTGATAGAGG	cggc-----ccctgaacggaacaga...1193...gaagtttcagaa	cgagatgc
C.Bri	tatctggt	gagtcaacaata...225...tttcatatcacatccgatc---	CCTTTGTCACaTATTTGCGCAAAATGcGTGATAGAG	-aggcggagtgttctcattaa-----...3076...tgattttcagaa	cgagatgc
C.Bre	tatccggt	tggtttttgttt...330...tttcat-tcaaatccatat---	CCTTTGTCACaTATTTGCGCAAAATGcGTGATAGAG	-aggcggagtgttctcattaa-----...1237...aggtttacagaa	agagatgc
C.Rem	tatctggt	gagttgttaciaa...231...tttttt-cg-catcctatgat-	CCTTTGTCACaTATTTGCGCAAAATGcGTGATAGAG	-aggcggagtgttctcaataa-----...1250...attatttcagaa	cgtgatgc
	* * **	** **** **	*****	** * * * * *	** *****

id=24830 gene=F45H7.2 name=gei-1 segment=chrIII.3348160_3350492.1 type=IN VIEW

Figure 180: CS=8



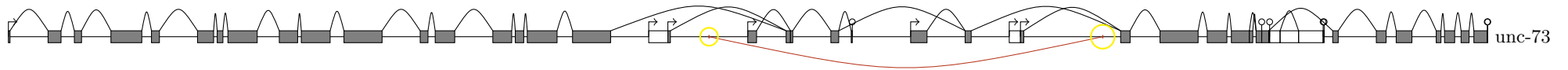
C.Ele	agcgagta	aggagtgcgtgt...206...ggagaggtcctcctcgtcct-	TTTTCTTTCATTTCTTCTT	ga	TTTTTTgTTGTCT	ccatgaattggatggatacg...3871...caatgattctca	gccgcatg
C.Bri	agcgagta	aggagtgcgtgt...29...catgctactacctccatcat-	CTTTTCTTCTTCTTgcTTCTtcTTTTTTA	-----	acgtcacttttattctcatt...4155...ttctgcaattca	gtcatatg	
C.Bre	aacgagta	aggaatgcgtgt...1899...gttcatctcatttaattgaa	ATCTaTTCTcaTCTTTCTTCTTCTTtTTCT	-----	gtctctctttctcttctgttt...1324...gatgaaagtta	gccgcatg	
C.Rem	agcgagta	aggagtgcgtgt...223...cctaagagcaaaaggggcac-	TCTCaTTTTgCTCTTCTT	-----	gccgtctccccttcattttc---...3000...ttttaaattca	gccgaatg	
	* *****	**** *****	* * *	*****		* * *	* * * **

id=53245 gene=F55C7.7 name=unc-73 segment=chrI.4011588.4015764.-1 type=IN

C.Ele	ggagtcca	ggtatgttttat...3252...-aaaaaacgagccctgagtt	GGACAGAAGGAGAAGAAGATgGAAAaGAAGGC	-----	ctcattccaatttgctcctc...189...ttcatattttca	gacgaatc	
C.Bri	ggagtcca	ggtgagttacat...2909...gttgcatcgagtcataaaa-	TAAGAAAAAGAAGGAGAAGAAGT	cgagatgaaaaatgagaa-----	...1982...tcaatatttaca	gacgaatc	
C.Bre	ggaattca	ggtgggttttat...3159...gaggcagttggtgccgaaga-	AGAAaAAGGAGA--AaGAAGAAGAAgaAGAT	-agaaaaagaaggctcattc-----	...161...ttccattttgca	gacgaatc	
C.Rem	agagtcca	ggtgggttattt...1926...-gtagaagatgtagaagttaa-	AAGAgAGAGaAAAAAcGAGG	-cggcgtataaattgaaatga-----	...2045...tttaaatttaca	gacgaatc	
	** ****	*** ** *	* * * * *		*	* ** **	*****

id=53252 gene=F55C7.7 name=unc-73 segment=chrI.4004608.4008147.-1 type=IN VIEW

Figure 181: CS=4.72



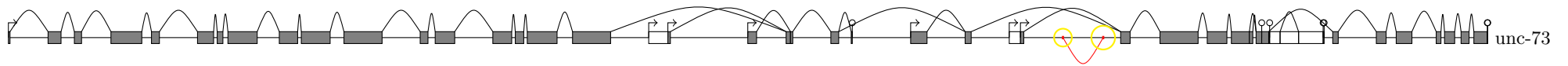
C.Ele	ttgaaaa	gtaagagttat...1504...	--tagtcagcttcttaacgtga---	TTGTTTCTTCTTCgTTTTCTG	CGGCTC	catttttgtccccattgg...1187...	atgattc---ttgca	g-aatgta
C.Bri	atcaacaa	ggtgagtttgtt...1092...	--ttcttgttttt--tttcaaca	TCTTCgcTTTCTTC-TCTTCT		-----cgtccagcttttatgcgaa...1189...	---tctctaactaca	g-aatgcta
C.Bre	ttgggcaa	gtaagtttact...456...	----ttaaattctaaattctctcc	TTGA	taTTTCTTTCaTCTTTTT	-----gatacatgtttgttccgcat---	...1714...agaatt---ctaca	gaaatgcta
C.Rem	ataagcaa	ggtgagtactga...562...	ggttctcaacttctaatacct-----	CATTTTCTTCGTTTT		-----catctctcggattcaggc---	...1534...--gctctcactaca	g-aatgcta
	*	**	*** **	*	*	*	*	**
			*	*	*	*	*	**

id=53236 gene=F55C7.7 name=unc-73 segment=chrI_4017477_4020260_-1 type=IN

C.Ele	ggagtcca	ggtatgttttat...3247...	tttcgaa-----aaaacgaggccct	GAGTTG	gaCAGAAGGaGAAGAAGAAGATGG	-----aaaagaagggtcattcca...	...199...ttcatattttca	gacgaatc
C.Bri	ggagtcca	ggtgagttacat...2910...	ttgcatcgagtcataaaat-----	AAGAAAAAGAAGGAGaGAAGA		--agtcgagatgaaaaatgag-----	...1984...tcaatatttaca	gacgaatc
C.Bre	ggaattca	ggtgggttttat...2005...	---aaa---aataaagagagagag-----	AGAGAGAGAAGGAAGcTCGAG		gagtcgacccatacacatcc-----	...1322...ttccattttgca	gacgaatc
C.Rem	agagtcca	ggtgggttattt...1897...	---gaagcgtcactaaaataaga-----	AAAAGtCGAGtaGAAGATG		-----tagaagttaaaagagaga-----	ga...2075...tttaaatttaca	gacgaatc
	**	****	***	*	*	*	*	*****
			*	*	*	*	*	*****

id=53252 gene=F55C7.7 name=unc-73 segment=chrI_4004608_4008147_-1 type=IN VIEW

Figure 182: CS=5.04



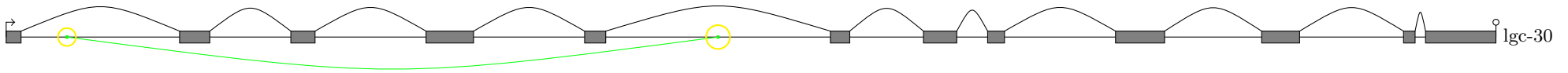
C.Ele	ggagttca	ggtatgttttat...2516...--gtccccgcctcccggttc	AGTTCTTCTt	TTTCTCTTTTTTCTTCTTTT	TCT	-----	tctcgttgctcttcttgtaa...	927...	ttcatatttca	gacgaatc	
C.Bri	ggagttca	ggtgagttacat...856...--tccttattctactttctctc	TTTCtTCTCcc	ACTTCTTCc	TTTTCTTCgTTT	TTTTC	-----	agcgtgaaggaggtggagtt...	4023...	tcaatatttaca	gacgaatc
C.Bre	ggaattca	ggtgggttttat...114...aatcttcttgcaagtttgaa	TAGTTTCt	CTTCTTAa	TTTCgaGTGTTCa	TCTGA	-----	tttcaacataaaaacttc...	3199...	ttccattttgca	gacgaatc
C.Rem	agagttca	ggtgggttattt...1838...--ccaagaggtgaaattggtt	-----	-----	GAAGAAGAAGAAAAAGAAGAAGGG	-----	acccttttgcatcgaagcg--...	2128...	tttaaatttaca	gacgaatc	
	** ****	*** ** *							* ** *	*****	

id=53252 gene=F55C7.7 name=unc-73 segment=chrI_4004608.4008147_-1 type=IN

C.Ele	ggagttca	ggtatgttttat...3256...----aacgaggc-cctgagttggac	-----	-----	AG-AAGGAGAAGAAGAAGAt	GGAAAAGAAGGGCT	cattccaatttgctcctcct	-----	...187...	ttcatatttca	gacgaatc	
C.Bri	ggagttca	ggtgagttacat...2909...----gttgcac	gagtcataaaa	-----	TAAGAAAAAG	AAGgAGAAGAAGAAGTc	GAGAtGAAA	-----	aaatgagaaaaagaagaaa...	1971...	tcaatatttaca	gacgaatc
C.Bre	ggaattca	ggtgggttttat...1356...tggtttgggacttcttact	-----	-----	TTGGAGGGAGTGC	aGAAAaTAAGAAGtt	GAAGTTA	-----	aaaagtgtacgaaaaagaa...	1958...	ttccattttgca	gacgaatc
C.Rem	agagttca	ggtgggttattt...3858...----ttgctcctccttattccgtc	CTCTTg	CTTCTTTTTTCTTCTTTC	-----	-----	tttttcttactatgtccct	-----	...107...	tttaaatttaca	gacgaatc	
	** ****	*** ** *	* * * *							* ** *	*****	

id=53252 gene=F55C7.7 name=unc-73 segment=chrI_4004608.4008147_-1 type=IN VIEW

Figure 183: CS=3.84



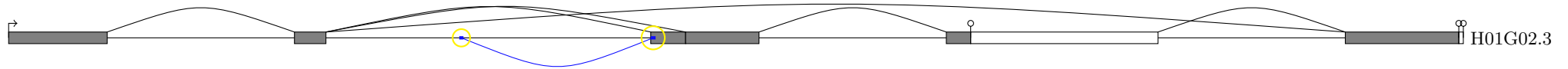
C. Ele	gtcgggaag	gtaagtgggtt	-----tggtctttt	:::::-----	tttttttcaaaattcagaaaaaagtctcc	AAAA	TTCC	AAAA	ccTTTC	caaaagtttttaaaccaat	---.3134..	ataattttcag	gcttc		
C. Bri	atctgaag	gtgagcaa	-----	:::::-----	tttttttcaaaattcagaaaaaagtctcc	TTTTTTTT	TGGA	TTTT	-----	caaattttttttgtgat	...2829..	cctgattccag	gattcatc		
C. Bre	gtcgggaag	g-----t	-----	tcgtttttt	:::::-----	TTCCA	TTTT	TTTCGAAA	aataacaaaaaaatttta	-----	...3920..	gccaattgcag	cattcatc		
C. Rem	gtcggagg	gtatgtggtt	aaaaaaagg	ggcgagcttatt	:::::cgttttgcttttctatgaacc	caaaattagcaaat	ctgg	CAAA	TTTCGAAA	-----	aggtatagattttcgaat	-----	...4675..	gattttttcag	gattcatc
	** ** *	*						** **		*	***		** **	*****	

id=98276 gene=F58H7.3 name=lgc-30 segment=chrIV.925003.928381.1 type=IN

C. Ele	cattttcg	gtaagaattgt	...1257...	-----	aaatggtggctctggtttct	---	GAAA	aaTTTT	TGGA	TTTT	-----	ttttatttgcgaaaaata	---	...3649..	tctactttcag	tgtgggtc
C. Bri	cgttttcg	gtgagttttg	...4148...	-----	tgacattcaaaatttcaaa	AAAAA	ATTCCA	AAAAA	AAAAA	-----	aaaattttggaacc	caaaa	---	...758..	gtcattttcag	tgcggctc
C. Bre	cattttcc	gtgagttattga	...1289...	agcaggaat	ggtggctcagg	-----	TTTC	GAAAAA	ATGGGA	-----	tttttggggg	aaatcgg	...3617..	ctataattcag	tgcggttc	
C. Rem	ctttttcg	gtgagtacactt	...498...	aaactacag	taaccgaaaa	-----	TTTCGAAA	acTTG	ataccgctg	aactttgtca	-----	...4413..	aattttttcag	tgcggttc		
	* *****	** **		*		** **	** **		***		** **	** **	** **	** **	** **	

id=98284 gene=F58H7.3 name=lgc-30 segment=chrIV.930311.936641.1 type=IN VIEW

Figure 184: CS=5.52



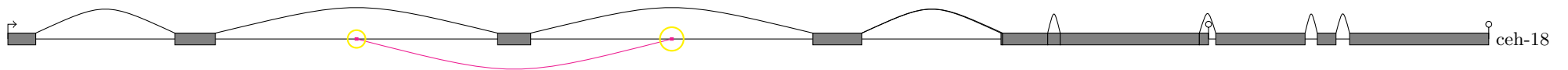
C.Ele	caggacc	acaccaggtcag...316...-----agatggataatttgggcta-----	TGAAACATCAAAA	gaagcaggatgagatacttt-----	...737...tggtttgtgtg	tcttcaga	
C.Bri	tcgaacc	atacaaggtaat...285...-----aaaataga-tatttcttgcta-----	TGAAACATCAAAA	AGGA	-----ggatactttgagacgatgcc...574...ctggtttgtgtg	tcttcaga	
C.Bre	gaggacc	atacaaggtag...103...-----attgattatcgcaccttc--	TCTTCTTC	TTTCTCTTT	-----ttttccttctttgattca-----	...810...tggtttgtgtg	tcttcaga
C.Rem	aagaactc	atacaaggtag...76...actgagaattggattatcac	ATCTTCTTCTTCTTCTTTC	TTCTTTTTTC	-----cttcttttgattcaatgttg...935...ctggtttgtgtg	tcttcaga	
	* * *	* * * * *	* * * *	*	* * * *	* * * * * *	* * * * * *

id=59682 gene=H01G02.3 name=H01G02.3 segment=chrIV.11787776.11788905_-1 type=IN

C.Ele	caggacc	acaccaggtcag...1089...-----tccgatgctgtttatctgg-----	T	TTTGTGTGT	TTCA	-----	-----
C.Bri	tcgaacc	atacaaggtaat...894...-tttgcgataatccgcacatgca-----	TTCT	ggTTTGTGTGT	TTCA	-----	-----
C.Bre	gaggacc	atacaaggtag...246...ccttcttacaattgaatgt--	AGAAGA	tGAAAGAAGAAGA	aaaagaagaagaagatggctatgaaacatcaaaaagga-g:::aatccgatgctttttatctggtttgtgtgtcttcaga	-----	-----
C.Rem	aagaactc	atacaaggtag...227...gaatgtagaagatggaataa	GAAAAAGAAGAAGAAGAAGAAGAT	---	atctctgctatgaaacatcaaaaaggagg:::aatccgca-----	-----	-----
	* * *	* * * * *	* * *	*	*		

id=59682 gene=H01G02.3 name=H01G02.3 segment=chrIV.11787776.11788905_-1 type=IN VIEW

Figure 185: CS=4.8



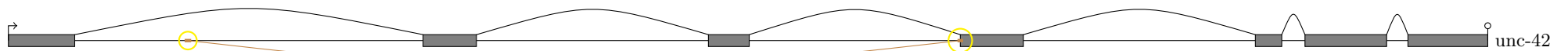
C.Ele	aagaagag	gtgagtctttg...1881...ttcactccatccgtttgcc-----GATGCAACAAttTGTT	gcatacataaaacggggaaa--...1564...actacttttcag	aaagttga
C.Bri	aagcagaa	gtaatccaggca...1471...-aaaacgccgcgaaaaaataGCGAGGGAATTGAAAAGTGAG	--aagctgcaagtgtagtaggt...798...tgaaaacttcag	gaaattgt
C.Bre	aagaagaa	gtaatccagaa...818...atgagtgagacgacccact-----GAATgACTCgaGTTTT	ttcaagcccttccacattg--...1334...ttgatttcag	gaagaggc
C.Jap	cagaagac	gttagtttttt...173...gcgaattgaaagtgtgggat-----AATGCAATAAAGGG	---gtgactaaaaaggaaaagga...1599...ccaatattacag	gaagccga
C.Rem	tagaagaa	gttagtttttt...339...tatgatgtcggacaatagt----AGGAAaAGAAAAAGAAGA	-gctatcttagtgtgcattg--...1603...ttgaatttacag	gaaattga
	** ***	** *		* *** ** *

id=65022 gene=ZC64.3 name=ceH-18 segment=chrX.3852677_3856200_-1 type=IN

C.Ele	tgtatcag	gttgg-----ttttgtacattcttatttg:::::aagtttacc-----AACGctTGTTCATT	ccatttgtcacttcctcgt...1951...--tcgttattgcag	agaagacg
C.Bri	-----	:::::-----TTTAaACTTTTCAAAaTTCTTaTTGC	---acttgaatcttcaagttat...3863...--tcgttatttcag	cgaagacg
C.Bre	-ccagtga	gtttg-----atTTTTgatttttagtagg:::::ttgtttcctatttttccaagattttcagattctcaattGGAAATGAGTATTC	---tgccaacaagtcgtagagag...1445...--tcgttattgcag	agacgacg
C.Jap	tgtttcag	gtacgtactattttgtttgtttatctgttta:::::tcacatatct-----TTTTTTGTTCATT	ctacttactatttttaggtat...1917...gttcggtt--tccag	agaagaca
C.Rem	tacagtaa	gttga-----a-----aactccaattag:::::ttgttt-----TCTTCTTaTTTCTTCCT	---ctcctccttcttttttcta...2091...--tcgttattgcag	agaagacg
				***** * *** ** ***

id=65024 gene=ZC64.3 name=ceH-18 segment=chrX.3848319_3852557_-1 type=IN VIEW

Figure 186: CS=5.4



C.Ele	actgtctc	acaghtaattg...193...tcataaattcattatggaaa	TTTGATTGtt	AGATGCTCT	cacgatcagtggcacacaca...593...tgatctatattt	tcagttcc
C.Bri	actgtctc	acaghtaattc...224...tcataaattcattatggaaa	TTTGATTGtt	AGATGCTCT	cacgatcagtggcacacata...1458...aaagttaacttt	tcagttcc
C.Bre	acggtctc	acaghtaattcc...216...tcataaattcattatggaaa	TTTGATTGtt	AGATGCTCT	cacgatcagtggcacagaca...837...tcgtttaacttt	tcagttcc
C.Rem	acaghtctc	acaghtaagaat...220...tcataaattcattatggaaa	TTTGATTGtt	AGATGCTCT	cacgatcagtggcacacaca...1256...cttcccgaatt	tcagttcc
	** *****	*****		***** * *		** *****

id=174129 gene=F58E6.10 name=unc-42 segment=chrV_9768326_9769194_-1 type=IN

C.Ele	cacgcctg	caaggtgagtat...409...agcctagaacggcccgaatc	AGAGCGTCTCAATt	cCAGGcgg
C.Bri	tacgccag	caaggtgagtct...1256...agccttgagcggcccgaatc	AGAGCGTCTCAATt	cCAGGcgg
C.Bre	tacaccag	ctaggtaggttt...714...agcctagaagggcccgaatc	AGAGCGTCTCAATt	cCAGGcgg
C.Rem	tacgccag	cgaggtgagtct...844...agcctagagcggaccgaatc	AGAGCGTCTCAATt	cCAGGcgg
	** * * *	* * * * * * * *	***** * *	*****

id=174133 gene=F58E6.10 name=unc-42 segment=chrV_9766964_9767418_-1 type=IN VIEW

Figure 187: CS=5.04



```

C.Ele  cagacact ggtaagt-----aaaatg-----gaaatacgcagagggggcgagcgtgcgaa-----CGTGGCTGaGTGGTCTAGTGGtATGAAttctcgcttagggtgcgaga...68...atccatthttca
C.Bri  cagacact ggtgagt-----gtgccccctttcctatacgacaaaactcacgctgtgcaaaTGTGGCTGaGTGGTCTAGTGGtATGAAttctcgcttagggtgcgaga...70...ttaacaatttca
C.Bre  cagacact ggtaagtcatagaaggggtgaggaaaatgagagggagggaagagagagagaacggggggacacacacgcacgttttgtgtacaccacaggggctccttctcagcGTGGCTGaGTGGTCTAGTGGtATGAAttctcgcttagggtgcgaga...168...ttttgatctcca
C.Rem  cagacact ggtaagt-----attg-----gacagagagaaggggagaaaaaagagactctcttttatatgcccgtcaaggctcagtgcaaacgtGGCTGaGTGGTCTAGTGGtATGAAttctcgcttagggtgcgaga...68...gaacggttttca
***** ** * **

```

id=243172 gene=F14B4.1 name=F14B4.1 segment=chrI.9268869_9269036_-1 type=IN

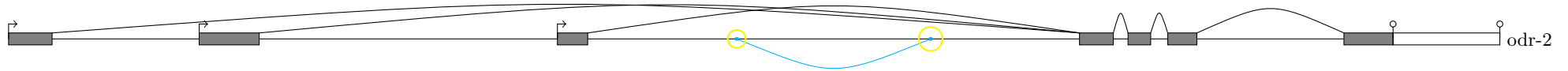
```

C.Ele  aaccgaa ggtaagcgtctt...52...cagattcgaagctctggtgccTTATCCATTAGGCCACgCGGCCACGaaattttcttattgca gagacgtc
C.Bri  aaccagag ggtaggatthtt...107...cagattcgaagctctggtgccTTATCCATTAGGCCACgCGGCCACA cactcccctttgttca gaaacgtc
C.Bre  aaccagag cgtgagthtttg...78...cagattcgaagctctggtgccTTATCCATTAGGCCACgCGGCCAC-aagtttcctctttgca gaagtgtc
C.Rem  aaccgaa cgtgagtatatt...102...cagattcgaagctctggtgccTTATCCATTAGGCCACgCGGCC--ccattttctctttgca gaaacgtc
**** ** * * * * *

```

id=243186 gene=F14B4.1 name=F14B4.1 segment=chrI.9267095_9267219_-1 type=IN VIEW

Figure 189:



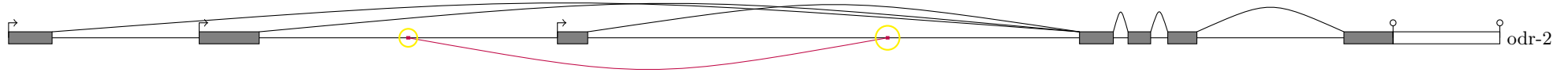
C.Ele	caattcgg	gtaagttttgac...988...-aacaagtttatctgtccatc-----	TCTCT-TTCTcCTCA-----	atattagttttggcgccgc...2215...ttatthtttcag	cactacgt
C.Bri	caattcgg	gtaagactttgt...1787...ctggaatatattgaataag---	TTTCTCTCTTCTCT-TTCTCTTTTTTTTC-----	gtgattctcttctctctcct...1340...agtaattttcag	cgctacgt
C.Bre	taattcgg	gtaagtttctac...546...--ttagttatthttatthttgt	CTCTgTTCTTTTCTGTTcTTTTGTCTTcTATC	ttttcctcttctctcatttc...2488...aagaactttcag	cactacgt
C.Jap	taattcgg	gtaaggtgtcac...614...--aacattthttaaaatcgat-	TTCTgCTTTCCgaTTTT-----	cttattatthttttccgagt...2416...tctcgatttcag	ctcttcga
	*****	*****	*** * *	* * **	***** * ** **

id=294812 gene=T01C4.2 name=odr-2 segment=chrV_7109582.7112862_1 type=IN

C.Ele	caattcgg	gtaagttttgac...1949...aacgacgaaaaagggaag-----	TGAGAG---AAAGAGA-----	aaaaattgcagggatttgag...1255...ttatthtttcag	cactacgt
C.Bri	caattcgg	gtaagactttgt...1975...ttgattgttgatgtgagaa-----	GAAAAAAAAG---AAAGAGAGAAGAGAG-	agggttacaagagaagaaaa...1154...agtaattttcag	cgctacgt
C.Bre	taattcgg	gtaagtttctac...1004...-----gacacaggaacttattcac	GATGAAGAGagTGGAATAAGAGAGAAAGAG	cgctaaaaagggtgttatt...2031...aagaactttcag	cactacgt
C.Jap	taattcgg	gtaaggtgtcac...1683...-----tggatgtcttatttctttcc-	AAAAGG---AAAGAA-----	aattgtgacacgacgatata...1352...tctcgatttcag	ctcttcga
	*****	*****	* * ** * *	*	***** * ** **

id=294812 gene=T01C4.2 name=odr-2 segment=chrV_7109582.7112862_1 type=IN VIEW

Figure 190: CS=4.8



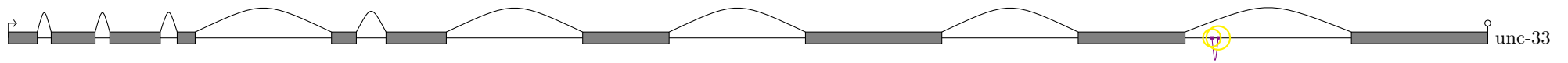
C.Ele	agatgcag	gtatgcactttt...1682...-----ttccactttccaattcacat-----	CAAAGATGAaTTACTG	----	atac-----	tctggctcagttgtgc...533...cgcattttgctc	ttttctaa
C.Bri	tgatgcag	gtgaggtttttg...1401...-----cctattcctcccaccacat-----	CAAAGATGAaTTACTGAT	--	acac-----	tgcttttgagttgtgc...513...cgcattttgctc	ttttccaa
C.Bre	tgatgcag	gtaagtctttgg...755...-----tgctctctcagaagttgtct	CTCTTTTCTTCT	-----		cttcatctcgttttcttcgc-----...1429...cgcactttgctc	ttttccaa
C.Rem	cgatgcag	gtaggcaaggtt...1685...agattgtcttatttc-----	CGGCGccAGTGcaGAAGTGAACAAAAAAGAC			acgcaaagatgctttcaaga-----...244...cgcacttttgct	ctttccaa
	*****	** *				**** **	**** **

id=294810 gene=T01C4.2 name=odr-2 segment=chrV_7107184.7109478.1 type=IN

C.Ele	caattcgg	gtaagttttgac...1801...----tgaagccgccgccgcccgcgccc-----	CAGTAA	TCGTTTTG	ccattgaaggtacacgttgt--...1401...ttatTTTTcag	cactacgt	
C.Bri	caattcgg	gtaagactttgt...1850...---ctcctgacaagagccacccc-----	GTCAgAGTAAc	TCGTTTTG	ctatcgaaggtacacgttgt--...1286...agtaattttcag	cgctacgt	
C.Bre	taattcgg	gtaagtttctac...1023...----cgatgaagagagtggaanaat---	AGAAGAGAAa	-----	GAG-cgcctaaaaagggtgttatt-...2031...agaactttcag	cactacgt	
C.Rem	caattcgg	gtaagcatctct...1767...tctctgcaaaaaagatcaac	GTTTTTGTTCAC	TTTACTtcCGTTGc-	tcgtagtaacttctcaaaa...1312...actgaatttcag	cactacgt	
	*****	***** *		*	*	*	***** * *****

id=294812 gene=T01C4.2 name=odr-2 segment=chrV_7109582.7112862.1 type=IN VIEW

Figure 191: CS=4.8



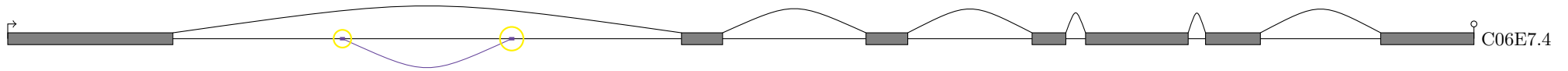
C.Ele	gggataag	gtaagcagagtg-...50...	gcaatggataacgctctgc	CTACGga	GCAGaa	GATTg	caggttcgaatcctgccgt...479...	ctcgttttacag	ttcgccaa
C.Bri	gcgacaag	gtgagt-gtgtgt...46...	gcaatggataacgctctgc	CTACGga	GCAGaa	GATTg	taggttcgaatcctgccgt...95...	atgttttttcag	ttctccaa
C.Bre	gagacaag	gtgagt-ataaaa...38...	gcaatggataacgctctgc	CTACGga	GCAGaa	GATTg	taggttcgaatcctgccgt...69...	tcattttttcag	ttcgccaa
C.Rem	gcgacaag	gtgagtaatata-...40...	gcaatggataacgctctcc	CTACGga	GCAGaa	GATTg	taggttcgaatcctgccgt...40...	aatttttttcag	ttctcaag
	* ** **	** **		*****	*****	*****		**** **	*** * *

id=105340 gene=Y37E11C.1 name=unc-33 segment=chrIV_3524764_3525373_1 type=IN

C.Ele	gggataag	gtaagcagagtg-...76...	agcagaagattgcaggttcg	AATCCTGCCGTGG	tcgaaactttttgtgggtcttcgatcacgattggact:::cgcaaaaaatctaatttttctcgttttacag	ttcgccaa
C.Bri	gcgacaag	gtgagt-gtgtgt...72...	agcagaagattgtaggttcg	AATCCTGCCGTGG	tcgaaactttt-----:-----cag	ttctccaa
C.Bre	gagacaag	gtgagt-ataaaa...64...	agcagaagattgtaggttcg	AATCCTGCCGTGG	tcgaaactttt-----:-----cag	ttcgccaa
C.Rem	gcgacaag	gtgagtaatata-...66...	agcagaagattgtaggttcg	AATCCTGCCGTGG	tcgaaactttt-----:-----cag	ttctcaag
	* ** **	** **		*****	*****	*****

id=105340 gene=Y37E11C.1 name=unc-33 segment=chrIV_3524764_3525373_1 type=IN VIEW

Figure 192: CS=5.6



C.Ele	tgatttac	acaggttagttt...778...	gagtactctttttgtcaac	-----	TTGACC
C.Bri	cgatttac	acaggtcagttc...1200...	ctctaaagtgtgaaat	AGTTTcAGTACCCAAAATCACTTTTTCcGTGTAAAATcACCGTTTTCAAAa	TTGATT
C.Bre	cgatttac	acaggttagttc...460...	cccatcataccctttcttca	-----	TCACT
C.Jap	tgatttgc	acaggttagtcg...1521...	gttcacttttttcaatgac	-----	CT
	**** *	***** **	** *		

C.Ele	TTCT	-----	T	CTCTT	-----	cataggattattatactct...4131...atcgattaattt	ccagaatg
C.Bri	TTCTTCATTCCTAGAAGGTTT	cAGGACTT	AAACTTTT	TGTGTTATACTCAAAACTATGTGAAAAT	gtcatatctttactttttt	...3602...aaattgaaattt	gcaggatg
C.Bre	TTCT	-----	CTCTCTgg	TTATT	-----	acaccattccattcaaatca	tcagaatg
C.Jap	TTCT	-----	CT	TTATTTCG	-----	gcactataataggattatta	ccagaatg
	****		* **			* *	** *** **

id=78788 gene=C06E7.4 name=C06E7.4 segment=chrIV.5853199_5859471_-1 type=IN

C.Ele	tgatttac	acaggttagttt...1284...	gacacgtcaaggttgacat	-----	AAG
C.Bri	cgatttac	acaggtcagttc...1451...	aaaaaatgaaaaatataaa	ATTTCACATAGTTTGTAGTATAACATAAAAAGTTTcAAGTCCTaAAACCTTCTAGGAAT	
C.Bre	cgatttac	acaggttagttc...4080...	acggtttttgtgctgggatg	-----	AATAAg
C.Jap	tgatttgc	acaggttagtcg...2250...	agtggaatgagggggaagaa	-----	TGGAAg
	**** *	***** **	* *		**

C.Ele	AcGAGGAA	-----	GGTCAA	-----	t	tttgaaggtagaaacggg...3624...atcgattaattt	ccagaatg
C.Bri	GGAGAAAATCAA	aTTGAAAATGGT	aGATTTTACACt	GAAAAAGTGATTTTGGGTACT	aAAATT	tcagcacttttagaggt	gcaggatg
C.Bre	AGAGAGAG	-----	GGGAA	agGTGA	-----	agtataccgacgaatgagta	tcagaatg
C.Jap	AAAGAGAA	-----	GG	-----		agatgggacaataaaca	ccagaatg
	*		*				** *** **

id=78788 gene=C06E7.4 name=C06E7.4 segment=chrIV.5853199_5859471_-1 type=IN VIEW

Figure 194: CS=3.84



```

C.Ele  tatcctcc aagaggtacgt-tcgctcgaaaaaagtat----ttttaaaata-TCCTCGCTTATAAGccGGGGgactagcctt-tgctgagttca...94...--aattaacgcatt ttcaggtc
C.Bri  tatcgttc aagaggtgagtac-----gagaatccaagttttaAAAGTGTCTCTCGCTTATAAGccGGGGgactagccggtatgctatgtt--..118...ctcgaactgttttt ctcag---
C.Bre  tattgtcc aagaggtattaatcatga----acgttt----ctgtaaaaa--TCCTTGCTTATAAGccGGGGgactagtctt-tgctatgttc...135...tga--ttctttttt tttaggtt
C.Rem  catcgcc  aagaggtaaatatttcgggtttcacgtcttgagtcctaagaatTCCTCaCTTATAAGccGGGGgactagtctt-tgctaagttc...133...ctc---ttgttcttt tacaggtc
** * * ***** * * *** * **** ***** * * **** ** ** **

```

id=2024 gene=K07C5.4 name=K07C5.4 segment=chrV_10352661.10352845_-1 type=IN

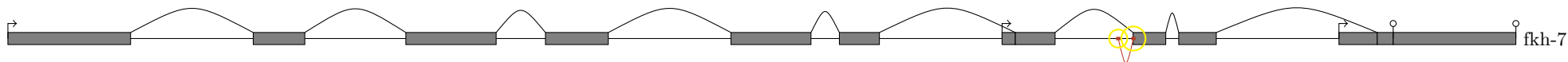
```

C.Ele  aatgagat tcttggtgaagtatt-----atagttcaaatgtagatgttggttaaCCTCTCTTATAAGCgGGGGgactagcattttgtaagttc-----...86...attctttccttt ttcagaaa
C.Bri  aacgagat ccttggtgagtagtttactcagttatatacctaatacactttta----CCTCaCTTATAAGCgGGGGactagctcaatgttatgttc-----...74...ttttattcatat ttgcattg
C.Bre  aacgagat tcttggtgagcaat-----ccacaaaacgtattactttca----CCTCaCTTATAAGCgGGGGactagctcaatgttatgttc-----...94...acaattttattt ttcagaga
C.Rem  aacgagat tcttggtgagtagttgctagaatcattgagcgtattactttca----CCTCaCTTATAAGcGGGGactagctgtttgttatgttca-----...104...taggttcattt ttcagaga
** ***** ***** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

```

id=2032 gene=K07C5.4 name=K07C5.4 segment=chrV_10351693.10351871_-1 type=IN VIEW

Figure 195: CS=3.6



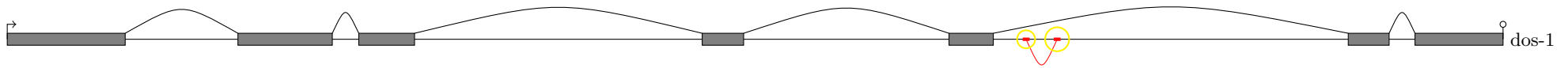
C.Ele	cgatgtaa	gtttttaattttccttttttgc	at---gttta:::aacctt--gatttttctctgattttcaccta---aaaaa	GCGAAc	TTTGAATTGACA	-----tcttaaacctgaaa-----catgcg---...27...caattcagattt	cgcagcaa
C.Bri	tgatgta	gttttcgtccgc--attgtgcat--gttta:::-----	-----TTTAGAGTTCGCTTTTGT	AATTgtag-----tgatagttgttattat---...156...caatttagattt	cgccgcat		
C.Bre	agatgtaa	gttcagaaaaaagaattgatgcatgtggctca:::accttttgttggttgtcgacacattcaacaatccgaaaa	GCGAac	TTTGAATTGACA	-----cctgaaccatttcatgctc---...33...caattcagatgt	cgcaaca	
C.Jap	tgacgtga	gtttcagttttca-accaagcat-----:::-----	-----TTTAGAGTTCGC-TTTGT	-----agaagaaagagatatcaga...158...caattcagattt	cgcaaca		
C.Rem	agacgtaa	gtttctgattgttc-tctatgcat---gttt:::aacctttgaatatggtcgacaa---accta---aaaa	GCGAAc	TTTGAATTGACA	-----ctgacacacctgaaa-----aacat---...37...caattcagattt	cgcagcat	
	** * * *	***	****	** * * * *	** *	***** ** * **	***

id=239719 gene=F26D12.1 name=fkh-7 segment=chrIV_5607984.5608301.1 type=IN

C.Ele	cgatgtaa	gtttttaatttt...271...-----ccagttttgtaattcgact-----	TGTC AATT CAGAtTT	CGC-----	-----agcaa	
C.Bri	tgatgta	gttttcgtccgc...121...tggattggatattagaatag---AATTc	TAAAAAAGCGAACTT	TGAA	ttgacacttttacctgaaaaaaaaacatgctctactctaataaaaagagcaaat	tttgaactttcctt-----gtcaatttagatttcgccgcat
C.Bre	agatgtaa	gttcagaaaaaa...230...-----ttgagcactctctcttgaac	TGTC AATT CAGAtgt	CGC-----	-----aaaca	
C.Jap	tgacgtga	gtttcagtttt...135...-----ccacaacacacacacatac	ACAAAAGCGAACTT	TGAA	ttgac-----aacgcaaacatttttgtc-----ttccgagccgttttctcgaccgcagtc	caattcagatttcgcaaca
C.Rem	agacgtaa	gtttctgattgt...204...agagctcccttctagaacct-----	TGTC AATT CAGAtTT	CGC-----	-----agcat	
	** * * *	***	* * * * *	*	**	

id=239719 gene=F26D12.1 name=fkh-7 segment=chrIV_5607984.5608301.1 type=IN VIEW

Figure 196: CS=7



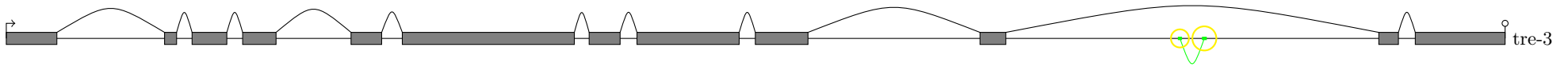
C.Ele	aacatctt	ttccaat	tttttctt	-----	aaacccat	ctct	-----	atcattat	c--a	-----	tcttat	GACTTTGAAAGATTGGG	-aagagaaa	cgaaga	aatc...	677...	aatctg	gtacat	gtcttg	gtt						
C.Bri	--attcac	tttctct	ctctct	-----	ctctct	ctctc	-----	tctcttt	atcttt	ctttt	ccttat	cattcg	ct--g	-----	cccat	GACTTTGAAAGATTGGGG	tgcgct	ctttt	cgcg	aatc...	183...	aatctg	gtacat	gtcttg	gtt	
C.Jap	acatccat	ttcgc	atccttt	ttttt	taactt	ctctac	ctttat	caccgt	ctct	cttct	ctcaaac	cttat	caagtag	tgcccc	gt	GACTTTGAAAGAT	-----	cggc	gtcac	-cgcg	cacca...	121...	aatctg	gtacat	gagttg	gcg
C.Rem	gcaggtat	ttcttat	catttt	at	-----	aac	-----	atcatt	caat	acg	-----	cccat	GACTTTGAAAGATTGGG	-aaaa	gaa	aac	ggac	gt...	153...	aatat	gg	tatat	gtcctg	gtt		
		**	*	*	*	*		*	*	*		*	*****		*		*		*		*	*	*	*	*	

id=35119 gene=ZK507.4 name=dos-1 segment=chrIII.9105691.9106459.1 type=IN

C.Ele	aacatctt	ttccaat	ttttc...	61...	agaaat	cgaag	acgcac	-CCCAATCTTTCAAAGTC	ttttt	ctttt	cttat	cg-a...	627...	aatctg	gtacat	gtcttg	gtt	
C.Bri	attcactt	tctctc	tctc...	88...	gttttt	gttct	tcttct	CCCAATCTTTCAAAGTC	-ttct	ctttt	cttat	cata-	125...	aatctg	gtacat	gtcttg	gtt	
C.Jap	acatccat	ttcgc	atccttt...	88...	----	tcaccg	caccacc	caCATCTTTCAAAGTC	-ttgt	cttat	cactc	gctta-	82...	aatctg	gtacat	gagttg	gcg	
C.Rem	gcaggtat	ttcttat	cattt...	62...	cttctt	cgaaa	acgcac	-CCCAATCTTTCAAAGTC	-ttat	caaat	cg	tattg...	96...	aatat	gg	tatat	gtcctg	gtt
		*	*	*	*	*	*	*****	*	*	*	*	*	*	*	*	*	*

id=35119 gene=ZK507.4 name=dos-1 segment=chrIII.9105691.9106459.1 type=IN VIEW

Figure 197: CS=8



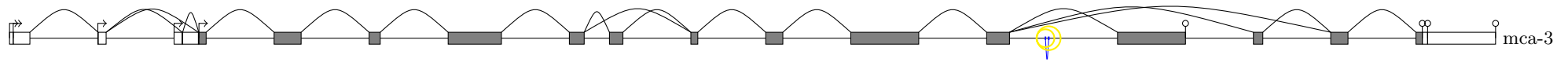
C.Ele	atgtggga	gaaghtaagaaa...1003...---	ttttttt	gctgaacaaagta---	GGTGGTAACAGGTGTACaATAG	--agaataaacatctc	cgttca---	1271...	caattactattt	tcagtaca
C.Bri	atgtggga	gaaghtaagaca...2300...---	-----	acgaaagtgggtg	taacggGTTAAcaGGTGTaCAAT	--agaaaaataacatctc	cgtt---	1173...	aattaattaatt	tcagtaca
C.Bre	atgtggga	aaaghtagata...1172...atc	gtttctttactgaacaa---	AGTGGGtgGTAACAGGTGTACaATAG	aaagaaataacatctc	cg---	1375...	tttactattt	tcagtaca	
C.Rem	atgtggga	gaaghtaatttt...817...a	cgttctttactgaacaa---	AGTGGGtgGTAACAGGTgAACAATAG	---aataacatctc	ggttcata...1224...	aattaattactt	tcagtaca		
	*****	***** *		* **	* ***** *	*****		* ** *	*****	

id=328111 gene=W05E10.4 name=tre-3 segment=chrV.11710124.11712483.-1 type=IN

C.Ele	atgtggga	gaaghtaagaaa...1063...-	catggaatccattatgtca	TTGTGTGTgACTTGTAC	--ctCACT	--ctcgtctctt	aatccacc---	1208...	caattactattt	tcagtaca
C.Bri	atgtggga	gaaghtaagaca...2747...-	caaggaatggcattggttg	-----	ATTGGCACCacTTATC	----gatgatcatgac	tcttct...	727...	aattaattaatt	tcagtaca
C.Bre	atgtggga	aaaghtagata...1240...g	cattg-aatccattatgtca	TTGTGTGTgACTTGTAC	--CTCACT	ctctcgccac---	taatccgcca--	1308...	tttactattt	tcagtaca
C.Rem	atgtggga	gaaghtaatttt...879...-	catagaaatccattatgtca	TTGTGTGTgACTTGTAC	--CTCACT	--ctcgtcac---	taatcgccatg...	1163...	aattaattactt	tcagtaca
	*****	***** *	** * * * *	*	*** ** * *	*	* * * *		* ** *	*****

id=328111 gene=W05E10.4 name=tre-3 segment=chrV.11710124.11712483.-1 type=IN VIEW

Figure 198: CS=2.4



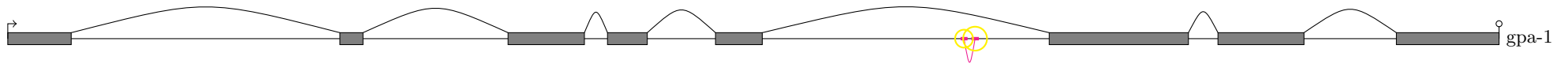
C.Ele	cagactca	ggttagtttcag...219...-----aaaaagaaaaaaagaaaa-----	-----	AAAAAAGAAGAA	tGAAG	-----	cctcttttcttcttctttt...3806...cattaattttca	gttacgag	
C.Bri	caaaactca	ggtcagtccttcg...1075...actttttgga--atthttgaaag-----	-----	CAGT	-GAAAAATGAGCAACATTC	-----	aacca--ccacccttctgtttt...736...ccaaaattttca	gttgagag	
C.Bre	caaacaca	ggttagtcctcca...244...ttcctttgacacatttcttg	TCATGTTTTCTg	TCTGAAA	cGTTTTCA	atCGAAAATGAGCAACACt	CTCT	atttagagcgtcaccagcgag---...1568...aaacattttca	gctacgag
C.Rem	caaaactca	ggttagtgctca...1011...--tttttaaacgatttttggg-----	-----	CAGT	-GAAAAATGAGCAACG	-----	acaatcaattcaccctttg---...705...tgaaaattttca	gttgagcg	
	** ** *	*** **	*		*** ** *		*	***** * * * *	

id=62781 gene=Y67D8C.10 name=mca-3 segment=chrIV_3112513_3116618_-1 type=IN

C.Ele	cagactca	ggttagtttcag...239...aaaaagaagaatgaagcct-----	-----	CTTTTCTTCT	ccTTTT	-----	ctccaaaaaaaaccctgaa...3786...cattaattttca	gttacgag		
C.Bri	caaaactca	ggtcagtccttcg...1643...-----gtttccgctgctcgtctgg--	GAGTg	TGTTGCTCAT	aTTTCGCTG	-----	gaa--atthttcagttgaaact---...165...ccaaaattttca	gttgagag		
C.Bre	caaacaca	ggttagtcctcca...1688...-----tttctcgtcgtcgtctctc	GGAGt	TGTTGCTCAT	TTTTTCG	cTGAAAAT	tTTTTGGG	aAGAAAATATGA	aaactacttctcttggaga---...124...aaacattttca	gctacgag
C.Rem	caaaactca	ggttagtgctca...1578...-----gctgctcgtctcagagtg	TGTTGCTCAT	tTTTCGCTG	-----	-----	aaa--aattttgaaaaaatca---...137...tgaaaattttca	gttgagcg		
	** ** *	*** **	* **	* ** * * * *	*		*	***** * * * *		

id=62781 gene=Y67D8C.10 name=mca-3 segment=chrIV_3112513_3116618_-1 type=IN VIEW

Figure 199: CS=6.24



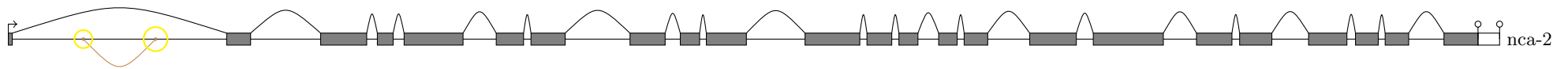
C.Ele	attctgca	aaatagtaagtt...329...agttcttcggaacttgatga	CCGCACGGag	CCGAtg	AA-TTTGGag	CCGTa	GTGG	cttgctcttctgagcgg--ata...106...taagatttaatt	ttcagttt
C.Bri	actctgct	aaatagtaagtt...345...agttcttcggagcttgatga	CCGCACGGag	CCGA	-----	-----	ttcgtttggagccgtagtg...1347...caaatgaacaaa	ttcagttt	
C.Bre	actctgca	aaatagtgagtt...1732...agttcttatgaacttgatga	CCGCACGGTg	CCGA	taAA-TTTGGa	GCCGTa	GTGG	cttgctcttctgagcgg--ata...81...ataaaaaaagtt	ttcagttt
C.Rem	attcggcc	aaatagtgagtt...347...tcctttcgaggacttgatga	CCGCACGGag	CCGAt	GAATTTTGGag	CCGTa	GTGG	ccagctcttctgagcgg--ata...1440...aacattgtatat	ttcagctt
	* ** **	***** **		*	*	*	***** **		***** **

id=181239 gene=T19C4.6 name=gpa-1 segment=chrV.11175386.11175919.-1 type=IN

C.Ele	attctgca	aaatagtaagtt...329...agttcttcggaacttgatga	CCGCACGGag	CCGAtg	AATT-TTGGag	CCGTa	GTGG	cttgctcttctgagcggata...106...taagatttaatt	ttcagttt
C.Bri	actctgct	aaatagtaagtt...365...--ccgcacggagccgattcgtt	-----	-----	TTGGag	CCGTa	GTGG	cttgctcttctgagcggata...1326...caaatgaacaaa	ttcagttt
C.Bre	actctgca	aaatagtgagtt...1732...agttcttatgaacttgatga	CCGCACGGTg	CCGA	taAATT-TTGGa	GCCGTa	GTGG	cttgctcttctgagcggata...81...ataaaaaaagtt	ttcagttt
C.Rem	attcggcc	aaatagtgagtt...347...tcctttcgaggacttgatga	CCGCACGGag	CCGAt	GAATTTTGGag	CCGTa	GTGG	ccagctcttctgagcggata...1440...aacattgtatat	ttcagctt
	* ** **	***** **		*	*	*	***** **		***** **

id=181239 gene=T19C4.6 name=gpa-1 segment=chrV.11175386.11175919.-1 type=IN VIEW

Figure 200: CS=2.4



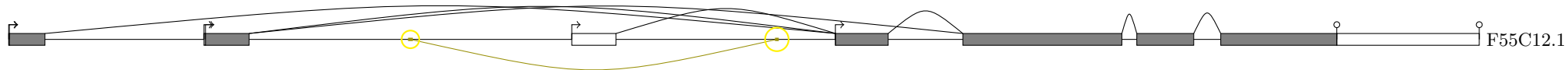
C.Ele	ttgttggg	taagatattact...1803...-----aatctctgattcttattctt	AAGAaGAAGGAGAAGAAAAGTTGTT	-----	tccctctctctctt---ggactt...2630...cttattttcagg	actgtcag		
C.Bri	ttgttggg	tgagtacttgag...1294...attcagaagacatccggcgc-----	TGTTTCTTCTTTGTTTT	-----	tccctctctcattt---ttttt...3485...ttcattttcagg	tctgtcag		
C.Bre	ttgttagg	tgagtatttcta...333...---tta-atttccgtcagttcaac-----	TCTAaCTTTCTGtTTTCgTTTCG	atttatcctttcaccgtgag-----	...4337...aatacttcagg	tctgtcag		
C.Jap	ttgttggg	tgagtatgtgta...1880...---acaatatttccgcctttcca-----	CATCttGTCTGtTCTTTTC	-----	aaaacattttgtg---gtcctt...3025...tggtgttcagg	attgtcag		
C.Rem	ttattggg	tgagtcctcttg...242...acactaaa-----caactaattact-----	GAACaTTTCggTTTCTgTTCTT	-----	tatttcgggttcaaagattc...2929...atcctcttcagg	cctgtcag		
	** ** *	* **		*	*	* **	* ****	*****

id=47023 gene=C27F2.2 name=nca-2 segment=chrIII.4965652.4970173.1 type=IN

C.Ele	ttgttggg	taagatattact...2932...aattgtaattcgaca-----ccttt-----	AACGccGCTTCTTCTTTTCTCTT	tttcatctttttaatgttt-----	...1502...cttattttcagg	actgtcag		
C.Bri	ttgttggg	tgagtacttgag...3107...-----tagaagaagaaggaccgcc	GAAGGCAAAaaGAAGAAGCA	-----	cacacgtgtgttagtgta-----	...1670...ttcattttcagg	tctgtcag	
C.Bre	ttgttagg	tgagtatttcta...2692...tcttcttctgttgtagaaga-----	CGAAAAGAAGTAGAAGGagTAGA	-----	agaagaagtgagtgaccgc...1980...aatacttcagg	tctgtcag		
C.Jap	ttgttggg	tgagtatgtgta...3403...-----gaatggaatggagacgaac-----	GAAAcgAAGAATGATGATG	-----	gtccttaaaaaagatttat-----	...1503...tggtgttcagg	attgtcag	
C.Rem	ttattggg	tgagtcctcttg...1093...aatctctgattctta-----ttctc-----	AAGAAAGAGAAaGAAAGTTT	-----	cttttttctgtacattttt-----	...2081...atcctcttcagg	cctgtcag	
	** ** *	* **	**		*	*	* ****	*****

id=47023 gene=C27F2.2 name=nca-2 segment=chrIII.4965652.4970173.1 type=IN VIEW

Figure 201: CS=4.8



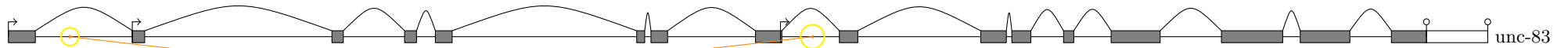
C.Ele	-agtactct	acaatattgaca...597...caagtgaagctttt---ccactc	GAAAa	CCGTA	TCGA	tacactcctttttctttctc...2395...cgaggctgaaga	gattcaga
C.Bri	-agtactta	ttcgtgtccaca...489...---ggaagcttttccaaccactc	GAAAa	CCGTA	TCGA	tacaccactctctcagctga...2679...tataaaggaga	gatttaga
C.Bre	-agtactct	tttcacatcgaa...691...---ggaagcttttccaaccactc	GAAAa	CCGTA	TCGA	tacacctttcttctctctc...2554...aacggaggaga	gaaataga
C.Rem	aagtact-t	actctattgaca...535...---tggaagcttttccaaccact	CGAAA	ACCGTA	TCGA	tacaccatttcttctttcac...1956...aaaggaatgaga	gaatcaga
	*****	*	*****	*****	*****	*	**

id=299117 gene=F55C12.1 name=F55C12.1 segment=chrII_5886474.5889545_1 type=IN

C.Ele	agttttga	gtaatacatat...548...aatgttgagaagatgcta	TTGATACGGTTTC	-cgcttgttccatccattttt---...153...aggactcgcta	tgcgatta	
C.Bri	agtttttag	tttctctgggaa...473...cgagaaaatcagatgcta	TTGATACGGTTTC	-cgcttattcc---catccttctc...126...aggactcgcta	tgcgatta	
C.Bre	agttttga	aactgtaaaatt...682...gagaaaaagaagatgcta	TTGATACGGTTTC	-cgcttgttct-tccatccttc--...145...aggactcgcta	tgcgatta	
C.Rem	ttatttga	gttattgagaac...595...agagattcgagaatgcta	TTGATACGGTT	TTTCG	cttgttccatccatttttcc...155...aggactcgcta	tgcgatta
	***		*****	*****	*****	*****

id=299119 gene=F55C12.1 name=F55C12.1 segment=chrII_5889685.5890462_1 type=IN VIEW

Figure 202: CS=4.32



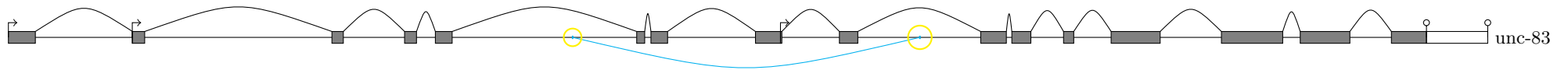
C.Ele	tttgaag	gtgaggcagagc...228...-----	ttgagcattacccttgcg	---	CATCATTGTTGCAAaaAGCTGT	caaaaagcccagagggcca	----...1402...aattaatttc	aggtcatc
C.Bri	ttttcaag	gtgagtacttac...60...--aatgcttgagcattttctcg	-----	CGCTcaGTTGTTGCAAaaAGCTGT	caaaag---	cgagatgccgaatt	...1623...ttttcctttc	aggtcatc
C.Bre	tttgaag	gtgtgtttcaca...101...-----	tttctcgcgctccgaaatca	ATTGTTGCAAaaAGCTGT	caaaaa---	gagagccgatttt	...1638...tatcttcatttc	aggtcatt
C.Rem	tgtttaag	gtgagaatttat...112...aaaagtctcgagcattttct	-----	CGCGCTcaATTGTTGCAAaaAGCTGT	caaaaa---	gagcgattcaatt	...1614...cgtccctatttc	aggtcatc
	* ** ***	*** *	** *	*** *****	*** *	** *	* ** *	*****

id=233348 gene=W01A11.3 name=unc-83 segment=chrV_6465268.6466985.1 type=IN

C.Ele	gatggaag	gtgagtctggca...205...tcaaaagtcgtttcatggta	ATAGCTTTGTGACAGT	caGGTGcg---	ccttgcaagattatc	----...179...tcttcatttcag	agtaactg	
C.Bri	gatggaag	gtaagattcccc...118...tcaaaagtcgtttaatggta	ATAGCTTTGTGACAGT	caGGTg	atgcttcg	cggtaggatt	-----...106...ataattttcag	agtaactg
C.Bre	gatggaag	gtaagaatttcg...216...caaaaagtcattaatggta	ATAGCTTTGTGACAGT	-----	caggtg	cggtgcaagatt	-----...154...aatattttcag	aataactg
C.Rem	gatggaag	gtatttatttc...94...tcaaaagtcgtttaatggta	ATAGCTTTGTGACAGT	caGGTGCG	-----	tggctaaggattatccggtc	...137...ttgtattccag	agtaacag
	***** **	** *	***** ** *****	*** * *****	** ***	**** *	** ***	* **** *

id=233364 gene=W01A11.3 name=unc-83 segment=chrV_6480969.6481438.1 type=IN VIEW

Figure 203: CS=5.2



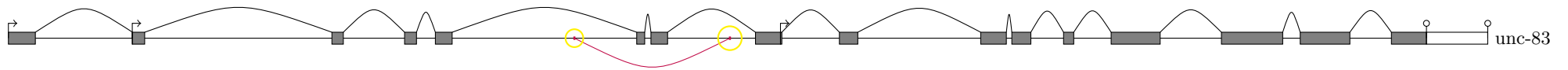
C.Ele	atcaacag	g	ttagtcttttg...1950...-----tctacagacctctcctacca	TCACATCA	CTTTTG	ttacaaattattctct---tggt...2119...ttcgatttacag	gctctaca	
C.Bre	atcaacag	g	ttagctgcat...2124...----tataatctaccgcctcctc-----	TCACATCA	CTTTTG	ttacaaattgtctgt---tttc...1908...acatgattacag	gctctaca	
C.Jap	atcagcag	g	ttagtcttttc...2677...attcatttattcatgctctt-----	TCACATCA	CTTTTG	ttacaaattgtctgt---tttc...1908...acatgattacag	gctctaca	
C.Rem	atcaacag	g	ttagtcttttg...585...gaccaaatattttaaactg-----	TCAT	TCATT	TTCA	---tagagttttcaataaaagtc...3134...cgtaaattacag	gctctcca
	**** **	*** *		***	***		** ***	***** **

id=233357 gene=W01A11.3 name=unc-83 segment=chrV_6472979.6477126.1 type=IN

C.Ele	gatcattt	g	taagtacctc...612...cacgttgaagaacacagcct	TGAAAGTGAT	ga	GTGG	ctcgggggacaagtgatac-----	465...cacaatttgcag	agttcctg
C.Bre	gaccattt	g	taagtacctc...732...tccacgggagaggacagcct	TGAAAGTGAT	ga	GTGG	ctcgtg----cgagtatacgtgat...354...cttttttgcag	agttcctg	
C.Jap	gatcactt	g	taagttgcgaa...1112...caggaaggaaggaacagcct	TGAAA	TGATG	aGTGG	ctcgtg----cgagtatacgtgat...211...ttgctttccag	acttccg	
C.Rem	gaccattt	g	taagtacaag...670...gtcgttccttcggacaacct	TGAAAGTGAT	ga	GTGG	ctcgtg----cgagtatacag-----	361...catttttgcag	acttccg
	** ** *	***** *		**	*****	***** *	*	*****	*** ** *

id=233366 gene=W01A11.3 name=unc-83 segment=chrV_6481589.6482745.1 type=IN VIEW

Figure 204: CS=5.04



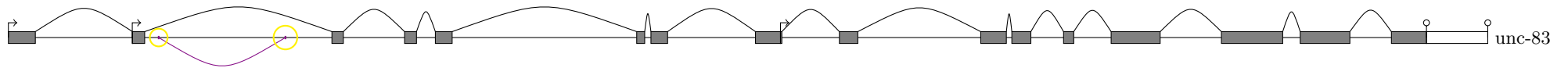
C.Ele	atcaacag	g	ttagtctttg...1962...	tcc---	taccatcacatcatctt---	TTGTta	CAAATTATTCTC	ttGTTT	-----	tcgccttgctcagagcttat...	2098...	ttcgatttacag	gctctaca		
C.Bri	atcaacag	g	ttagttggtt...478...	-----	aactgtac--tcatacttaaaa	ACTTTTACATTGA	cgGATTAAAT	-----	actttcgagacgtatttg-gt...	3530...	atcgttttccag	gctctcca			
C.Bre	atcaacag	g	ttagctgccat...3909...	...	atttgatgttcgcttcgaca-----	ACTTTTAC	C	TTGA	-----	AATT	-----	tgcgcaaatgcgtagttt...	121...	acatgattacag	gctctaca
C.Rem	atcaacag	g	ttggtttttga...3342...	...	ttcgatataccatgtcatca-----	AGTGA	-----	aAGTGAGAGAA	ttacctcgttcttttgaat...	375...	cgtaattacag	gctctcca			
	*****		*** *		**		*	*		*		** ***	***** **		

id=233357 gene=W01A11.3 name=unc-83 segment=chrV_6472979_6477126_1 type=IN

C.Ele	accatcag	g	tgagaattcat...3113...	...	-cattagcggatcctatttt--	GGGTg	GAGAt	ATAGTTG	cACAG	-----	ttgcatgaatctatgacacg-...	175...	taatttttcag	caagcatc	
C.Bri	accatcag	g	tgagtaaaagc...1870...	...	---aca--cgttcctcttccgcaga	GTTTcc	AATTTCAAT	GTGAAAGT	ggatgaattggaagaagaac-----	...	1038...	tttaattttcag	caagcatc		
C.Bre	accatcag	g	tatgcaaattc...1840...	...	gcaaccgccttttggtttc-----	-----	AATTTCAAtt	GTGAAAGT	-----	ggaagagaaatttgaactt--...	1194...	tattttttcag	caagcatc		
C.Rem	accatcag	g	tgaggcagatc...994...	...	-catct--cgttattatt-cgcac-	TTTT	---	TgTCACTCAT	---	T	-----	attatat--atctatactccc...	1581...	tttattttccag	caatcatc
	*****		** *		*	**	*	*		*	*	*	*** **	*** **	

id=233361 gene=W01A11.3 name=unc-83 segment=chrV_6477379_6480753_1 type=IN VIEW

Figure 205: CS=3.84



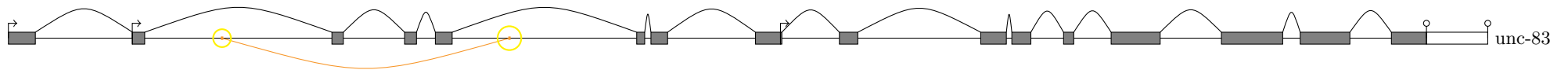
C.Ele	cctcaaaa	gtaagtcttatt....68...	ggcctcaaaagaacctcctg-----	TTTTCTCgaTTT	-----	cttctagtttttc-tttgaac-----	...4632...	attatt-tttcag	acgatatc
C.Bri	cctcaaaa	gtaagtatttta....93...	-----ggctctctttttttttccc---	AGTTTcCTTCTaTTTcTTTC	-----	ttcccagctttt--ggttaactt---	...4104...	-cactttttcag	gcaatatc
C.Bre	cctcaaaa	gtaagtatttgt...220...	gatagtttagaggatcatcaa-	TTATCAAAAAGAGGAGAAACGTTACGT	-----	gtctgtcaattgaacacaca...	..4404...	-tcattatttcag	acgatatc
C.Jap	cctcaaa	gtaaatcgttt...137...	---agt---ggggtcatctattatca	AAAAAGAGgaGAAGAAAAAGA	-----	aactttgctcagtgaattag--	...4767...	-tcaattttgcag	acgatatc
C.Rem	cctcaaaa	gtaagttgtttt...1892...	-----ctcccttccttaatctaaa	TTAATGAGTTT	-----	ggtcggaggtttccagaagt-----	..2377...	aataat-tttcag	acgatatc
	*****	**** *	*			*		* ** **	* ****

id=233351 gene=W01A11.3 name=unc-83 segment=chrV_6467087.6471864.1 type=IN

C.Ele	cctcaaaa	gtaagtcttatt...4352...	-----gaagacagatgataaacat	AAGAGAGAgA	GAAA-----	aagctcattaggtattatgc-----	...348...	attatt-tttcag	acgatatc
C.Bri	cctcaaaa	gtaagtatttta...829...	tt---tgaaattggagatctttt	GGAAAAGAAGAAGa	AAGACT-----	taccatcagttattgttagg-----	...3370...	-cactttttcag	gcaatatc
C.Bre	cctcaaaa	gtaagtatttgt...2987...	-----gacattgtcctagattgtaa	GCGTGT	TGTTTTCTCTgTTTGATAG	-----	aggaaaatttcgaatattcg--	...1639...	-tcattatttcag
C.Jap	cctcaaa	gtaaatcgttt...4529...	-----cogaaagtctttccacgatc	TCTTTTTCTTCTTTT	-----	cctctcatttagaatgat-----	...377...	-tcaattttgcag	acgatatc
C.Rem	cctcaaaa	gtaagttgtttt...3909...	atgagaagaaaagaggagag	-----	AAAGCTCATTAG	-----	gtattatgcattttatgtt...	...360...	aataat-tttcag
	*****	**** *	* *			**		* ** **	* ****

id=233351 gene=W01A11.3 name=unc-83 segment=chrV_6467087.6471864.1 type=IN VIEW

Figure 206: CS=4.8



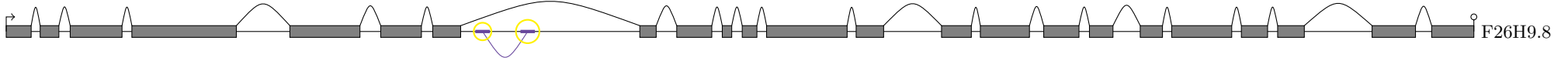
C.Ele	cctcaaaa	gtaagtcttatt...1789...	aagaatacagag--aacagtaac	GGAAGAAGAA	taAGG	ga-----	AAAGA	--cacggagtca---	tctcatgttt...2902...	attatt-tttcag	acgatatc	
C.Bri	cctcaaaa	gtaagtatttta...380...	tttataaacatttgcagaga	-----	GATTCg	TCTCACTTTTTC	gaATT	-tcaataaatcacgaatc---	caa---...3814...	cactttttcag	gcaatatc	
C.Bre	cctcaaaa	gtaagtatttgt...1789...	atatgaacgcgcacacgcgt-	GAAGAAGAAGAAGA	-----	AGAGC	aacagtaaacagaagaag	-----	...2840...	tcattatttcag	acgatatc	
C.Jap	cctcaaa	gtaaatacgttt...136...	gagt--ggggtcatctattatc	-----	AAAAAA	gaGGAGA	-----	AGAA	--aaagaaact---	ttgctcagtga...4772...	tcatttttcag	acgatatc
C.Rem	cctcaaaa	gtaagttgttt...219...	agtttaggggtcatcaatta	-----	TCAA	aAGAG	a-----	AAGAA	-----	acgttacgtgtctgtcaatt...4046...	aataat-tttcag	acgatatc
	*****	**** *			*	**		*		** * **	* *****	

id=233351 gene=W01A11.3 name=unc-83 segment=chrV_6467087_6471864.1 type=IN

C.Ele	atcaacag	gtagtcttttg...418...	caagaattct--cattgtcaat	-----	TCTTTTCT	gcTTCTTCTT	-----	ttccttcacatctttcccttc...	3645...	ttcgatttacag	gctctaca
C.Bri	atcaacag	gtagtgggttt...3370...	tcgatctaca--ccatgtcatc	AAGTGAAGTGAGAGAATT	-----	-----	-----	acctatttgattgtgtgtt--...	642...	atcgttttccag	gctctcca
C.Bre	atcaacag	gtagctgcat...1022...	tcattttgcat-tttgtcgc	-----	GTTCTTTTCTTCTTC	cTTCTT	taCTTC	ttcttctcctgacgtccgt--...	2998...	acatgattacag	gctctaca
C.Jap	atcagcag	gtagtgggttttc...137...	ttggtt--ccgtctttgtccta	-----	TTCTTCTTCTTTTT	-----	-----	ttcttctcccctttccct--...	4773...	ttcactttgcag	gctcttca
C.Rem	atcaacag	gtagtgggttttg...992...	tatttttccttttcttgcc	-----	TTCTTCTTCTTCTT	CTTGA	-----	ccgctcgttggtattcccg--...	2722...	cgtaattacag	gctctcca
	*** **	*** *			*	*		*	*	** **	***** **

id=233357 gene=W01A11.3 name=unc-83 segment=chrV_6472979_6477126.1 type=IN VIEW

Figure 207: CS=4.8



```

C.Ele -----:.....:-----ATATCTCGGTCGGG
C.Bri ---gttaaagtgaaaatcgaggaaaatgagctgaaatt:::aggggttgaaggattactgtaggagttgaaagattactatAAGAGATgTCCGTCGGG
C.Bre -----:.....:-----AAAAAGAAAGGAATCTGCGT-----
C.Rem aaggtagtttttttaaaaacaattaaaatcaacaaaaaac:::agaa-----TAGGTTTTTCAGATCTGA
                                     * * *

C.Ele GGGAA...45...-----CACCCAGAACGGGTGGTTT-----gacgaaaatagatataaaaa-----...3162...aattcttcaga aaggtagt
C.Bri GG---...72...CTAGAAGATTCTAAaGACAA-----tatgaaacc-gttatctcgc-----...3855...aaatttacaga atggaaac
C.Bre ---...47...GACCATTACACCACGAACGC-----catgt-----tttatttagattgg...4847...ctcatttcaga tcggaat
C.Rem AA---...56...-----GCGTCCATGCTGACCTTTACcccccaacgc-gatatttca-----...904...aatatttcaga aaggatcc
                                     *                ***                ** ****                **

```

id=147613 gene=F26H9.8 name=F26H9.8 segment=chrI_9319894_9323229_1 type=IN

```

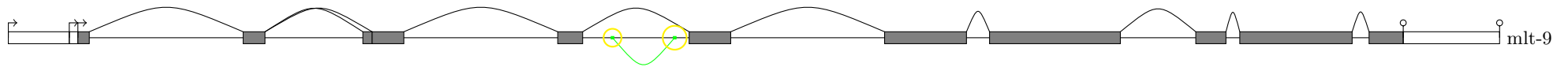
C.Ele tttgaagg ttcgttaaaaag...235...ctttccatcatttcttcagAAATCACCGCGTTTCGTGGTG-----...45...TTCCCCCGAA
C.Bri gttaaagg tgaaaatcgagg...1138...ggaaaatctannnnnnnnn-----TTGTCaTTGGAATCTTCTAG-----...72...---CCCCCGAA
C.Bre tataaagg tgggaatacaag...756...cacagaccgtttttcacgcc-----GCGTTCGTGGGTGAATGGTC-----...49...---
C.Rem aaggtagt ttttttaaaaac...4698...tgaatatcgcgttcgtgt-----GTAAtGGTCAGCATGGATGC...56...---TTTCGGAT
                                     ** *                *                *

C.Ele CGCAGATGT-----acttattttgaaaaaaattgtt-----:.....:tacttgaatagagacaccaggctgattgtctgcatacgtt
C.Bri CGCAGaATTTTTT-----gagagaagaagtacagtaaccaattagcctttttgcagt:::..:gacc-----
C.Bre -GCAGATcTCTTTTTTaTTTTttctaaaattgtttctgaactaattttgttttgaccaa:::..:-----
C.Rem TTGAAAAATCTA-----:.....:-----
                                     * * *

```

id=147613 gene=F26H9.8 name=F26H9.8 segment=chrI_9319894_9323229_1 type=IN VIEW

Figure 208: CS=3.84



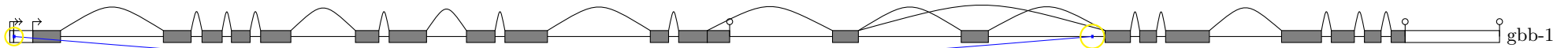
C.Ele	gtggcccg	gttcgatcaggtttgtgtgatatttcttcttttctcgatatt-----	aaaattgaaggacatgaaggtttttcccccattcga----	TTCTgG-TTCTTATCAG-----	aatcgaacgaacaaaaaaa-----	...214...	aaactaatcttg	tccgc
C.Bri	gtggccct	gttcgatcaggtttg-----	tcgttttttttcgaaaaaatgggaaaggaaaaatg-----	agattttctttttctcgggtccgTTCTgGTTTcCTTATCAGTGACA	gtgtttggtgtagtcatca-----	...240...	aaactaatcat	---gt
C.Bre	gtggccct	gttcgatcaggtttgag-gatcatttctctttttttt-----	agaatg-----	ggattttccacaaattggTTCTgGTTTcCTTA-----	tcattagtcatcaaaagcgg...205...	aaactaatcttc	tgcg	
C.Rem	gtggccca	gtccgatcaggtttaag-gat-----	atthtttattca-----	agaaatg-----	ggattttctc--tcaattggTTCTgGTTTcCTTATCAG-----	...226...	aaactaatatt	tgcg
	*****	** *****	*** *	* ** **	* ** **	*	***** ** **	* **

id=13154 gene=F09B12.1 name=mlt-9 segment=chrX_15104504_15104849_-1 type=IN

C.Ele	gtggcccg	gttcgatcaggt...247...	-----gaagatagattgatgtcccaCTGAccTAGGAAACaAGAA	-aaggacac----	tttcaacgaatagctttggaatgcg-----	gagaaactaatcttg	tccgcttc----
C.Bri	gtggccct	gttcgatcaggt...260...	agcgaatgagacagattgaTGTCccACTGAccTAGGAAACaAGAA	aaaggacat----	ttc-----ctaggaatggaatgcggaggcga	aaaaaagaaactaatcat	---gttccagga
C.Bre	gtggccct	gttcgatcaggt...217...	-----agattgatgtcccactgaccTAGGAAACaAGAA	-aaggacat----	tttcaacgaataagaatggaatgcgaag-----	aaaagaaactaatcttc	tgcgcttt----
C.Rem	gtggccca	gtccgatcaggt...229...	-----agagacagattgatgtcccaCTGAccTAGGAAACaAGAA	-aaggacacatattttcaacgaataggaatggaatgcg-----	gagaaactaatattt	tgcgcttc----	
	*****	** *****	*****	*** *****	*** **	*****	***** *

id=13154 gene=F09B12.1 name=mlt-9 segment=chrX_15104504_15104849_-1 type=IN VIEW

Figure 212: CS=4.8



C.Ele	atgtgatt	tcagttTCAGaTATGaaAT	AGaTGTTc
C.Bri	cctccttat	ccagttTCAGaTATGaaAT	AGatgttc
C.Bre	acgagttt	tcagttTCAGaTATGaaAT	AGaTGTTc
C.Rem	atatttct	tcagttTCAGaTATGaaAT	AGaTGTTc
	*	*****	*****

id=151325 gene=Y41G9A.4 name=gbb-1 segment=chrX_2957924_2957942.1 type=E5

C.Ele	tcttaatc	aggtgctgacaa...1849...-gcatgggacaatgaccagta	AATGCTATaCATGCTGA	ttcaattttagctagatTTTTTctaaaatttgctctTTTTTgtttaattatcacia----ttttc	agccgatt
C.Bri	tctaaatc	aggtgctctgaa...1246...----gggacaatgtgcatgattg	CTATaCATGCTGA	ttccatcctagctagaaattactc--a--cacg----ttttcgctgaaataacaaaaattaatttc	agccaata
C.Bre	tcttaatc	aggtgctgacaa...419...cgcatgggataatgagcaat	GAATGCTATaCATGCTGA	tttcgatttagatagaccaatcccaattaca----tgtaattcatctaata----ttctttc	agcctatt
C.Rem	tcttaatc	aggtgctgacaa...506...cgcatgggataatgagcaac	GAATGCTATTCATGCTGA	ttcattcatagctaga---tacc--aattacc----tattcttcaatcaacataaac--atttc	agccaatt
	*** **	***** **	*****	*** **	*** **

id=151353 gene=Y41G9A.4 name=gbb-1 segment=chrX_2964279_2966239.1 type=IN VIEW

Figure 213: CS=4.32



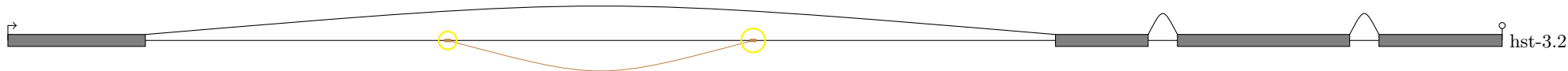
C.Ele	gagtggt	caaggaggtcga...657...-----ccttgttcttctgcttctcc-	TCTTTCTcCTCTTCaTCAT	---catcctcctcatcctcgggc...	4249...taaaaactccca	cgagtgaa
C.Bri	gagtggt	caaagaggttga...482...-----tctgcaacagacaatgcgac	CTCTCTTCCTTCTTgTTCT	aaggctcctcttatcggttg----	4424...tgctctttgaca	ctattttc
C.Bre	gaatggt	gaaggaagtaga...515...gattgctcatgaaccttaa----	TTCTtcTTTCTTTTCTTCCTTG	-----ttcttttttgccttttcctt...	4388...taatgatgacaa	taagacag
C.Rem	gaatggt	gaaggaggttga...513...--tgcttttgaactttat---	cttcCTCTTTCTTTtCTTCTTT	-----attcttctttgtttcctt...	4394...gaaaatgtttcg	ttgttttc
	** *** *	** ** * * *	* ** * * ** * *	** * * *		

id=219640 gene=T12D8.8 name=hip-1 segment=chrIII.13615809.13621347_-1 type=IN

C.Ele	gagtggt	caaggaggtcga...3778...cgggagaagcttttgagaaa---	GTGAGAAGAGAGAGGGA	aaaagaggaaagatgggaa-----	1130...taaaaactccca	cgagtgaa
C.Bri	gagtggt	caaagaggttga...3824...ctgattcgatacatatgcag	AGAAaaAAGAAGAGAAGAG	-caagcgtcttcttctctttt-----	1081...tgctctttgaca	ctattttc
C.Bre	gaatggt	gaaggaagtaga...3988...ggagcaacaagaagaaaaat	CGGGAGAAGAAGAGAtAGAA	-----agttatctctgattcgatac--	917...taatgatgacaa	taagacag
C.Rem	gaatggt	gaaggaggttga...4062...--aacaagaaaagaaaaatcg	AGAGAAGAAGAGAtAGAG	-----ttatctctgattcgatacat...	845...gaaaatgtttcg	ttgttttc
	** *** *	** ** * * *	* ** * * * *	** * * *		

id=219640 gene=T12D8.8 name=hip-1 segment=chrIII.13615809.13621347_-1 type=IN VIEW

Figure 214: CS=3.84



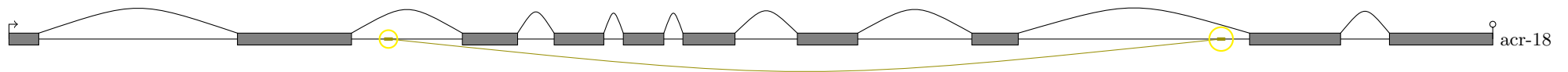
C.Ele	gtacaggt	gagtatactttt...925...-----aaaaaactgtcaatgagaaa-----	TATGGAAATGAAAAC	agagaccttatggcgccata...3199...taatttataggg	aacaaatg
C.Bre	gtacaggt	tagtcaccttc...88...ttgcgccattttccaactac-----	CTTCCgtGTTAgGTAA	-----catgaatagacaaatatac...2942...tgatttataggg	aacaaatg
C.Jap	gtacaggt	cagtgggctaata...60...-tgctctttataccctcttga	TTGGCGCATTtaCCTTCcgTGTtagGTAA	-----cgatgctcacaaatataaa...3275...tgatttataggg	aacaaatg
C.Rem	gtacaggt	tagttgttttc...800...-tgcaaaacatatctcagcg-----	GTGTTGTTTCatCAATTI	ctaattggcgaggacatgta...2358...tgatttataggg	aacaaatg
*****	***	*	* *	* *****	*****

id=169009 gene=F52B10.2 name=hst-3.2 segment=chrX_2919542.2923744_-1 type=IN

C.Ele	gtacaggt	gagtatactttt...3216...-----tgttgacgcttctccgttcc	GTTTTCAATTTTCATA	-----attataatgcgagataagaa...908...taatttataggg	aacaaatg
C.Bre	gtacaggt	tagtcaccttc...1591...-----ttgtacaatcccattgcca	TTACgTAACGGAAG	-----tatggt-----tgtaggaaggttg...1441...tgatttataggg	aacaaatg
C.Jap	gtacaggt	cagtgggctaata...1761...----acacgtcttgtagcat-----	TTACgcAACGGAAGGAAGTgtGTGCGG	ctgttccacatgttttgag-----...1577...tgatttataggg	aacaaatg
C.Rem	gtacaggt	tagttgttttc...2343...cggaggaagagaagaagac-----	AGATTGGAGCtGACAC	-----gaaacgggattataattaga-----...816...tgatttataggg	aacaaatg
*****	***	*		* * *	* *****

id=169009 gene=F52B10.2 name=hst-3.2 segment=chrX_2919542.2923744_-1 type=IN VIEW

Figure 215: CS=3.84



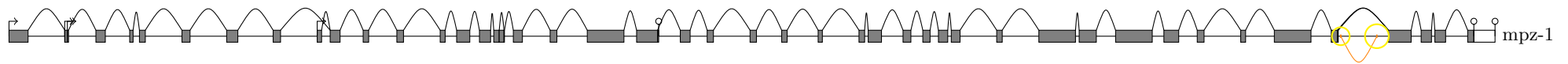
C. Ele	tttgggtg	acaataagtgag...40...ccagcgtcgcacggccaca	ACGTGGaGTACTa	ACCACTATACTA	-----agcaggccgaaagcagcggg...150...tttcaaacctt	ttttcagc
C. Bri	gctgggtg	ataataagtgag...53...ccagcgtcgcacggccaca	ACGTGGaGTACTa	ACCACTATACTA	agTGGGccgagagagacagaggcaga...130...aaataatgaatt	ttttnagn
C. Bre	gttgggtt	ataataagtgag...530...ccagcgtcgcacggccaca	ACGTGGaGTACTa	ACCACTATACTA	-----agcaggccgagagtgcctgc...876...ctgtatctcaa	ttttcagc
C. Jap	actagttt	ataataagtaag...35...ccagcgtcgcacggccaca	ACGTGGaGTACTa	ACCACTATACTA	-----agcaggccgaaagtacagcc...61...tgtgtgcgtatt	tttccagt
C. Rem	gttgggtt	acaataagtgag...50...ccagcgtcgcacggccaca	ACGTGGaGTACTa	ACCACTATACTA	-----agcaggccgaaagtgtatga...105...acttgtgttcat	ttttcagt
	* * *	* * * * * * *	*****		** * * *	** *

id=317943 gene=F28F8.1 name=acr-18 segment=chrV.15553829.15554107_-1 type=IN

C. Ele	gatcaccg	gaaacaggtaat...560...---aaaactt--cttgtgtcctcgg	TAGTATAGTGGTg	AGTATCCGCGT	ctgtcacatgagaccg...34...---caattcttcaaa	atattaga
C. Bri	gacaatcg	gaaacaggtgaa...371...agtctgtccctctcgtgtc	CTCGgTAGTATAGTGGTg	AGTATCCGCGT	ctgtcacatgagaccg...36...---tttattcgttac	ttttcaga
C. Bre	gataatcg	gaaacaggtgaa...934...---ctgtcct--cccgtgtcctcgg	TAGTATAGTGGTg	AGTATCCGCGT	ctgtcacatgagaccg...50...---aaaatcatctaa	ttttatgt
C. Jap	gaccatag	aaaacaggtaaa...113...----agtttaattcgtgtcctcgg	TAGTATAGTGGTg	AGTATCCGCGT	ctgtcacatgagaccg...153...aacgatattcgt---	attccaga
C. Rem	gataatag	gaaacaggtgaa...393...---ttagttt--tccgtgtcctcgg	TAGTATAGTGGTg	AGTATCCGCGT	ctgtcacatgagaccg...32...---caaaaattgt-aa	tttccaga
	** * *	*****	*****		*****	** *

id=317955 gene=F28F8.1 name=acr-18 segment=chrV.15551748.15552429_-1 type=IN VIEW

Figure 216: CS=6.65



C. Ele	gcgacgac	tccaagggttgtagaa	AGGTAAGCAC	GTGT	GAAT	ggcaggccatagcaaccaat---	.617..	aattgatttcta	atcgagga
C. Bri	gcgacgac	tccaagggttgtagaa	AGGTAAGCAC	GTGT	GAAT	ggcaggcc---gcaaccaaaaaa..	.416..	tctttttgctc	atatacaa
C. Bre	gcaacgac	tccaagggttgtagaa	AGGTAAGCAC	GTGT	GAAT	ggcaggcc---gcaaccaattca..	.430..	aatcattcccta	atacaact
C. Rem	gcgacgac	tccaagggttgtagaa	AGGTAAGCAC	GTGT	GAAT	ggcaggcc---gcaaccaat---	.444..	tagtgtttgaa	atacagtt
	** **	*****				*****		*	** *

id=14139 gene=C52A11.4 name=mpz-1 segment=chrII.10740380.10741065_-1 type=IN

C. Ele	gcgacgac	tccaagggttgg...478...	ttcatttgattatcgggccg	ATTCTGCACGTGCTTACCT	caaa-----	aaacaccttacgaacg...	.125..	aattgatttcta	atcgagga
C. Bri	gcgacgac	tccaagggttgg...289...	tttattcatttttgggccg	ATTCTGCACGTGCTTACCT	caattacagtaataccata-g---	...113..	tctttttgctc	atatacaa	
C. Bre	gcaacgac	tccaagggttgg...301...	tttttgatttacttgggccg	ATTCTGCACGTGCTTACCT	caatt---	caataccgta-gacaa...	.115..	aatcattcccta	atacaact
C. Rem	gcgacgac	tccaagggttgg...307...	tttttgatttatttgggccg	ATTCTGCACGTGCTTACCT	caatt---	caataccgta-gacaa...	.123..	tagtgtttgaa	atacagtt
	** **	*****	** *	*	*****	** ** *		*	** *

id=14139 gene=C52A11.4 name=mpz-1 segment=chrII.10740380.10741065_-1 type=IN VIEW

Figure 217: CS=5.6



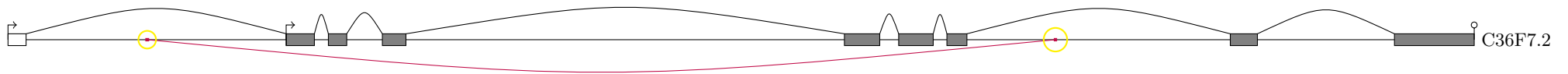
C.Ele	ttgcaagg	taaaaatagtga...276...	tctaaccatcgaag-----acaccg--	ACTTGAT	taCACAg	ATTAACAGA	-----	aaggaaga	----	agccgccgatgc-----	...1611...	cattattacagg	agccaaca
C.Bri	tcgcacgg	tgagcagaatag...293...	----accattcaag--tggagtaccg--	ACTTg	ATTACACAg	ATTAACAGA	-----	aaggaagagagaggagcatc-	-----	-----	...1471...	aatatttcagg	agccaaca
C.Bre	tcgcaggg	taaggtgcattg...243...	-ctatctcctcaa--agagcac	ATCGACT	TGATtaCACAg	ATTAACAGA	-----	gaggaagaagaagagccgcc	-----	-----	...2371...	tataatttcagg	tgccagca
C.Jap	tcgcaagg	tgagtttgcaca...284...	-----tattccagtttagagcaccg--	ACTTGAT	taCACAg	ATTAACAGA	aa	TGAAGa	TAAG	gagatggagaagtactcact	...1650...	ctcttcttcagg	agccaatc
C.Rem	tcgcacgg	tgagcacataga...349...	-ttgtctgattaattgacgaa-----	TCAAGT	--Gctg	ATTATCG	-----	-----	-----	cgctccgatcgagtgaat...2833...	ctgatttcagg	agcgaact	
			* * * * *		* * *	* * * * *						* * * * *	* * *

id=180621 gene=C36F7.2 name=C36F7.2 segment=chrI_9554897_9556870_1 type=IN

C.Ele	ttgcaagg	taaaaatagtga...401...	aagagagactcgtttatttg-----	TCTG	aTTAATTGTGATCAAGT	-----	gctgattatcgcgctcaact...1488...	cattattacagg	agccaaca	
C.Bri	tcgcacgg	tgagcagaatag...389...	atgagtgtaccgtttatttg-----	TCTG	aTTAATTGTGATaAAGT	-----	gctgattatgtgctcct...1377...	aatatttcagg	agccaaca	
C.Bre	tcgcaggg	taaggtgcattg...407...	tctcactggcgttttatttg-----	TCTG	aTTAATTGTGATCAAGT	gcTGAT	tatcgcctcgccttatcgca-----	...2207...	tataatttcagg	tgccagca
C.Jap	tcgcaagg	tgagtttgcaca...410...	-ggcattgcgagttcatcccg	TTTATT	TGTCTG	aTTAATTGTGATCAAGT	-----	gctgattataatttggcgtc...1530...	ctcttcttcagg	agccaatc
C.Rem	tcgcacgg	tgagcacataga...385...	-----gcgtctcgtatcgagtga	-----	TGATGATGCACTTGA	-----	gaagttgtatatgtgaggtg...2799...	ctgatttcagg	agcgaact	
			* * * * *		* * * * *					

id=180621 gene=C36F7.2 name=C36F7.2 segment=chrI_9554897_9556870_1 type=IN VIEW

Figure 218: CS=6



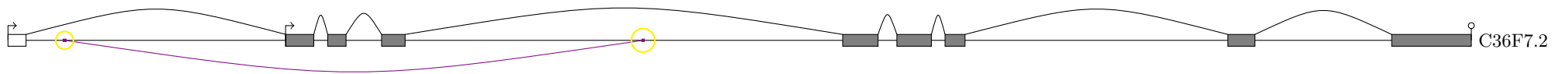
C. Ele	aaacacgg	taagtcgattca-----	...395...	gtgcggaaaagggtcaacac	CTGTctGTAATCGAG	actgtattacctgtccagtc...	2939...	tatgattgacag	gtgaagcc
C. Bri	aaacgttg	taagtcgatcta-----	...400...	tgccgatatggggtcaacac	CTGTctGTAACCGAG	actgtattaactgtccatcg...	2650...	aaggattgacag	gtgaaaag
C. Bre	acacattg	taagtcattca-----	...441...	gatctgtgtggggtcaacac	CTGTctGTAATCGAG	actgtattacctgtcctgtg...	2487...	tatgattgacag	gtgaaacg
C. Jap	aaaatcag	tgagtcgattat-----	...389...	ctcgttgggtggggtcaacac	CTGTctGTAATCGAG	acagtactcttttctgtacc...	2624...	aactgtgacag	gtgactac
C. Rem	----ttg	taagtgggggaggggag...	...400...	ttgttcatacgggtcaacac	CTGTctGTAATCGAG	actgtattacctctctctgt...	3434...	attgacaggag	gaaaaacg
		* **		*****	*****	*** *		* **	* *

id=180608 gene=C36F7.2 name=C36F7.2 segment=chrI_9544806_9548218_1 type=I5

C. Ele	ttgcaagg	taaaaatagtga...	...277...	ctaaccatcgaagacaccga	CTTGATTACACAG	attaacagaaaggaagaagc...	1620...	cattattacagg	agccaaca
C. Bri	tcgcacgg	tgagcagaatag...	...294...	ccattcaagtggagtaccga	CTTGATTACACAG	attaacagaaaggaagagag...	1480...	aatattttcagg	agccaaca
C. Bre	tcgcacgg	taaggtgcattg...	...248...	ttctccaagagcacatcga	CTTGATTACACAG	attaacagagaggaagaaga...	2380...	tataatttcagg	tgccagca
C. Jap	tcgcaagg	tgagtttgtcca...	...285...	attccagtttagacaccga	CTTGATTACACAG	attaacagaaatgaagataa...	1671...	ctcttcttcagg	agccaatc
C. Rem	tcgcacgg	tgagcacataga...	...237...	catatagagagagagcga	CTTGATTACACAG	attaacagaaaggaagagca...	2949...	ctgatttcagg	agcgaact
		* ** ** *		*****	*****	*****		* ****	** *

id=180621 gene=C36F7.2 name=C36F7.2 segment=chrI_9554897_9556870_1 type=IN VIEW

Figure 219: CS=5.4



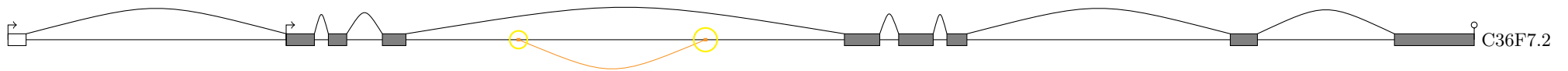
C.Ele	aaacacgg	taagtcgattca-----	....93...	----tgcaaatgagaacacattaa-----	TTTGA--gaAAACA-TATG	ccctca--aagaaggaaattgc-...3240...	tatgattgacag	gtgaagcc
C.Bri	aaacgttg	taagtcgatcta-----	...1846...	----gtcatgaaaagggtacaat--	ACGAAGAAACGaaAAACA-----	cttcattatccagttaagcg-...1201...	aaggattgacag	gtgaaaag
C.Bre	acacattg	taagtcattca-----	...108...	----tgagaacacattcacattaaTTTGA--	gaAAACA-TATG	ccctca--aagaaggaaattgc-...2819...	tatgattgacag	gtgaaacg
C.Jap	aaaatcag	tgagtcgattat-----	....67...	aaaatgcaaatgagaacaca-----	TTAATTTGA--GAAACA-TATGC	cctca--aagaaggaaattgct...2940...	aactgttgacag	gtgactac
C.Rem	----ttg	taagtggggaggaggag...2412...	cgatgtcaacaaaaggcgtg-----	-----TGAACACA	gTGTCT	ctacacctgctaagctatct-...1423...	attgacaggagg	gaaaaacg
		* * **		*	** ** *	* ** * *	* **	* *

id=180608 gene=C36F7.2 name=C36F7.2 segment=chrI_9544806_9548218.1 type=I5

C.Ele	tagtaagg	taccgtaattta...824...	-----gccgtttttct-----	ttcgtcaga-----	CATGTGTTTCGAG-----	caacattcaattttatatga-----	...4087...	ttgattttcaga	gaagtctt
C.Bri	tagtaagg	tgaggagaatca...729...	-----tcctagaatgctgcccaaa	TGTIgcCGTTTTTC	ttTCGT-----	cggacatat--gttttcgagca-----	...4176...	gcagatttcaga	gaagcctc
C.Bre	cagcaagg	tgtgcagatttg...849...	-----ccgatttttct-----	gtgtcttaa-----	CATGTGTTTCGAG-----	caattttatatgagccgttt...4062...	aaaattttcaga	gaagcctt	
C.Jap	cagcaagg	tgagcagaaaag...1242...	atttcgacctttcact-----	gtt-----	GCATATGTaTCTTGatAATTAA	ctaaaacat--aattacaatgg-----	...3661...	ttctattttaga	gaagtctt
C.Rem	tagtaagg	taatagtgggga...1839...	-----gccgtttttct-----	cctctcagc--	AGACATGTGttTTCG-----	agcaaaaacattctggtttt-----	...3071...	tcaatttcaga	gaagcctc
		** **** *	**		* * * * *	**		** **	**** **

id=180615 gene=C36F7.2 name=C36F7.2 segment=chrI_9548656_9554449.1 type=IN VIEW

Figure 220: CS=3.9



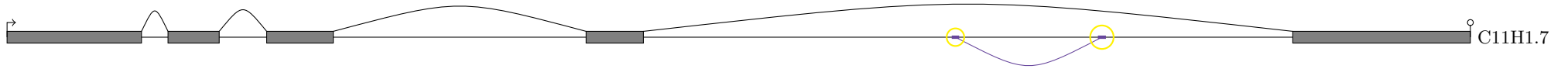
C.Ele	tagtaagg	taccgtaatta...364...	--catttgctaggcggaataa-----	TCACacTTTTCGTGT	-----	cattttctgtgttagccact...4546...	tgattttcaga	gaagtctt	
C.Bri	tagtaagg	tgaggagaatca...370...	-----	tgggtgctgggaggtgtaca	CGAGATTAATGATAAtGGCGAA	tgagacaggagtcaatggag----	...4533...	gcagatttcaga	gaagcctc
C.Bre	cagcaagg	tgtgcagattg...552...	---agccccggggccaagcacc	TCGTaAATCTTGT	-----	aatagctaggtcgggatagg-----	...4359...	aaaatttcaga	gaagcctt
C.Jap	cagcaagg	tgagcagaaaag...315...	ctcttttcggtgtgcgagc-----	GAAAGAGAAaGAGC	-----	cacagtgagtacacgctggt...4596...	ttctattttaga	gaagtctt	
C.Rem	tagtaagg	taatagtgggga...733...	cgacaccaacaaaaaccagc-----	CGAGAACA	-----	TGTGTCT--agcagaaagagatgtgatag-----	...4177...	tcaatttcaga	gaagcctc
	** ****	*	*	*	*	** ***	**** **		

id=180615 gene=C36F7.2 name=C36F7.2 segment=chrI_9548656.9554449.1 type=IN

C.Ele	tagtaagg	taccgtaatta...1046...	---tctccctgacggcgtgtgaa--	ACACaaGAAGAGTGA	-----	gttgaataaacaaggtatac-----	...3864...	tgattttcaga	gaagtctt
C.Bri	tagtaagg	tgaggagaatca...1867...	---cccggtttacgacatcatgc---	TTTGCTTTTATCATTAACTTG	-----	atttttctcaaaa---ttcgatt-----	...3036...	gcagatttcaga	gaagcctc
C.Bre	cagcaagg	tgtgcagattg...3277...	gtatcgtgttttgaggtgtc-----	ACAACAGATTtagATGA	-----	tttctctcatcgaaaaag-----	...1632...	aaaatttcaga	gaagcctt
C.Jap	cagcaagg	tgagcagaaaag...861...	---agctagatgagcaaaaatat	GCTTaaTTCTCTTC	-----	ttggtcctctcctgacggcg...4049...	ttctattttaga	gaagtctt	
C.Rem	tagtaagg	taatagtgggga...1839...	---gccgttttctcctctcagc---	AGACATGTGTTTTCG	-----	a-----gcaaaaacattctggtttt-----	...3071...	tcaatttcaga	gaagcctc
	** ****	*	*	*	*	** ***	**** **		

id=180615 gene=C36F7.2 name=C36F7.2 segment=chrI_9548656.9554449.1 type=IN VIEW

Figure 221: CS=3



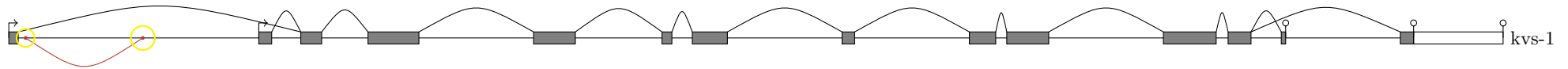
C.Ele	taatatt---t	atgcacttataa...665...cctctcacttcaccttactc	GCTAaTCGCAACA	-tttcaattgtggaggggtg...516...caggttgaactc	ggcatgcc
C.Bri	gaaaggt---t	aaacaataataa...1494...cctctcacttcacctcactc	GCTAaTCGCAACA	Attttccaaaatggaacatat...553...caggttgaactc	ggcatgcc
C.Bre	aaaaatt---t	ggaaatttgata...1005...ttctctcacttcacctcactc	GGCTAaTCGCAACA	Attttccaaaatggaacatat...487...caggttgaactc	ggcatgcc
C.Rem	---aggtcagt	attcaatttcaa...1257...cctctcacttcaccttactc	GCTAaTCGCAACA	Attttccaaaatggaacatat...759...caggtcagagctc	ggaatgcc
	* *	* * *	***** **	***** * **** *	***** ** ** **

id=15905 gene=C11H1.7 name=C11H1.7 segment=chrX_14328580_14329837_1 type=IN

C.Ele	taatatt---t	atgcacttataa...902...gctaaaatgtga-atgtctat	TGTTGCGA	AaaTGGC	cttttttcgccgtactgcac...278...caggttgaactc	ggcatgcc
C.Bri	gaaaggt---t	aaacaataataa...1750...-ctaaaatgcaatgtctccat	TGTTGCGA	AaaTGGC	-ctttttcgcgtgtatgcaca...296...caggttgaactc	ggcatgcc
C.Bre	aaaaatt---t	ggaaatttgata...1218...cgctaaaatgt--tgtgtttat	TGTTGCGA	AaaTGGCC	cttttttcgcgtgtcatgcaca...273...caggttgaactc	ggcatgcc
C.Rem	---aggtcagt	attcaatttcaa...1500...-ctaaaatgaaatgtctctat	TGTTGCGA	AaaTGGC	cttttttcgcgtgtcatgcac...515...caggtcagagctc	ggaatgcc
	* *	* * *	*****	* * *****	***** ** *****	***** ** ** **

id=15905 gene=C11H1.7 name=C11H1.7 segment=chrX_14328580_14329837_1 type=IN VIEW

Figure 222: CS=5.6



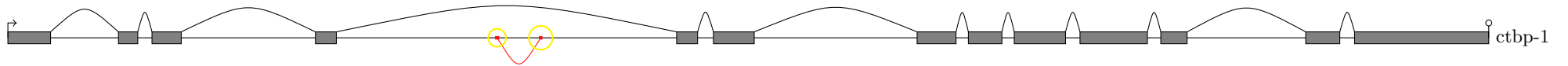
C.Ele	cgatttaa	ataaagggt	taagtg	-----	:::::	-----	-----	TTGAGTTT	TGTTTTTC	-----	tttattt	--	aatggagattga	...	4926	...	tttccgagctct	catattca				
C.Bri	ggacttga	ataaagggt	gagtagaat	-----	:::::	gatgggggtt	caactcgtcaatt	aaacctcgat	ccccact	GAAAAGGCCAAAc	AAAGC	-----	aaatgatttc	gtttcaaac	-----	...	3444	...	tcaccaagttct	ttttgcgt		
C.Bre	ggatttga	ataaagggt	gagcatggt	-----	:::::	-----	-----	-----	-----	-----	TCTTTTTCa	TTCT	cccttacagt	cagacctcac	...	4501	...	ttgcgccgttt	tataacat			
C.Rem	ggatttga	ataaagggt	gagtc	tggtttg	gacgattgata	:::::	gatgggggt	-----	-----	AAATGGGGAA	--	AAAGc	AAGTc	TTTG	-----	cattcgaagaag	aaaaga	...	3954	...	ttcttctctct	tttcctgc
	** * * *	*****	**										*	*			*	*	*	*	*	

id=232850 gene=C53C9.3 name=kvs-1 segment=chrX_7696654_7706994_-1 type=IN

C.Ele	cgatttaa	ataaagggt	aag...	741	...	ctgctttgtgagcatttac	-----	CAAAAACAAA	ACTTAA	-----	aatcagagact	aaagatac	---	...	4168	...	tttccgagctct	catattca	
C.Bri	ggacttga	ataaagggt	gag...	3662	...	acaagg-cg	cgagcgtttatag	-----	-----	GTTTTTTC	cCTTTT	ccgttg	gaaaagg	gcttctc	...	1247	...	tcaccaagttct	ttttgcgt
C.Bre	ggatttga	ataaagggt	gag...	919	...	agcaagtctttg	cattccaa	GGAAGAAA	AAGGA	-----	tgctgtgat	ggcgggag	gag	---	...	3994	...	ttgcgccgttt	tataacat
C.Rem	ggatttga	ataaagggt	gag...	3819	...	gggagatttc	gatgctctgt	-----	-----	CAGAACTTTT	TCTCC	aATT	cttttttag	gctttcttc	...	1085	...	ttcttctctct	tttcctgc
	** * * *	*****	**									*			*		*	*	*

id=232850 gene=C53C9.3 name=kvs-1 segment=chrX_7696654_7706994_-1 type=IN VIEW

Figure 224: CS=2.4



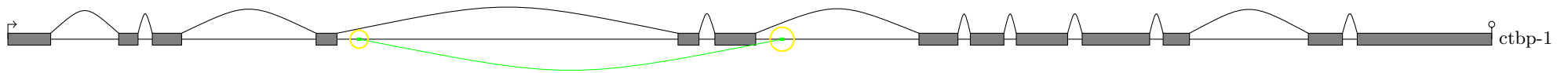
C. Ele	ttgtaag---	tactttttcaca---	...2009...	---ttgagctgccttcttttct---	CCATTTTt	cCTTCTT	---cTTCT	-----	ttccttcttcctaaatgacg-----	...2636...	tttttagatcca	gcacaaag				
C. Bri	ttggttag---	tttaattccag---	...2017...	gccgttga---	atcttccatcca	TTTTTCTT	TTCTTTCTTTTCTT	ccTTTTc	---CTTC	-----	atcttaaataatgacgtgtcgcc...	2873...	ttttcagatcca	gctcaaag		
C. Bre	tcggttag---	tttcttttcatt---	...392...	gatcttca---	ttaccttcagtc---	TTGTTACTTTT	TTCTCTT	TTCTTGTTTGTTA	gGTGGT	cacg	ttcttctgtttc	caaaa	-----	...3965...	gtttcagaccct	tctcaaag
C. Jap	ttggtgagcca	tttattttc-----	...795...	tatgtcaa---	tattttaaacga---	CTTTc	CCTTc	---CTTCT	-----	ttc	ttttat	ttttcttctt	-----	...3914...	tttttagatccc	gctcaaag
C. Rem	tcggttag---	t---tttccatttgc...	1206...	ga-gttgt-	ctttctacc-tcac-----	TTTTCTCTTCAAG	CCTT	-----	atc	ttat	tttcaacg	catc-----	...2621...	attacagatcct	gcacagag	
	* ** *	* ** *		*	*	** * *	*				** ** *	** ** *		** ** *	** ** *	** ** *

id=147338 gene=F49E10.5 name=ctbp-1 segment=chrX_5864598.5869327_1 type=IN

C. Ele	ttgtaag---	tactttttcaca---	...2177...	--gaaaaaattggagaagca---	gc-----	GGAAAAGAAGAAGAGTGG	---tagtcggttggtgaaccaca-	...2471...	tttttagatcca	gcacaaag			
C. Bri	ttggttag---	tttaattccag---	...2172...	tcttttttttgggcaaaa	GAAGaa	AAAA	ttGAGAGA	aaAAGGAGGGAAAGAAAAA	-----	agaaaaaggggtagttggt...	2717...	ttttcagatcca	gctcaaag
C. Bre	tcggttag---	tttcttttcatt---	...464...	tcaaaacttttcatatata-	GTTATGACAGATag	atAGGAAAAAGGAGAA	AAAAGTGACAG	caactaataaatctcactga...	3890...	gtttcagaccct	tctcaaag		
C. Jap	ttggtgagcca	tttattttc-----	...3264...	-----	tcggaagaagagccgttc	-----	GGAAGAAAGAAAG	-----	annnnnnnnnnnnnnnnnnnn	...1447...	tttttagatccc	gctcaaag	
C. Rem	tcggttag---	t---tttccatttgc...	3102...	-----	gcttccatcaagataaaaac-----	-----	AAAGTTGAAGGGGAAA	-----	aaaagaagaaaaacaaaa...	726...	attacagatcct	gcacagag	
	* ** *	* ** *					***	*		** ** *	** ** *	** ** *	

id=147338 gene=F49E10.5 name=ctbp-1 segment=chrX_5864598.5869327_1 type=IN VIEW

Figure 225: CS=3



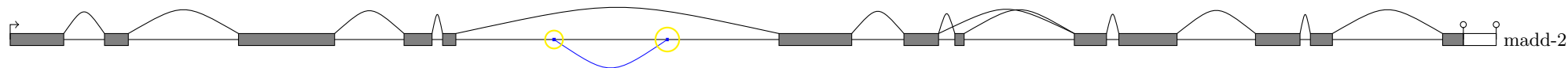
C. Ele	ttgtaag---	tactttttcaca---...33...cattaatagctgtagctgt--	CAACAAGTTAGTTacCCAT	----	atcaaatgtgtcttataaag-----	...4614...tttttagatcca	gcacaaag
C. Bri	ttggttag---	ttaattccag---...527...-tggt--gcg-tgtggtcagcagata	TTC--TTGTTGTTCAAaaCTTTT	aaactat--	atatctagttttc-----	...4377...ttttcagatcca	gctcaaag
C. Bre	tcggttag---	tttcttttcatt---...434...ttgtttgta-ggtggtcagcag--	TTC--TTGTTGTTCAAaaCTTTT	-----	catatatagttattgacaga..	3939...gtttcagacacct	tctcaaag
C. Jap	ttggtgagcca	tttattttc-----...66...--acaagtta-gatacccatatc-	TTCAGTTTCTTATTGA	-----	gcgaaatgtgttgagcagag-----	...4642...tttttagatccc	gctcaaag
C. Rem	tcggttag---	t---ttccatttgc...447...ttgttgtcg-cgtggtcagg--	TTC--TTGTTGTTCAA	-----	aactatttcatatctagtt-----	...3383...attacagatcct	gcacagag
	* ** *	* ** *	* ** *		* **	** ** *	* ** *

id=147338 gene=F49E10.5 name=ctbp-1 segment=chrX_5864598_5869327_1 type=IN

C. Ele	aagtgtaa	tagaagctgcca...49...tttccatcatatcctttccc-----	ATGGAATcAATTcGTTG	-----	ctcttcaatgtcaatcaaga...734...tttgaggtgtt	aaatgaag
C. Bri	aagtgtag	tattcccgaat...111...-----gagagaggagacgagcggaa	AGAAGcTTGAAaaCAATAGGAA	actaggggtccacttcgctc-----	...274...tttgaggtatt	gaacgaag
C. Bre	aagtgtaa	taaagtgtgtaa...86...--tgctcttcaatgtcaatcaa-----	GAGAAGcTTGAAaaCAATAGGAA	actaggggtccacttcctc-----	...190...attcaggtgtt	aaatgaag
C. Jap	aagtgtaag	taaattggtcgg...75...tcgctgctcttcaatgtcaa-----	TCAAGAGAAGcTTGAA	---ttgaaacaataggaacta-----	...120...tcttcaggttct	caatgaag
C. Rem	aagtgtaa	taaaaaagacaa...93...-----atgtcaatcaagagaggagc-----	TTGAAaaCAATAGGAA	actaggggtccacttcgctt-----	...212...attcaggtgtt	gaatgaag
	***** *	**	** **		* ***** *	** ****

id=147342 gene=F49E10.5 name=ctbp-1 segment=chrX_5869617_5870482_1 type=IN VIEW

Figure 226: CS=5



```

C.Bri acacaaggtatgttttttaata--atttgtcaatca:::::-----gaaac-----GTTTAGAA--AaaTGGGGAAA--A---atcttagtgaggatgatat----.4511..ttatattgcagacggaactc
C.Bre acagaagg-----taagacctatttgtcaatca:::::-----AGGGGGA---GGGGGAAGATT--tctcagttaccgcaaatctt----.4906..ataatttcagactgaactc
C.Jap acacaagg-----ttggtc--gtttgtcaatct:::::-----GATGgcGGGA---gGGGGAGGGGGTGGcttgaaaagagggggtgcgt----.4796..caaacttttagaccgaactc
C.Rem acacaagg-----tgagtg--atttgtcaatca:::::tttataattgtgtaagacgatgtgtgtgcatcttcttctcTGTTGGGaaGGGAAAATTGGGGAtACGA---atgtaacgaattccagggtc----.2766..ctaatttcagacggaacta
P.Pac gcagaaag-----tgagcg-----ttt:::::-----TGGTCATGAATCGA---GGGGGGGGC-----gagagagaggggaaggcaag...4728..aataattccaggctgagctg
** ** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

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id=72001 gene=C39F7.2 name=madd-2 segment=chrV_1227683_1233212_-1 type=IN

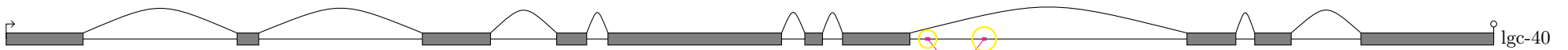
```

C.Bri acacaaggtatgttttttt...2236...attgctggtttttatttta----T--TTACCGAATTCAAAT-----t--ttgacgta-cgtaaatttt...2671..ttatattgcagacggaactc
C.Bre acagaaggtaagacctatt...1873...----gaattcaaccaataagcccAGTTTgCTCCCTCCTCCCTT-----ggctcaat--ccaagattcc-----...3031..ataatttcagactgaactc
C.Jap acacaaggttggtcgtttgt...4674...-tcgtgaagttcfaatctaat-----TTACCCCTCCTCCTCCCATC-----ccttctct--tccgcttttcg----...229...caaacttttagaccgaactc
C.Rem acacaaggtgagtgatttgt...2803...----aatctcttgcccacagtcTTGTTCCCGgAATTtTTCCTgCCTGGCG-----cgct--ttgacgcgtcgaaaa-----...2094...ctaatttcagacggaacta
P.Pac gcagaaagtgagcgttttt...303...----atttg--cataaggtgtagtggGCCTCCCTCTCaGATTcCATGgcGTCAtagcacactggttagcgagt-----...4595..aataattccaggctgagctg
** ** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

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id=72001 gene=C39F7.2 name=madd-2 segment=chrV_1227683_1233212_-1 type=IN VIEW

Figure 227: CS=4.8



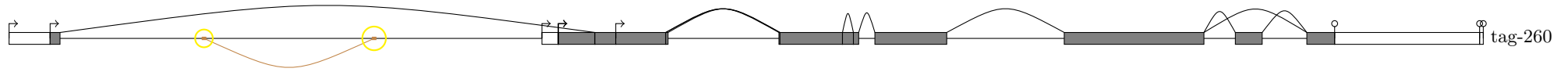
C.Ele	ggccacgc	ttgtatg	ttgcttg	cactgc-t	ttcaca	CGCTAAGCTCAT	TTCAG	acaaaat	at	tttgatt	caac--	...	1629...	aaaccaa	at	ttc	agaacgag
C.Bre	ggccacgc	ttgtatg	ttgcttg	cactgc-t	ttcaca	CGCTAAGCTCAT	TTCAG	actgaa-	ttc	gattcaa	aat...	...	447...	attcatt	tttc		agaatgaa
C.Jap	ggccacgc	ttgtatg	tcgcttg	cactgct	tttcacc	cgCTAAGCTCA	atTTCAG	acaaaag	at	cacatt	ttgta--	...	390...	attga	at	ttc	agaacgaa
C.Rem	ggccacgc	ttgtatg	ttgcttg	cactgc-t	ttcaca	CGCTAAGCTCAT	TTCAG	actgaat-	ttc	gattct	tact-	...	432...	gtcca	at	tttc	agaatgaa
*****	*****	*****	*****	*****	*****	*****	*****	** *	*	**				*	****	****	****

id=154224 gene=T24D8.1 name=lgc-40 segment=chrX.2362343.2364048.1 type=IN

C.Ele	ggccacgc	ttgtatg	ttgct...	139...	-tcaag	agaag	ctag	atag	CTGAATGAGTTTAAGCG	-----	acttt	ac	ttt	cact	caca...	1486...	aaaccaa	at	ttc	agaacgag	
C.Bre	ggccacgc	ttgtatg	ttgct...	136...	tgttat	ggag	agg	at	ata-CTGAATGAGTTTAAGCG	-cttt	cact	ctt	ac	ttt	ac----	...	307...	attcatt	tttc	agaatgaa	
C.Jap	ggccacgc	ttgtatg	tcgct...	104...	-ctttg	aaaaa	at	caa	taaCTGAATGAGTTTAAGCG	cgcg	cttt	cact	ct	aaccg-	-----	...	287...	attga	at	tttc	agaacgaa
C.Rem	ggccacgc	ttgtatg	ttgct...	122...	-tcgga	agaag	ga	aga	ataaCTGAATGAGTTTAAGCG	-cttt	cact	tttt	ct	tat	ca----	...	306...	gtcca	at	tttc	agaatgaa
*****	*****	*****	***		*	*			***	*****	***	*	*	*			*	****	****	****	**

id=154224 gene=T24D8.1 name=lgc-40 segment=chrX.2362343.2364048.1 type=IN VIEW

Figure 228: CS=8.32



```

C.Bri gatcacaccgccgtaagta...388...-----tTTTTgatctcaaggattGAGAcAAA--AGA-----GAAAC---tcgatctggtttaatgagg...4521...cgaactaaaacgcgcatt
C.Bre gatcaaaccgccgtaagt...3460...tttagtgttcttctcccact-----GGAAAAAGGAAGa-----GAAGAccttcagtaatttctatag----...1447...cgaactaaaacgcgcatt
C.Jap gatcacaaccgccgtaagta...2139...ctagttttttttcaatacc-----AAGGTCgcTTTTCtTTCTtTCTTTTTAGA---ccgaccttgatacaaaaa...2754...tcgacgcaaacgcgcatt
C.Rem gatcacaccgccgtaaggg...399...tccctagaacttttattatc-----GAGAcAAG--AGA-----cAAGAcAAGcaatgaatcggatccattg----...4510...cgaactaaaacgcgcatt
**** * * ****
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** *****

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id=57916 gene=M04G12.1 name=tag-260 segment=chrV_13372935_13380022_-1 type=IN

```

C.Bri gatcacaccgccgtaagta...1284...----ataaaatacataatgcatatGTTTCT-----CTTTCTCTCttttccttgttccagttg-----...3625...cgaactaaaacgcgcatt
C.Bre gatcaaaccgccgtaagt...3556...tccttcatatcccactttt--TCTTTCTT-----TCTTTTTTC-----tttgtcaaaaaagactgaat...1351...cgaactaaaacgcgcatt
C.Jap gatcacaaccgccgtaagta...3660...gatgctga---tgccgtttgtctTCTGAGAAGAAGAAGACCTT---cagccaatttctgtactagt-----...1242...tcgacgcaaacgcgcatt
C.Rem gatcacaccgccgtaaggg...1429...----ttgaaacctgacttatctctTCTTaT-----CTTTCTT-----ttcgttcagagcaacaaaa...3482...cgaactaaaacgcgcatt
**** * * ****
*
*
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* **
** *****

```

id=57916 gene=M04G12.1 name=tag-260 segment=chrV_13372935_13380022_-1 type=IN VIEW

Figure 229: CS=2.4



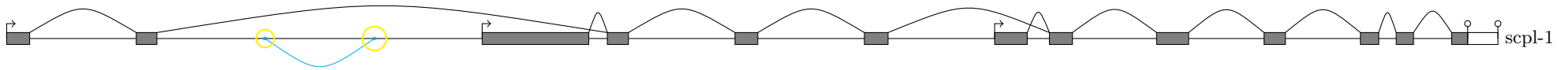
C.Ele	tattacc	gtcgtg	tcgctt	cttttt	ctctat	CTGGAAAGAGTTT	CGAACA	ttttcg	caagaaga	agcgcc	...57...	ataccac	caaaa	ctacaaa
C.Bri	tcgttcc	gttgtg	tcgctt	cttttt	ctctat	CTGGAAAGAGTTT	CGAACA	atntag	caagaaga	agcgca	...56...	ataccac	caaaa	caacaaaa
C.Bre	taatccc	gttgtg	tcgctt	cttttt	ctctat	CTGGAAAGAGTTT	CGAACA	aattag	caagaaga	agcgca	...54...	atatc	acccaaa	caacaaaa
C.Rem	caatacc	gtcgtg	tcgctt	cttttt	cactat	CTGGAAAGAGTTT	CGAACA	atttag	caagaaga	agcgcc	...53...	ataccac	caaaa	ccacaaaa
	* **	**	*****	*****	*****	**	*****					*** **	***	* *****

id=282430 gene=R10E11.1 name=cbp-1 segment=chrIII.9768462.9768593.1 type=IN

C.Ele	tattacc	gtcgtg	tcgctt	...66...	tttcg	cttact	ctagccac	TGTTTGAAAt	CTCTTTCAG	ccgata	ccacacaaa	ctacaaa	
C.Bri	tcgttcc	gttgtg	tcgctt	...65...	tttcg	cttact	ctagccac	TGTTTGAAAt	CTCTTTCAG	ccgata	ccacacaaa	caacaaaa	
C.Bre	taatccc	gttgtg	tcgctt	...63...	aatcg	cttccct	ctagccac	TGTTTGAAAt	CTCTTTCAG	ctgata	tcacccaaa	caacaaaa	
C.Rem	caatacc	gtcgtg	tcgctt	...62...	aatcg	cttcagt	ctagccac	TGTTTGAAAt	CTCTTTCAG	ctgata	ccacacaaa	ccacaaaa	
	* **	**	*****		*****	*****	*****	*****	*****	****	***	***	* *****

id=282430 gene=R10E11.1 name=cbp-1 segment=chrIII.9768462.9768593.1 type=IN VIEW

Figure 230:



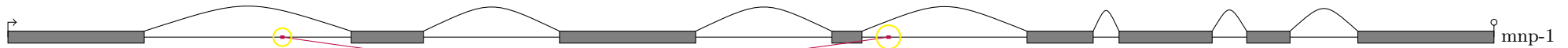
C.Ele	aacagact	tgtacgttcttt...2110...-ttctgaagagctctctcaac-----	-----	TTTTCGTTT	tcTCT	ctTTTC	cgttccattattcaacagtt...2794...tccttatttcaa	gaaatc
C.Bri	aacacagt	tgtaagtattga....79...-cattatcctacttgaaaaa-----	GAA	GagAGAA	aGTGA	-----	tgcttggtatcttttgata...4788...attaccttcaa	ggagtcct
C.Bre	aacacagt	tgtaagttttca...443...-gctacacaaattaacgaga-----	-----	CGGA	aCTT	gTCTTTTCTTCTTTTTT	cggttggtcttcatcatttc...4454...tcgaaattgaa	gaaccctt
C.Jap	aacagagt	tgtgagttttct...204...tcttgattccaatcgtatgg	AATGGAAAATGGAAAATGGA	aGAAA	aAGAGAGAAA	-----	cgggcgggccgaccagcgga...4686...tctaacttgaa	gaagaatc
C.Rem	aacacagt	tgtgagttttca...341...-cgcc-ccatgcacgagaaaa-----	GAAAATAc	GAGAGAGAAAGA	-----	-----	cggaacttttttttcttatt...4564...ctaaacttcaa	gaagtcca
	**** * *	*** ** *					*	*** ** *

id=785 gene=B0379.4 name=scpl-1 segment=chrI.10094470.10100652.-1 type=IN

C.Ele	aacagact	tgtacgttcttt...4217...gatttaggggaaagatacga	GAAAAGAGAAAC	aGAAAG	-----	-----	agagtagtttgcgtgctcat...690...tccttatttcaa	gaaatc	
C.Bri	aacacagt	tgtaagtattga...649...-aggttagaatcgttttttct-----	TCATTTCCTTC	-----	-----	-----	gaatcatc-gaattaggtt-tc-----...4221...attaccttcaa	ggagtcct	
C.Bre	aacacagt	tgtaagttttca...1957...tcgatcgttgcggctgcgc	GAAAAGAGAAAAGAGGAAG	cTCCG	-----	-----	ccccttgccggttcaatt-----...2943...tcgaaattgaa	gaaccctt	
C.Jap	aacagagt	tgtgagttttct...365...-ttttccattttcctcct-----	TTTTCG	CTCTTTT	aTCCA	cgTTTT	gcTCGTTTT	TTGTT	
C.Rem	aacacagt	tgtgagttttca...374...-agaaagacggaa---ctttttt-----	TCTT	atTCITTT	-----	-----	TCITTTCTATTTTC	ctcatctaaagtacatcgctc-----...4526...ctaaacttcaa	gaagtcca
	**** * *	*** ** *					*	*** ** *	

id=785 gene=B0379.4 name=scpl-1 segment=chrI.10094470.10100652.-1 type=IN VIEW

Figure 232: CS=4.8



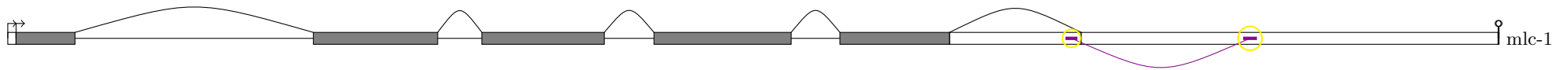
C.Ele	ctttgagg	taaggaagtgaa...733...	cacacacaccaccacgaccg	CATAAACATGTGTGTTTGTGG	aagagga-----gatgatggtgatg-...216...	aaaatttcaga	tcgttgaa	
C.Bri	gttcgagg	taggtatthttg...263...	ccaccaccacgatccgaccg	CATAAACATGTATGTTTGTGA	atcaggatgtattctacgaa-----...492...	aatttgttcagg	tagttgaa	
C.Bre	gttcgagg	tgagtgggatac...525...	ccaccaggggtccccaccg	CATAAACATGTATGTTTGTGG	atcaga-----ttgaaggatthtt...1370...	ttctattccagg	tcgtogaa	
C.Rem	gtttgagg	tgagatthttgat...317...	cacacaccacgatccgaccg	CATAAACATGTATGTTTGTGG	acgaaaa-----taagaaaaatctg-...251...	ataaatttcaga	tcgttgag	
	** ****	* *	* **	* *****	***** *	**	* **	* ** **

id=156629 gene=B0285.7 name=mmp-1 segment=chrIII_4357094.4358127.1 type=IN

C.Ele	ttttgagg	taaaacttttga...44...	gtagtttcgtgg---ttccc-----gaa	TTGTAAACACACat	ATGTTATG	atattcaacgtcgtgtaatc...1021...	ttaaatttcaga	aagccctg
C.Bri	ttttgagg	ttagttttgaaa...80...	gaagt---tgaagaaatccc-----gaa	TTGTAAACACAC	ATGTTATG	atattgaacgtcgtgtaatc...825...	tgcaatttcaga	aagccgta
C.Bre	ttttgagg	ttagttttgaaa...75...	-----gtgtattccctccccgagaa	TTGTAAACACAC	ATGTTATG	atattgaacgtcgtgtaatc...803...	gaatatttcaga	aagccctg
C.Rem	ttttgagg	ttagttttgaaa...68...	-----ctttggaggattccc-----gaa	TTGTAAACACAC	ATGTTATG	atattgaacgtcgtgtaatc...876...	gttgttttcaga	aagccctc
	*****	* * ** *	****	*****	*****	*****	*****	*****

id=156635 gene=B0285.7 name=mmp-1 segment=chrIII_4362052.4363203.1 type=IN VIEW

Figure 233: CS=5.92



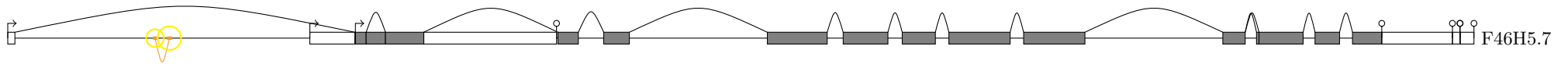
C.Ele	actttggg	agtggcgtcaac...86...-----ttgtcattccgtgtggcgca	GCGTTCAGACGGCG	ctctaaccat	tccgcgcg
C.Bre	actttggg	agtggcgtcaac...86...-----ttgtcattcctgtgtggcgca	GCGTTCAGACGGCG	ctcataccat	tccgcgcg
C.Jap	actttggg	agtggcgtcaac...73...tagattattgtgtcatccc	GTGTgCGCcaGCGTTCAGACGGCG	ttctaaccat	tccgcgcg
C.Rem	actttggg	agtggcgtcaac...86...-----ttgtcatccgtgtggcgca	GCGTTCAGACGGCG	ctctaaccat	tccgcgcg
	*****	*****	**** * *****	*****	*****

id=20448 gene=C36E6.3 name=mlc-1 segment=chrX_17460109_17460251.1 type=A3

C.Ele	taaccat	tccgcgcgcatt...136...caaccctaatttctaacca	CGCCGTCTGA	ctGCGG	gtcacacttctatcactcc-----...237...caacatcc-agac	tttcattg
C.Bre	ataccat	tccgcgcgcttt...136...aacctctatttctaacca	CGCCGTCTGA	ctGCGG	gttcacacttctatcactcc-----...177...-aacgtccaatgt	tttcattt
C.Jap	taaccat	tccgcgcgtact...135...ccacccggtttcctaacct	CGCCGTCTGA	ctGCGGTGCACAC	ctcctatcactcctcaaatggtt...182...-aacattcaagaa	tttcattg
C.Rem	taaccat	tccgcgcgtct...136...caaccctaatttctaacca	CGCCGTCTGA	ctGCGG	gttcacacttctatcactcc-----...188...taacgtccaaagt	ttt-attt
	*****	*****	*	** * *****	*****	*** * * *

id=20449 gene=C36E6.3 name=mlc-1 segment=chrX_17460252_17460704.1 type=E3 VIEW

Figure 234: CS=2.4



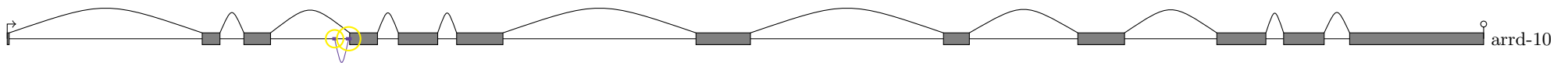
C. Ele	----ccccccc	ccccatcgttc...1176...aaagctttcaggcaatctgg-----GCTTgTTCGTTgGCCA-----gaaacgtcaacaaattcttg-----...3732...ctcttcttgatc	gacttctc
C. Bri	----aactccc	aagacgatatctc...262...-----tcaaacggagtggtgcgct---TGTGtACATTTCGAcAAGAAAATTGAGGcatgatatcatgcgtggaaa...4636...cgctccttgatc	gaattctg
C. Bre	----ctcgtccc	cggcgctcgtcc...69...-----tcgaagcatgacggggccccCCGAagGGAGAAAGAGcGAGAAATAGGGG-aggggtattacttacaacgc...4827...ctcttcttgatc	gacttctc
C. Rem	gttgttcgtccc	---ggtcgtct...1219...aaagctttcaggcaatctgg-----GCTTgTTCGTTgGCCA-----gaaacgtcaacaaattcttg-----...3689...ctcttcttgatg	gaattctc
	***	* ** * * * * *	** ****

id=221970 gene=F46H5.7 name=F46H5.7 segment=chrX_7242918-7280140_-1 type=I5

C. Ele	----ccccccc	ccccatcgttc...1227...ttcttgccaaaacaggcaa-a-----TGGTtcCAACCGAAGAGC-----agccgcagccgaaaattagc...3679...ctcttcttgatc	gacttctc
C. Bri	----aactccc	aagacgatatctc...2661...gccctttcaattctcaciaa-aTCTCAATTTCTTttTTGAaATGTtCAT--Gtcctttttgaggatataaatt...2235...cgctccttgatc	gaattctg
C. Bre	----ctcgtccc	cggcgctcgtcc...627...-ttttttcccttttcgaaaca-CCCCTTCTCTTTTTC-----TCCaTCGG-cttttctccggcgcgctcg...4274...ctcttcttgatc	gacttctc
C. Rem	gttgttcgtccc	---ggtcgtct...1270...ttctggccaaaaccggcaa-a-----TGGTtcCAACCGAAGAGC-----agccgcagccgaaaattagc...3636...ctcttcttgatg	gaattctc
	***	* * * * * * *	** ****

id=221970 gene=F46H5.7 name=F46H5.7 segment=chrX_7242918-7280140_-1 type=I5 VIEW

Figure 235: CS=3.84



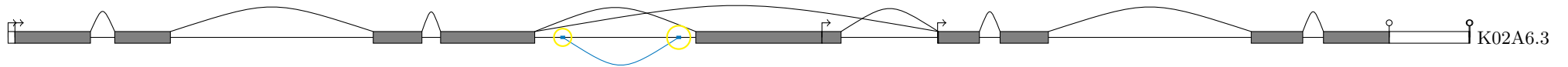
C.Ele	tcgctttt	tactcaaacat...120...	ttctacgccaaaattgagac----	GATAATCCAAATT	--aaacgagaga-----	ttttgtagaaggaattggtggaattgtcat	tgcggatc
C.Bri	tctctttt	tctcctcccgtc...164...	gataaagaggaaaaggaaaa----	GATAATCCAAATT	ggaaagaagatttactctt--	tttttctgcagaaggaattggtggaattgtcat	tgcggatt
C.Bre	tcactttt	catctatctctc...211...	--taaaaaaggacggattgaa--	GATAaTCCAAATT	gagagagagagagacagagattt	ttatataagaaggaattggtggaactgtcat	tgcggatt
C.Rem	tcactttc	tcctttttcctc...164...	----agaggaattgaagagagga	GATAATCCAAATT	-gagaggagaaaga---t--	ttatttttagaaggaattggtggaattgtcac	tgcggatt
	** ****		* **	*****	***	** * *****	*****

id=20399 gene=F58G1.6 name=arrd-10 segment=chrII.12940101.12940305.1 type=IN

C.Ele	tcgctttt	tactcaaacat...155...	acgagagatthttgtagaagg	AATTgg	TGGAa	TTGTCat	tgcggatc
C.Bri	tctctttt	tctcctcccgtc...212...	tcttttttttctgcagaagg	AATTgg	TGGAa	TTGTCat	tgcggatt
C.Bre	tcactttt	catctatctctc...262...	gagatttattttatagaagg	AATTgg	TGGAac	TTGTCat	tgcggatt
C.Rem	tcactttc	tcctttttcctc...207...	agatttattttgtagaagg	AATTgg	TGGAa	TTGTCac	tgcggatt
	** ****		** *	*****	*****	*****	*****

id=20399 gene=F58G1.6 name=arrd-10 segment=chrII.12940101.12940305.1 type=IN VIEW

Figure 236: CS=4.8



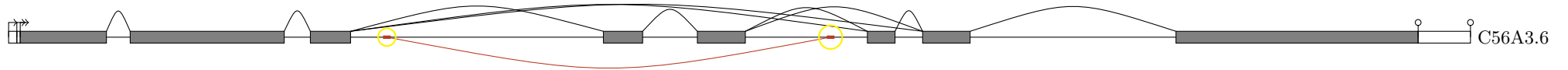
C.Ele	tgattttt	tgtcgactgtagt-ttc-----	tttgaactg--agagcaaagcgcattatgaagaa---	GAAA	AGTGTGATCCCAGG	aaTTAGATATTT	acctaaacaaaaattgctt-----	...284...	tttcttagt-t	ctttccag
C.Bri	agatttcc	tgttgactgtagt---agtactgggggtggtgtagtgc	caatg-----ttaaggatggaatctagtacaa	GGAA	TAGTGTGATCCCAGGAAG	-----	ataaagagaaggagaagtcg-----	...515...	aatgtgtgttct	ttttccag
C.Bre	tgaatgcg	tgttgactgtagtttcagtgct---	caataggagctcaacaagatgtttcagaataga-----	AGGA	AAGTGTGATCCCAGAGG	-----	aaatatgcattcggggagga---	...901...	aactctctgtt-t	ctttccag
C.Rem	tgaattct	tggcgactgtagt-tccgatattcttagatgtggtctagcactgctagactctagcagagagt-----			AGTGTGATCCCAGGAACT	-----	cggagcattggctgtgaaac...	197...	tcaacatgctgt	ttttccag
	** *	** *****	* ** *		*****		* * *		** * *	*****

id=61435 gene=K02A6.3 name=K02A6.3 segment=chrX.8230127_8230523_-1 type=IN

C.Ele	tgattttt	tgtcgactgta...294...	cccaatcactttttaaaa-----	agGGATGgcTCTGGga	CCTGGGATCACACTTTTC	--gtgcattgactcactttttatcttatattc--tta-----	tgatt	ctttccag		
C.Bri	agatttcc	tgttgactgta...529...	cattctttcaaaatagca--aa-----	CTTC	CTGGGATCACACTcTTCT	-gttttctgagt-acactgtctttt-tttttccaaaaaatgtgtgttct		ttttccag		
C.Bre	tgaatgcg	tgttgactgta...911...	tccaaaatttcaaa--aata--aa-----	CTT	CTGGGATCACACTCTCT	ggtttttttctcatttcacttctt-tatttc--ctatcaactctctgttt		ctttccag		
C.Rem	tgaattct	tggcgactgta...206...	caactccaaatctatgcaa--	GGTTT	CTGGGATCACACT	ctccgggattttctgtcattcaggtttt-tatttcattttcaacatgctgtt-		ttttccag		
	** *	** *****	* ** *	*	*****	* * *	* * *	* *****	*	*****

id=61435 gene=K02A6.3 name=K02A6.3 segment=chrX.8230127_8230523_-1 type=IN VIEW

Figure 237: CS=8.88



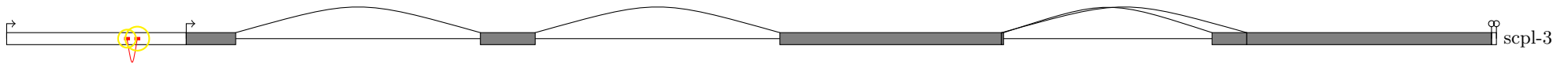
C. Ele	atgaattt	atgcttgtgagt	-----	.....	-----	AAGAGAAGTGC	GATATTG	-----	cttgctgtt	gtatgaaaaa	...412...	--gaatgtgataa	atttagat					
C. Bri	atgaattc	atgttggtgagt	-----	-----	AAAAAAGAga	AGTGC	GATATTG	ctTGCTtt	TGTG	tgaaaat	tttcattg	gaaaa...389...	--gaatctcgtgaa	atttagat				
C. Bre	aggaattc	atgttggtgagt	gatgaggcta	actttttatt	:::::	cctagtaa	gaaaat	catcagga	atggtggtt	ggaaatt	GAAGAga	AGTGC	GATATTG	-----	ttt	gtctta	aatgattaa...855...	--cgttagtataat	atttagat
C. Jap	acgaattc	atgttggtgagt	-----	.....	-----	AGAGAGAAGT	GC	GATATTG	-----	ctt	gtcctgt	gctatga...1581...	-agaatg-agaaca	atttagat				
C. Rem	atgaattt	atgctgtaagt	-----	.....	-----	GAAGAga	AGTGC	GATATTG	-----	ctt	gctttt	gtattcagaaa...362...	tagaat--cgtaca	atttagat				
	* ****	** * ** *				*****					*	*	*	*****					

id=293475 gene=C56A3.6 name=C56A3.6 segment=chrV_13555169_13555690_-1 type=IN

C. Ele	ctgttatg	ttcactgtaaga	...126...	-----	atttcccgcctg	ttt	gtt	gtt	---	TGAATATCGCGCTTCTTTT	---	cttctcttctct	-ccc-acttc-	...43...	cttttccaattt	ttccagat	
C. Bri	ccgttatg	ttcactgtaagg	...96...	gtcagaatcgt	ttctcctg	cc	TGTGt	GGTGt	CGAATATCGCGCTTCTT	CTTTT	ccctattctct	accctacc-	...47...	cccaacattttt	ttccagat		
C. Bre	ctgttat	tttctgtaaga	...835...	gacataaacg	catggtt	---	tttc-	CAAGTATCGCGCTTCTTT	---	tatctcttct	cgcacc-actc-	...131...	atatttctttt	ttccagat			
C. Jap	ccgttatg	tttaccgtaaga	...49...	tttgccttatg	ttcgctttc-	---	CAAAATATCGCGCTTCTTTT	---	cctctcttct	acc-acttct	...50...	cagcccgTTTT	ttccagat				
C. Rem	ctgttatg	ttcaccgtaaga	...152...	attatcctgt	ctgtt	gtt	gtt	gtt	---	tttctctt	ctacc-actt-	...65...	tttccaattt	ttccagat			
	* ****	** * ****			**				*	*****		*	**	**	**	***	*****

id=293479 gene=C56A3.6 name=C56A3.6 segment=chrV_13554624_13554875_-1 type=IN VIEW

Figure 238: CS=8.75



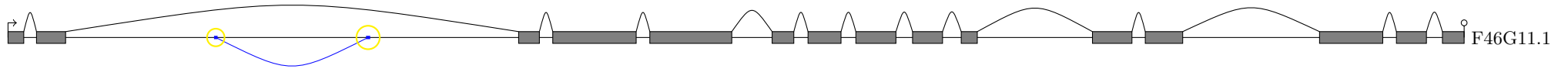
C.Ele	ccttttcc	attgctgccatc...200...----	gttcaggaagcttaaggaat	CAGAAGACGAAGA	---gggtgacatcttcgtcttct-...	90...cgacctctagac	atgagcaa
C.Bri	ccttacc	agtgtaccgct...207...----	gttctaaaactccagaat	CAGAAGACGAAGA	---aggtgacatcttcgtcttct-...	156...agggtcacaga	atgaataa
C.Bre	gtttttct	cctattgcctcc...208...tcgccgttccaaaactca	AGAA	CAGAAGACGAAGAATT	gaagaaatcttcgtcttctg...	116...cgaccggtcaac	atgagcaa
C.Rem	tttttccc	actgtacccta...177...----	gttcaaagacaattcagaat	CAGAAGACGAAGA	---aagtgacatcttcgtcttct-...	120...agacctctaaat	atgaataa
	** *	* * *	*** * * * **	*****	** *****	* *	*** **

id=16047 gene=Y47D9A.2 name=scpl-3 segment=chrI.4298260_4298626.1 type=EN

C.Ele	ccttttcc	attgctgccatc...221...agaagacgaagagggtgaca---	TCTTCGTCTTCTG	-----ctgcaacacggatcaggcag...	69...cgacctctagac	atgagcaa	
C.Bri	ccttacc	agtgtaccgct...228...agaagacgaagaaggtgaca---	TCTTCGTCTTCTG	-----ctgtcagcggaaagtgtcg...	135...agggtcacaga	atgaataa	
C.Bre	gtttttct	cctattgcctcc...234...agaagacgaagaattgaag	AAATCTTCGTCTTCTGTTCT	---caaacagaagggtctcaaaa...	92...cgaccggtcaac	atgagcaa	
C.Rem	tttttccc	actgtacccta...198...agaagacgaagaaggtgaca---	TCTTCGTCTTCTG	ttgtctttgcaagacaaaaa-----...	99...agacctctaaat	atgaataa	
	** *	* * *	*****	***	*****	*	*** **

id=16047 gene=Y47D9A.2 name=scpl-3 segment=chrI.4298260_4298626.1 type=EN VIEW

Figure 239: CS=4.8



C.Ele	tgagtaag	tc---cagttttgt...536..catttttgctccaccaaacc	TTCAC	TCAACCAT	---aggattat---	tgctcgaaaag-----	...1486..ttttcagttctg	acg'gcct	
C.Bri	cgagtgag	tcctatagccac---...615..catttttgctccaccaaacc	TTCAC	TCAACCAT	---aggattattggctgctcaa-----	...1531..ttttcagttctg	acg'gcga		
C.Bre	tgagtgag	tc---tagccatttt...559..catttttgctccaccaaacc	TTCAC	TCAACCAT	---aggattat---	tgctctaaaaag-----	...1119..ttttcagttctg	acgctcct	
C.Jap	cgagtgag	ttcttaaaacat---...405..catttttgctccaccaaact	TTCAC	TCAACCAT	aGGATT	attgc-----ctataaaaagtgagg...1349..actttagttcgg	acg'ccca		
C.Rem	tgagtaag	tt---ttaccctttt...508..catttttgctccaccaaacc	TTCAC	TCAACCAT	---aggattat---	tgctctaaaaag-----	...1121..ttttcagttctg	acgctcca	
	*** **		*****	*****	*****	* **	** **	* *****	**** **

id=35769 gene=F46G11.1 name=F46G11.1 segment=chrX.5791862.5793960_1 type=IN

C.Ele	tgagtaag	tc---cagttttgt...1387..-----ttgaactctaaagcagtgtc	ATGGA	TTGA	taTGGAtgactatacaattctgcca...	...633..ttttcagttctg	acg'gcct	
C.Bri	cgagtgag	tcctatagccac---...1470..-----ctgaattctaaagccgtatc	ATGGA	TTGA	taTGGAtgattacactattctaccaa...	...674..ttttcagttctg	acg'gcga	
C.Bre	tgagtgag	tc---tagccatttt...1416..-----ttaaattccaaggccgtatc	ATGGA	TTGA	taTGGAtgactatactatcttacc...	...260..ttttcagttctg	acgctcct	
C.Jap	cgagtgag	ttcttaaaacat---...1436..cgccattgaactaaaagc	AGTCT	ATGGA	TTGA	taTGGAtgactatactattctgcca...	...316..actttagttcgg	acg'ccca
C.Rem	tgagtaag	tt---ttaccctttt...1336..-----ttaaattctaaagccgtatc	ATGGA	TTGA	taTGGAtgactatactattctaccaa...	...291..ttttcagttctg	acgctcca	
	*** **		* ** * * * * *	*****	*****	* ** * * * * *	* *****	**** **

id=35769 gene=F46G11.1 name=F46G11.1 segment=chrX.5791862.5793960_1 type=IN VIEW

Figure 241: CS=4.8