

Bt	--AG-----TTGTTTCCC-TCAGGTTCTCTGTTATTTCTCTGATAAAC--TATATAGGACAGTTTGTGAGATTAA-TTG	-938
Cf	--AGTTTTCAATTGTTTCCC-TCTGGTTCTCCATTGTTTCTCTGATACAT--AATATAGGAAAGTTTATGAGATTGA-AT-	-955
Dn	--AGTTTCTTTTGGCTCCCTTTGGGTTCTTTGTTGTTCTTTGATAAAG--AACACCAGAGAGTTTATTAGAGTAG-TGG	-801
Ec	--TGTG---TTGTCTCCC-TCAGGTTCTCTATCGTCCCTCTGATAAAC--GATATAGGACAGTTTATGAGACAAA-GTG	-967
Hs	--AGTTGCCATTGTCTCCCTTCTGGTTCTCTGTTGTTTCT--CGAAT--GACATAGAAGAGTTTATGAGATTAA-TTG	-1014
La	--AGCCTCCACTGGCTCCC-TAAGGCTCTCCACTTTCTCTCTGACGAAC--AGTAAAGGAG-GTTCATGAGGTTCTGTTTG	-954
Oc	CTGGCTGTCTTTCTCTCC-----ATCCTCTGTTTCTCTGTCAAACTTTTTATAGGACAGTTTATGACATCA-----	-892
Sa	-----ATATTC-----TGGGG--GATGCAGGGAGGGAGGGAAAGAGGG-AAAG	-716
Ss	--AGTTTCCATTGTCTTCC-TCAGGTTCTCTATTGTTTCTCTGATAAAC--AATATAGGACAGTTTATGAGATTAA-TTA	-934
Cp	-----TCCCTC-----TAAGTCTTTGTTGTTTCT--CAAAC--AATGTAAGAATAGTTTATGAGGATAA-TTG	-978
Mm	-----	-553
Rn	-----	-600
Mr	-----	-545



Bt	CTTCTCACC AAAATAGCTATGTTTCT-----GGGGGCGGCTT-----TGGCTTTTATA-----	-890
Cf	CTTCTCACTGAAAATAGCCAGGTTTCTG-----GGGGGCAATTTTGG-----CTTTTATA-----	-906
Dn	CTTTTCACTGAATTCAACAAGTTTCT-----GGGACTACTTTAGCT-----TTTATC-----	-754
Ec	CTTCTCACTGACATAGCCAGATTTC-----GGGGGCAGCTTTAGCTTTTCTTCTAT-----	-913
Hs	CTTCTCACTGAAAATAGCCAGGTTTCT-----GAGGGCAGCTTTGGC-----TTTTATA-----	-966
La	CTTCCCCTGAAAACAGCCAGG-CTCT-----GGGGAT-GCTTTGGC-----ATTCAAC-----	-908
Oc	CTTTCTAATGAAAATTGCCAGGTTTCTGGGGAGGAGATGGGACAGCTTTGGATT-----TTACG-----	-834
Sa	-----AGAGAGAGAANCAGAGATT-----GGGGGG-----	-690
Ss	CTTCTCATTGAAGTAGCCAGCTTTCT-----AGAGGCAGCTTTGGTCTGGCCTTTATA-----	-881
Cp	TTTCTTAATGAAAATAATCAGGTTCCCT-----GGGGGAAGCTT-----TTACTTTTATTTTCTTAAACT	-919
Mm	-----	-553
Rn	-----	-600
Mr	-----	-545



Bt	TGAA-----CATTTT-----CCTACCAGTTACTGGCA-----	-863
Cf	AGAG-----CTTTTG-----CCTATCAGTTACTGTCA-----	-879
Dn	TCAG-----CTTTTTTC-----CTACCACCTTAGTGCC-----	-726
Ec	TGAG-----CTTTTT-----CCTACTA-TTACTGCCA-----	-887
Hs	TGAG-----CTTTTTCTTCTTACCACCTTATCAGTTACTGACA-----	-929
La	TGAG-----AGTTTC-----TTACTGCTG-----	-889
Oc	TGAA-----CTTTATTTTC-----TACCAGTTATCTCCATTACCACTCT-----	-795
Sa	GGAGTGATA-----GCCTTGTC-----ATAAACTTCCACC-----	-660
Ss	TGAG-----CATTTT-----TCTA-----AGCA-----	-863
Cp	GAAAGTGTAGAGATGGTACCCTGGGCTTGCCTCAGGGTG-----ATACATCCCCACCGTAATTTGGCTTTACAGTTGC	-844
Mm	-----	-553
Rn	-----	-600
Mr	-----	-545



Bt	-----GCGGGTGAACTTCACTACTGTATTCCT--ATGACTGCTTCAGTG	-821
Cf	-----GTGAGTGAACTTCACTTCTGTGACCTT--AGGATTGGTCAATG	-837
Dn	-----GTTGATTAACTTCTTACTATGCTGTTA--TGATTGGTCAATG	-684
Ec	-----GTGGGTGAACTTCACTACTGTGCTCTT--ATGATTGGTTCGATG	-845
Hs	-----GAGGGTCAACTTCACTACTGTGTCTAT--ATGGTTGGTCAATG	-888
La	-----GTTGTGAGCTTCAGTGTTCGATGTTGTCTCTCGTTGATCCAGTG	-844
Oc	-----GTAGGTAAACCTCACTACTGTG-----CAAAG	-768
Sa	-----CCACCCACACCAAGATTCAAAGGAAAACTACTACA-----GCTTGCTTCNTTG	-611
Ss	-----GCCGG--CACCACTACTGTACTCTT--ATGGTGGGTTCAATG	-825
Cp	CAGTTACTGCCAACCAGTCACTATTGTGTTTTAGGATTGATTCTCCATTGTTATGATT--GATTGCTCATTG	-771
Mm	-----TTTGTCCCAAGG	-541
Rn	-----TTTTTCTCAAAG	-588
Mr	-----TTTGGTTCAAAG	-553

CNS2



CNS2

Bt TT-GGGGTTGT CAGATT CACGGAGTAAGTAGAAAAAA--TACT-----GAAGATTGAG----- -771
 Cf TTGGGGGTCATCAGATTCATGGAGGAAATAG-GAAAA--TACTA-----AAAAGATTAAAG----- -786
 Dn TT-GGAGTCTTCAGATTCCTAGAGAAATGT--AGGCAACTACT-----AAAAGACTGAG----- -635
 Ec TT-GGGGTCATCGGATTCACGGAGAAAAGTAGA-AAAA--TACT-----AAAAGATTAAAG----- -796
 Hs TT-GGGTTCCTCAGATTCATGGAGGAAATA-GGAAAA--TAGT-----AAAAGATTAAAG----- -839
 La TT-ATGATTGAGCAAATC---GACGAAGTA-AGCAAA--TACT-----AAAAGATGAAG----- -799
 Oc TT-GGAGCTATCAGATTC AACGAAGTAG-----AAAAGTAAGG----- -731
 Sa GT-GTTGTT-----TTCAAGTACA-----CGCT----- -589
 Ss TT-GGGGTCATCAGATTCATGGAAGAAG--GAGAAGA--TACT-----AAAAGATGAAG----- -777
 Cp TT-ATGATTGATTG-TTCATGGAGG-----AAGAAATAAT-----AAAAGATCAAG----- -728
 Mm TATGGAGTCACCAGGTTCCCGAGA-----GAAAAGACTAAGATG----- -504
 Rn TTTGGAGCCATCAGTTTCTCGGAA-----ACTGGATGAAAAGACTAAAAATGACCAAGC----- -536
 Mr TTTGGAGTTACCAGATTCCCGGA-----AAGTACAAAAATGA----- -496



Bt -----GGTTCACAGTTTAAAAATTACAAGTAATATA-- -740
 Cf -----GACTCACGGTTTAAAAATTGCAAAACAGATCACAC -753
 Dn -----AATTTCACAGTTTAAAACATTACAAAGAGGTT-- -605
 Ec -----GATTTCGAGTTTAAAACTTACAAAACAGGTCAAAA -763
 Hs -----GAGTCATAGTTAAAAAATTACAAAACAGGTCAACA -806
 La -----GAAATACAGTTTCAAGATTAAAAAATCTGGT--- -770
 Oc -----AAGTAAAAAGTTAGGGACTCACTAACTGCTGACA -698
 Sa -----GACCCAGTAA-TTTAAAAATT-----CCTCTTACA -562
 Ss -----GTTTCACAGTTTAAAA--CATTACA-- -754
 Cp -----GACTAATAGCTTTAAAAAATAGAAACAGGTCAACA -695
 Mm -----CCAAATGACCCAAAACATATGAGCGTAAGCCCTCCAAATCGGTCACA -459
 Rn GCAAAATTCAAGCGTAAAATTCAAGACGTAAAAAATCCAAAGACGCAAAATTCCAAGCGTAAGTCCCGCAAAATAGGTCACA -456
 Mr -----TACAGAACCAAAATTTCTGTGCGCAATCAGTACAAATAGGTCACA -452



Bt -----GATTGGTTAGG-GGCTAAATCAGCATTCTGTGAAATGATT--TTTCTTTCTTCT--CTCTCTT- -684
 Cf GACAGTACAGCTTCTTGATTATTTAGT-GGCCAAAATGACATTCTGTGAAATTAACCTTCTGTTCCTTCTCT--TTCTCTT- -678
 Dn -ACAGTTTTCTCTCTGGATTACTTAAGTGGTCAAATGGCCATTCTTTGATCTGTCTT--CCTTTACG--TCTCTTT- -534
 Ec AACAGTACTC-----GATTATTTTCGG-GGCCAAATTTGGCATTCTGTGAAATGCCTTCTTTCTTCTCT--CTCTTTT- -694
 Hs AACAGTACTCTTTCTTGATTATTTAGG-AAACCAAAATAGCCATTCTATGAAATGTCTTTCTTTCTTTCTTT--CTCTCTT- -731
 La GGCAGTGTGCTTATCAATTGTTTAGG-GGCCAAAATAGCCTTTCTGTGAGATG---CGTTCCTGTGT--CTCTCCG- -700
 Oc GAC-----TAGG-GACCACACAGCCATTCTGTTAAATGTC---TACCTGACTGTCTTCTTTT- -645
 Sa A-----ATTTCT-----CAATTG-----TTCTT- -544
 Ss -----GTTTACTCAGG-GGCTACATGGACTTCCTGTGAAATGTC--TTTCTCTCT--CTGTCTT- -698
 Cp AACAGCACTTCT-----CGATTAGAGAC-----CTCCTT- -666
 Mm ACT-----AATACTCTGATAATTTAGG-AAACCAAGGAGCCATTTTGTGAGGCATTTCTACCTTTCTCT--CCTCA- -390
 Rn ACC-----AGTACTCTGATAATTTAGG-AATCACGGAGCCATTTTGTGAGACATTTCCACCTTTCTCTGT--CCTGG- -387
 Mr GCCAA--TAATACCTTAATAATTTAGG-AAACCAAGGAACGATTTTGTGAAACACCTCTTCTTTTCTTTA--CCTC- -381



Bt -----GCTC-----ACT--TAGAAACA-----CT--TCCATTCTTCTATTTTCAAGGGGCCAC--AGAA- -637
 Cf -----GCTCACCGTTTGACT-----TAAAAGCA-----CT--TCTACATCTCCATGATCGGGGGCCAT--ACAA- -623
 Dn -----GCTCACCAATTGACT-----C--AAGTA-----TT--TTCTTTCTTCTATGGTCAGGGGTCAT--AC-A- -482
 Ec -----GCTTATCAATTAACT-----TATAAGCA-----CT--TCTAATCGCCTGCGATCAGGGGGCCAT--ACAA- -639
 Hs -----GCTCACCAATTGACT-----CGTAAGCA-----CT--TCCGTTCTTCTTATGGTTGGGAGCCAT--AG-A- -677
 La -----AC-----CG-----CATAAAGTG-----CTTAACCTCACTTTCCAATTGTGGGCGCCAC--AG-C- -653
 Oc -----GTTAATCAATTGGCTG-----CAAAAGCA-----GTTAG--AGTCTCTTATCACCTGGGGCTATGG-G- -590
 Sa -----NGCCACACCTGGTAT-----TACTCAGGAGTTGATCT-----A----- -511
 Ss -----GCTCACCAAGTTAACT-----TAGAAGCG-----TT--TCCAGTCTCCTATGATCAGCAGCCAT--GAAA- -643
 Cp -----AGTTACCAATTGAATCCTAAATACTTATGGTCTGGTCTC-----CATGAATAGGGGGCCACCCAA-- -607
 Mm TCTGAGGTGCGCAACTAATG-----CAGAAGAAC-----TTCTAGTGTCCAAGAC-CGGAGCGA--CACAC- -333
 Rn ATTGAGCTTACCACCTAATT-----CATGGGAACCTT-----TTCTTGTCTCCAAGACCGGGAGCGA--TACA- -326
 Mr ---GAGCCCAACCAATTGATC-----CGTAAAGCA-----TTTTAGTACCAAGACGAGGGGCTA--TGCA- -326



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Bt	ATGC--AGTGCTGGAGTAGAAAAATACACTGA-----CTCAGA-----A-----TTAC--AGTATGTGACT---	-586
Cf	AGGCAGAAATGCTGGAGTAGAAAAATACACGGA-----CTCAAA-----A-----TCAT--GGTGTGTGACC---	-570
Dn	AGGCAGAGTGATGGAGTAGAAAAATAAATTCA-----ATCTGA-----A-----TCATG--GTGTGTGACT---	-429
Ec	AGACTTCGTGTTGGAGTAGAAAAATTTACTGT-----CTCAGA-----A-----TCAT--AGCGTGCAGACC---	-586
Hs	AGGTAGAGTGTTGGAGTAAAAAATACATTGA-----CTCTGA-----A-----TCATG--GTGTGTGACC---	-624
La	GGGCCCTGTACTGGGGTACAAGGAACACTCA-----ATCGCA-----G-----CC-----TGAGT---	-608
Oc	AGACAAAGTATTGGAGTAGAAAAATGCAGGGA-----CTGGGG-----AGTCGAGGGT-----GTGTGACT---	-535
Sa	-GGCTAAGTGT-----ATATATCTT-----TTTTATGTTTTGGTCC-----ACCTGG-----	-470
Ss	AGGCAGAGTGATGCAGTAGAAAAATACACTGA-----CTCAGA-----A-----TCTCTTGGTGTGTGACT---	-588
Cp	-GGTAAGGTGTTGAAAAAGTAAATACACTAA-----CTTGAGTCATGGTATGT-----GACCTAG-----	-552
Mm	TGGTT---TGTCCAAGTAGAAGATATATTGAAATTTTGCATAGA-----	-292
Rn	AGGCCGGATGTCCAAGTAGAAGATATGTTGAAATTTTGCATAGA-----	-282
Mr	AGGTTGGATGTCCAAGTAGACGATATATTGAAATATGCATA-----	-284



Bt	-----TTG-----AGCACATCATGTAA-----CTTTATGGGTCTC-----TTTTCC-----	-549
Cf	-----TCA-----TGCATATCATATAACAG-----CTTCAT---TATC-----TATCAA-----	-534
Dn	-----TCATC-----CACCCATT-----TTTTATGGGCTTCTATCTTGTAAATATATA-----	-387
Ec	-----TCA-----TGTACGTCGTGTAA-----CTTTCTGACAACC-----TATAAA-----	-549
Hs	-----TCG-----GGCACATGATGTAA-----CTCTATAGGACTCTATTTTAA---TGTATA-----	-579
La	-----CCA-----TGTACATTACTCAGC-----CTTTACGGCCCTC-----TGTATA-----	-571
Oc	-----TCA-----TGCACATAATTTCACTTTGTTTCTAATCTATGA-----	-497
Sa	CAAAGCTCAGCG-----TTTACTCCTTG-----CTCTACA-----CTCA-----	-436
Ss	-----TTGT-----TGCACATCATGTAA-----CTTTATGGGTCTC-----TTTTTC-----	-550
Cp	TGAACCTCA-----TTTAACCTTTATGGAT-----TTCTGT-----CTCATA-----	-515
Mm	CA--GGTGTGTG--CTAAATGTACACCCAAATGTTTA-----TGTGAAGTTC-----TACATA-----	-241
Rn	-----CATGGTGTGTGACCTAGTGTACATTATTTAACGTTTA-----TGGATAG-----TGTGCA-----	-232
Mr	-----TACATTATACAACGTTTA-----TGTGCCCTTCC-----TATA-----	-251



Bt	-----G--ACTAAACCTTCA-----CTATCACATTAGATAACGGAAAGGAAAAGT-----	-507
Cf	ACATAGG--AACAAAACGGGCA-----CTATCTCATTAGATAAATGAAAAGGAAAAGT-----	-486
Dn	AAACAGAGGGGATAACCCCTTTA-----CTATCACA--GGAGAATGGAAGGGAAA--	-341
Ec	ACAAAGG--ACTAGACCTTCA-----CTATCGCCTTAGGTTATGGAAGGGGAAAGT-----	-501
Hs	AAACAGG--AATAATCCTTTATTATTATCTATGCAATACATAATCCATTATCTATTACATGGGATAATGGAATGGGAAGT-----	-501
La	AGGCAGGTAAATCATTCTTCA-----CTACCGCATTGATGATGCTA--GCGAAGT-----	-522
Oc	-----ATGATTCCTTCAC-----CTGTATTGGTAAATGGAAGAGAAAAGT-----	-459
Sa	--GTA-----TTACCTTCTGG-----	-422
Ss	--A--AGTAAACCTTCA-----CTATCACGTTAGATAAATGGAAGGAAAAGT-----	-508
Cp	ATGTA-----TAATCCTCTAGT-----ATCAGATAACGGAAAGGAAAAGT-----	-476
Mm	AAC-----	-238
Rn	AA-----	-230
Mr	-----	-251



Bt	CCCCTG--AAGAGGGTTCTAACCTTAATGTATTGCCCTTCTAGCTTCTTTGGTTCTTATGTCGGTGG---ACAAGTT-----	-432
Cf	CCTTTG--GAGAGGGTTCTAACCTTAATGTAGTAC--CCTTCTAGCTG-----TGGTGG---GGGAGTT-----	-428
Dn	-----TTTTAGCTAATTTGATCCAG-----	-321
Ec	CCCTTG--AAGAGGGTTCTAACCTTAATGTATTGCTCCTTCTAGCTTCTTTGGTTCAAAAAGTTTGGTAG---GGAAGTT-----	-426
Hs	CCCTTG--AAGATGGTACTAACCTCAATGTATTATCTCCTTCTAGCTTCTTTGGTTCAAAAAGTTTGGTGA---AGGAGTT-----	-426
La	GCTTTGAAAGGTGGTTC--AACCTCGATGTACTGCCGCTTCTCACTTCTTTGATTCAAAAGTTTGGTCA---GGAGGTT-----	-447
Oc	CCTTGG--AAGATGGCTCTAACCTTAAGGTACTACCCCTTCTTAACTTCTTGGTTGAAAGTTTGGTGGTGGTGGGATT-----	-380
Sa	-----TGGTCCTCAG-----GGGACCATATGC---ATGCT---AGGGAT-----	-389
Ss	CCTTTG--AAGAGGTTTCTAACCTTAATGTATTGCCCTTCTGCTTCTTTGGTTCAAAAAGTTTGGTGG---GGAAGTT-----	-433
Cp	CCTTTGACA--ATGGTCTTAATCTTAATGTGTTATTGTTTCTTAGCTTCTTGGGTCAAAAAGTTTGGTGGT---AGAGCT-----	-401
Mm	-----GTTTTTAGCTGTAAAAAT-----	-216
Rn	-----AGCTGTAAAAAT-----	-214
Mr	-----AGCTATAAAATAG-----AGGAT-----	-233



TF JARID2

Bt	ATTCAATTCGA-CTAAATGAGGTATTTGGATAGTTTATTAACATATCAAAGCTCTACCCCCCTCCTTCCTCCT-----	-360
Cf	ATACCTTCTGG-CTGAAAGAGGTATTTGGATTCTTTATCAACATATCAAAGCTT--ACTTCCTCTCTTCTTCCC-----	-358
Dn	-----	-321
Ec	AGACATTCAG-CTGAATGAGGTATTTGGATACTTTATCAACATATCAAAGCTGTA-CTACTTCAGTCTTCTC-----	-355
Hs	ACAAATTCGGTTTGAATGATATATTTGGATACTTTATCAACACATCAAAGCTCTACCTA-TCCCTTCCCCCA-----	-354
La	ATGCATTCGG-CTGAACGAGGTACTTGGAGGACGTAGCAACAAATCGAAGTTCTCC-----TCTTTCCTCTA-----	-380
Oc	ACACGTTCTGG-TTTAACGAGGGTTTCAGATATTTTACCAACATATGAAAGC-----ACCCCTCA-----	-321
Sa	TGAA-----CCGG-T-----AGG-----CCGCATGCAATGCTATATTACGACTGCG-----TCCTCACACAATTC	-335
Ss	ATACACTCTGG-CTAAATGAGGTATTTGGATCTTCATTAAACATATCAAAGCTCTACCTCCCT-TTTCCTCCT-----	-362
Cp	ACAAATGCTGG-TTGAATGAGG-----TTACTTCCATCAACACATCAAATTCCTATTT-----TCCTCAC-----C	-341
Mm	A-----ATCCTTCATTATCGCGCAAAAT-----	-193
Rn	A-----ATCTTTCAATTACCATATAAAAT-----	-191
Mr	A-----ATCCTTCAATATCACACAAAT-----	-210



Bt	-----ATTT-----CAAAACCAAATTAACTAAACCTTTTCATTGTGTACACTGTTTG-GGAGAATT-TTAGCA---T	-296
Cf	-----ATTTCAAA-----CAAAACCAAACCTAACTAAACCTTTTCATTGTGTATGTTGTTTGGAGAATT-TTAGCA---T	-289
Dn	-----	-292
Ec	-----ATTT-----CAACAC-----TAAACTAACATCTTTTCATTGTGTATGCTTTTTATGGAGGATT-TTAGCA---T	-295
Hs	-----TTCT-----CAAAACCAAGCTGAATTAACATCTTTACATTTATTATGCAGTTTATGGAGGATT-TTAGCA---T	-289
La	-----ATCT-----CAAAACCAAACCTAAGTAGAAACCTTTACGTTTGTAGGACAGTTTGTAGAGAATT-TTAGCA---T	-315
Oc	-----ATTT-----AATGACAAACTAACTAACACC-----ATTATGCAGTTTGTGGACAATT-CTATCAG---T	-275
Sa	CCAAAATCTTCTTTCTAAATCAGG-----GTTCTTTTCATTTTTAATA-----AGGAAAATA-GCATGG---T	-275
Ss	-----ATTT-----CAAAACCAAATTAACTAAACCTATTTCATTGTCTATCTGTTTGTGGAAAATT-TTAGCA---T	-297
Cp	CCATAATCT-----CAAAATCAA-----CACTTCATATTGCTATATAGCTTGTGGAGAATT-TTAGCA---T	-281
Mm	-----AATGAAATTACGCGTCA-----TGTCACCTGAGCTTACGTACCTCCATCTTTA---T	-144
Rn	-----AATGGAATCGCGAGTTT-----TGTCACCTGAGCTTACGTACCACTATCTTTA---T	-142
Mr	-----ATACAAATTTGGTGGTTCTCGATCGCTCTGTCA-TGAGTTTGGTACAATCATAATTAATTT	-149



Bt	CAGTTATCTAATTTGATTTACT---TAAAGTCCCTATTTTACAGACAGAAACCCATTGAAAAACC-TTTGAAATCATGG	-221
Cf	TAGTTATCTAATTTGACTTCCT---CAACGTCCCTATTTCTATAGATAAGAAACCCATTGAAAGCCC-ATTGAATTTGTGC	-214
Dn	ATGTTATCTA-TTTGATTTAGC---CAGTGTCCC-ATTTTATAGATGAGGAATT--TGAAAAACCGATTGGAGTTGTGA	-220
Ec	TAGTTACCTAATTTTATTTCACT---GAAAGTCCCTATTTTGTGTA---AAACCCATTGAAAAACC-ATTGAAGTTGTAT	-223
Hs	TAATTATT--GCTTGATTTACT---CAATGTCCCCATGTTATAGATGAGAAC---TGAAAAACCC-ATTGAAGTTGTGA	-219
La	CACTTATCTAATTTGATTTACT---CAACATTTCTATCTTATAGATGAAAACT--TTGAAAACT-ATTGATGTTGTAA	-242
Oc	TAAGTG---TGGATTTACA---CACCGTTTCTGTTCTATAGATGAGAA-----CTTA	-218
Sa	GATTCGACT--TTTTATTGCTC---CACCATTTCTTTTTTACGGCCGAAG-----GATGGTTAA	-220
Ss	TAGTTATCTAATTTGATTTACT---CAACGTCCCTATTTTGCAGATGGGAATCCATTGAAAAACG-TTTGAAATCGTGG	-222
Cp	CAGTTAA---TCGATTTGGTT--TCTTGTTCCTTTTATAGATGAAAAATT-----TGTAAGTGTATGA	-222
Mm	TCAT-----TTTAAAT---T	-133
Rn	TTAT-----GTTCA---T	-132
Mr	TCAT-----CTTAATTACTC	-134



Bt	CTCC-----TGGACTAGAAATGAAGCCTACTTCCAGTATAATGTTCTTTTATGTAATGTTGCTATTTTCTTGAA--	-153
Cf	T-----CAAGCAATGAAGGCTACTTCCAGTCTAGTGTCTTTTCTA--ACGTGCTGTTTTCTTGAAAT	-153
Dn	CTCC-----CAGACTAGAAATGAAGCCTACTTCCAGGCTGGTGTCTTTCTAGTATGGTACTGCTAAGTTGAAAT	-150
Ec	CTCT-----TGGACTAAAAATGAATACTATTTCTAGTCTAGTGTCTTGCTAATATGTTGCTGTTTTCTTCAAAT	-153
Hs	CTCC-----TGGTCTAGAAATGAAGTCTACTTCCAGT-TAATGTTCTTTCTGGTATGCTTTTCTTTGAAAT	-150
La	CTCC-----TGGAACGGGAAGTGAGACTTACT-----TTCTTGTAGAAATGCTTCGGATTGTTGGAAT	-184
Oc	CTCT-----TGAAATAGAAATGACCCCT-TTTCAGTTTAGAAATTTTTCTAGGATCCCCCTGTTTTCTCAGCT	-149
Sa	TTCTCCTCCGAAGATAAAAGTACGTGAAACCGTCTTTTCAGTATAGCGTTTTTTATAAATAGATATATAATTTTGAAAA	-140
Ss	CGCC-----TAGAATACAAATGAAGCCTATTTCCAGACTGATGTTCTTTTAAATATGTTGTTGTTTTCTGAAAT	-152
Cp	TTCT-----TAGACTTAAATGAAGTCTACTTCCGCTCTAGGTTCTAGGTACAT-GTTAAATTTATTTTATTTT	-153
Mm	-----TTTTTATAATATAGTTAGACCTAAAGGTCCAAT-----	-100
Rn	-----TTTTTAAATATAGTTGGAACCTAAAGGTCCAAT-----	-99
Mr	-----TTTTTAAAGAAATAGTTTGCAATTAACCGCAAT-----	-101



Bt CT---CTCTTTTT-----CTTGTTACTGGGTAAAT-----TTTTGAAACGGGCT---AAACT--- -108
 Cf AT---CCCTTTTT-----CTTGTACTGGTTAAA-----TTTTGAAACGAGTT---AAACC--- -109
 Dn CTC---CCCATT---CTTATAATTGGTGACAT-----TTTGAGCTGTCT---AAACC--- -104
 Ec AC---CCCTTTTT-----CTTGTTCCTAAGTAAA-----TTTGGGGCGGGCT---AAACC--- -109
 Hs TTC---CCTTTTTT-----GTCCTTACTGGGTAAA-----TTTTGAAACCAACC---AAATC--- -105
 La GG---CCTTTTGT-----CTTATTCTGGGTAAATTTTTTTTTTTTTTTTTTTTTTTTGGAGCTGACTAGAAAAATCCACG -117
 Oc CTC---CTCATT---CTGTTACTGGGTACAGCT-----TGAGTCGACC---AAACCT--- -102
 Sa TATTATTGCTTATAAATTGAGGGGTGCAATTGCTCCAAT----- -100
 Ss CT---CTCTTTTT-----CTTTTACTGGCTAAA-----TTTTGAGCGGGCT---AAACT--- -108
 Cp TATTTTTCATTTT-----TGCAATTGTGTAAATTTT-----GAACTGTCTA---AACTTCAA -103
 Mm ----- -100
 Rn ----- -99
 Mr ----- -101



CNS1

Bt -----ACAAATATGTCTGGC--TTTCAATCTTC-TAGGCCACTCCTCTTCTATTCCCTC-CG-CCC--TCAGT -47
 Cf -----ACAAAGATGTCTGGC--TTTCAATCTTC-TAGGCCACTCCTCTTCTACTCCCTC-CGCCCT--CAGGT -47
 Dn -----ACAAAGATAAATGAC--TTTCAATCTTC-TAGGCCCTCCTCTTCTCCTCCCTC-CGCCCTTAACC-- -42
 Ec -----ACAAAGATATATGGC--TTTCAATCTTC-TAGGCCACGCTCTTCTACTTCTCTC-CACCCC--CCAGT -47
 Hs -----ACAAAGATGTCCGGC--TTTCAATCTTC-TAGGCCACGCTCTTATGCTCTCTC-CGCCCC--TCAGC -44
 La GAAAAACCAACGAAAAAATGTCCAGC--TTTCAATTTTTC-CAAGCCACGCTGTTCTGCTTCTCTC-CACCCAT--GCAG- -44
 Oc -----CTAAGATGTCTGGC--TTTCAATCAGCGGGGGCCACGCTCTTGTTACCCCG-CCCCAAC-- -43
 Sa -----ATAGCCGGT--TTTCAATCTTC-TAGGCCACTCCTCTTCCCTCCCTCCATACCCCA----- -46
 Ss -----ACAAATATGTCTGGC--TTTCAATCTTC-TTGGCCACTCCTCTTCTACTCCCTC-CG-CCC--TCAGT -47
 Cp -----GAAAGATGTCAAAC--CTTTAATTTTC-TAGGCCACTCCTCTTCTGTGTCTCTC-CGCCCTCA-- -46
 Mm -----AAGATGTCTAGAA--TTGCAATCTTC-TTGGCCACTCCTCTTCTGCTCTCTC----- -52
 Rn -----AAGATGTCTAGAC--TTCCAATCTTC-TTGGCCACTCCTCTTCTGCTCTCTC----- -51
 Mr -----AAGAGTCTGGGACTTTTCCGCAATTT-CTGGCCACTCCTCTTCTGCTCTCTC----- -51



TF CTCF

Bt CCCCCTCCCTCTCACTT-----CTTAAAGCGCTGCACTTTGCTGCGACCGCCATATTTCTTTCTTTTCCCGAGA-TG 22
 Cf TCCCTCCCCCTCACTT-----CTTAAAGCACTGCAATTTGCTGCTGCGCCATATTTCTTCTTTTCCCGAGA-TG 22
 Dn -----CCCCCTGAAC--CTTAAAGCGCTGCAATTTCTGCTGCTGCGCCATATTTTCTTCTTTTCCCGGGG--TG 21
 Ec CCCCCTCCCCCTCACTT-----CTTAAAGCGCTGCAATTTGCTGCTGCGCCATATTTTCTTTTCTTAGGG-TG 22
 Hs ---CCCCCTTCAAGTT-----CTTAAAGCGCTGCAATTTGCTGCTGCGCCATATTTCTTACTCTCTCGGGGCTG 23
 La -CTCTACGTCAAGT-----TTTAAAGTCTGCAATTTGCTGCTGCGCCATATTC--TTCTGTGAGCCCGG 19
 Oc ---CCCCCTCAATT-----CTTAAAGCGCTGCAATTTGCTGCTGCGAGCCATATTTCTACTTCTCTCCGAGGTTG 23
 Sa -CCCTCTCCCTCCTTC-----CTTAAAGTCTGCAATGATGCTGCGAGCCATTTTTC-----CGCCATGCGGTG 18
 Ss CCCCCTCCCTCTCACTT-----CTTAAAGCGCTGCACTTTGCTGCGACCGCCATATTTCTTCTTTTCCCGGG-TG 22
 Cp -GCTCCCCCTCACTT-----CTTAAAGCGCTGCAATTTGCTGCTGCGCCATATTTCTTCTCTCTCGGGGACA 23
 Mm -----CGCCTTCAGCGCCGCGGATCAGTTAAAGGCGTGCAACGGCTTGCTCCAGCCATGTTTGCTCGTTTCCCGTGGAATG 23
 Rn -----CGCCTTCAGCG--CGCCAGTCAAGTTAAAGGCGAGCACTGCTTGCTGCGAGCCATATTTGCTCGTCTCCCGTGGAATG 23
 Mr -----CGCCTTGGGCGTAC--GATCATTTAAAAACATGCAAGTGCTTGCCGAGCCATGTTTGCCAGTTTCCCGTGGAATG 23



Bt GAAGC-TTATTAATATTGGAATTTCTTTGCTGTGTTCTTTCT-GGAACATTTT-CCAGACCCCAACCATGC---CTT 96
 Cf GTAGC-TGCTAACAAGTGGGTGCTTTCGCGGTGTTGTTCTTTCT-GGAACGTTTT-CCAG-CTCCAACCATGC---CTT 95
 Dn GCTAT-CCGCTAACTGTAGGTCTCTCTTCTTTCTTATTGTTCTTTCC-GGAACGATTT-CCAGCCCCCTACTACCC---CTC 95
 Ec GAAAC-TTGGTAACACTTGATCTCTTTGCGCGTGTGTTCTTTCT-GGAACATTTT-CCAGCCCCCAACCATCC---ATT 96
 Hs GAAGC-TTCTGACTGAAGATCTCTCTGCACTTGGGGTCTTTCT-AGAACATTTT-CTAGTCCCCCAACATCCC---TTT 97
 La AGAGA-T--CTGAACCCCGATGTTTCTGCTTGGCTCTTTCT-GGAA-GCGTT-AGAGCCCTGAGATGGGC---TTT 90
 Oc GAAGC-TGCTAGCCATAGTTCTTTCTGTACTTATGTTCTTTCT-GGAACATTTT-CCAGTTCCCCCAATTCG---CTT 98
 Sa AAATC-TTCTGAAA---AGGACTTCTTACCCCTGTGTTCTTTCT-GGATCATTTTCCAGCATGCTATTACCC---CTA 90
 Ss GAAGC-TTGTGTTATTGGAATCTCTTTGCGCGTGTGTTCTTTCT-GGAACATTTT-CCAGCCCCAGCCATGC---CTT 96
 Cp AGAGC-TTCTTAACCGTAGGTCTCTCTCCATTTGTTATTCTTTCC-GGGACATTTT-GTAGCTCTCTAATCCT---TTT 97
 Mm TGGG-TTCTT---CCGTGGTTCTCTCCATCTAAGGAGCTTTGGGGGAACATTTT-TAGTTCCCTTACCACCAAGCCTT 98
 Rn TGAGGTTTCT---CCGTGGTTCTCTCCATCTAAGGGCTTTTGGGGGAACATTTT-TAATCCCCCTACCACCATGCCTT 98
 Mr TGAGC-CTCT---CTGTGGTCTCTGTCCATCTATCGGGGTCTCTGGGAACATTTT-TAGTTCCCTTACCACCATGCCTT 98



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Bt	ATGG	CATA	TTTC	-TTGG	AAAAAA	TTAC	CCAAAAAT--TCATAAAATATTTTT 146
Cf	ATGCC	GTATTT	CTTTAAG	AAAAAT--TC	CCCAAATT--	CCATAAAATA-TCTT 143	
Dn	AGGGC	--ATTT	CCCTCAA	AGGAGCC	ATGAAGATT	--CCTAAATGTT-TT 143	
Ec	ATGGC	ATA	TTTCTTTAG	AAAAA--TT	CACCAA	AAATT--CCATAAAATATTTTT 145	
Hs	ATGGC	GTATTT	CTTTAAAA	---AAATC	ACCTAAAT	--CCATAAAATA-TTTT 144	
La	G-GGC	ATATTT	CTCTG	AAAAGCAA	ATCACCG	AAATTAGTTCTAAAC--TAGG 140	
Oc	ATGGGG	CATTT	CTTAAG	AAAA--AT	CACCAA	ATGA--CATAAAGGGTTT 146	
Sa	CTGGGG	TACTT	ATTTTTA	AGGACCATC-CT	AAATT--	CCATAATATACTTGA 139	
Ss	ATGGC	ATA	TTTCTTTA	AAAAAAATCC	ACCAA	AAAT--TCATAAAATGTTT 147	
Cp	ATAGG	GTACTT	AGCAAA	CAAAAGCA	AT-CAGA	ATT--ACATAAAATATTT-A 145	
Mm	ATGGC	TTATTT	AAGAAAA	CA-----T	ATCAAA	ATT--CCACGAGAT-----T 138	
Rn	ATGGT	GTATTT	AAGAAAA	CA-----T	ATCAAA	ATT--ACATAAGAT-----T 138	
Mr	ATGGT	GTAA	TTAAG	AAAAATA-----T	ATCAAG	ATT--CTATAATAT-----T 138	

