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Article

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De novo genes with an IncRNA origin encode unique human brain developmental functionality

In the format provided by the authors and unedited

Supplementary Figure 1. The alignments of the CDS regions in *de novo* genes with the orthologous regions in rhesus macaque. The disruptive mutations or indels in rhesus macaque were highlighted with red boxes.



ENSG00000167747; ENSG00000172927: Human GCTGGACCTG GTGACCGGG GAGAAACAAG GGAGACAAG GTGCCCAGAC AGGTGCGGGG CTCAGCCAGG AGGCAGAAG CCTGGACGTG TCCCGGGCCA GAGGACACAC CAAGGCACTC TGTGTGGCAC TGGGAACAGG Rhesus CCTGGACCTA ATGACTGGA GAGAAACAAG GGAGACAAG GTGCTCCAGGC AGGTCCCAGG AGGCACAAGA CGTGGATGTG TCCCAGGCCA GCCCAGGCACTC TGTGTGGCAC TGGGAACAGG CTCACCAGG AGGCACAAGA CTGGAACTA ATGACTGAC CAAGGCACTC TGTGTGGCAC TGGGAACAGG CTCACCAGGCACTC TGTGTGGCAC TGGGAACAGG CTCACCAGGACAGA CTGGAACAAGA CTGGAACTA TGTACCTGAC TGGAACAGG CTCACCAGGCACTC TGTGTGGCAC TGGGAACAGG CTCACCAGGCACTC TGTGTGGCACTG TCCACGCACGCAGG AGGACAGGA CTGGAACAGA CTGGAACAGA CTGGAACAGA CTGGAACAGA CTGGAACAAG CTGGAACTA TGTACCTGAC TGGAACAGA CAAGGAACAAG CTGGAACAGA CTGGAACAAGA CTGGAACAGA CTGGAACAGG CTGAACAGA CTGGAACAGA CTGGAACAGA CTGGAACAGA CTGGAACAGA CTGGAACAAGA CTGGAACAGA CTG ENSG00000174407: Human A Rhesus C Clustal ENSG00000175913: Heman ATCITCGTIC CAACGGGGA GGATGGGGC CAGATGGTIT GCAAAGGGCA CACTCGCACA ACGCAATACA CAGAACAAGA TICCGTTGTT ACAGCGCGT GTITACTAGA TGCTAAAAGG GTGGGAGTAG CAGGAGGGTC TIAA Rheeus ATCITCGTIC CAACGGGCGCA GGATGGGGC CAGATGGTIT GCAAAGCCCA CACTCACACA ACCCA-TACA CAGAACAAGA TICCGTTGTT ACAGCGCGTG GTITACTAGA TGCTAAAAGG GTGGGAGTAG CAGGAGGGTC TITAA CAGGAGTAG TICCGTTGTT ACAGGCGTGTTTACTAGA TGCTAAAAGG GTGGGAGTAG CAGGAGGGTC TITAA CAGGAGTAGTTACTAGA TGCTAAAAGG GTGGGAGTAG CAGGAGGGTC TITAA CAGGAGTAGTTACTAGA TGCTAAAAGG GTGGGAGTAG CAGGAGGTCTTACTAGA TGCTAAAAGG TGCGAATACA CAGGAGCTCTAAAGG TGCGAATACA CAGAACAAGA TTCCGTTGTT ACAGCGCGTG GTTTACTAGA TGCTAAAAGG GTGGGAGTAG CAGGAGGGTC TITAA Hamman GCAAACOGGA GTCTTCCTCG CCAGAGTCCC ATAAACGTGC CTCAGTCAGA TCCTGGAGAG ACAGAGAAGG GAAGAGTCA TCAGAGCCTC CTGATTCGAG CACCCATC GAGCTCGGTG GTCCACACAG CCACCGGTG TCCACTCAG CACCGGTTT GAGCTCGGTG GTCCACTCAG CACCGGTTT GAGCTCGTT GAGCTCGTT GAGCTCGGTG GTCCACTCAG CACCGGTTT GAGCTCGTT GAGCTCGGTG GTCCACTCAG CACCGGTTT GAGCTCGGTG GTCCACTCAG CACCGGTT GAGCTCGGTG GTCCACTCAG CACCGGTG GAGCAGAAGAG CACCGGTT GAGCTCGGTG GTCCACTCAG CACCGGTT GAGCTCGGTG GTCCACTCAG CACCGGTT GAGCTCGGTG GTCCACTCAG CACCGGTT GAGCTCGGTG GTCCACTCAG CACCGGTT GAGCTCGGTG GTCACTCAG CACCGGTT GAGCTCACCGGTG GAGCTCACTCAG CACCGGTT GAGCTCACACGGT CACCGGTG GAGCAGAGAG CACCGGTT GAGCTCACACGGT CACCGGTG GAGCACTCAG CACCGGTG GAGCAGAGAG CACCGGTT GAGCTCACCAG CACCGGTG GAGCAGAGAGAG CACCGGTG GAGGAGAGAG CACCGGTG GAGGAGAGAG CACCGGTG GAGGAGAGAG CACCGTG GAGGAGAGAG CACCGGTG GAGGAGAGAGAG CACCGGTG GAGGAGAGAGAG CACCGGTG GAGGAGAGAGAG CACC ENSG00000176911: Human CTGAGCAGCC ATTCCTCTCC CGAGCACATT CCCCTAGAGA AGCTCTGCAC GGTGTGCACAG GCACCAGCTG CAGGAGTGCC ATCCACAGCA CAGCTGTTTA TGAAAAACCG TAATCAACCC AAACATCTGT ATGAAGAAAA ACGAAGAAAC TGACCAGCA CATCCTCTCC CGAGCACATT CCCCTAGAGA AGCTCTGCACCAG GCGCCAGCTG CAGGAGTGCC ATCCACAGCA CAGCTGTTTA TGAAAAACCA TCATCAACCC AAACG—TGT ATGGAGAAAA ATGAAGAAAC CLUSTAT STATEMENT S

ENSG00000177822. ENSG00000178803. ENSG00000179522: CHUSTAN THE COLOR THE COLO Human CTGCCCCAGC CCGAGCCCTG GGCTCACTTA GCAGCCTGAT GCCGAGTTTC AGACGCAGTC CTGCTGCGCT TACACCCGGG CTTCTTCGCC CCCTTGCCAA AGTCTGCAGC CCGATGGATG CTGGGCGCGG GCTTTCCTG AGCGCTTTA AGACGCAGTC CTGTCTGCT TACACCAGGG CTTCTTCGCC CCCTTTCCCAA AGTCTGCAGC CCGGTGGATG CTGGGCGCGG GCTTTCCTG GCCGCTTTAACCCAGGG CTTCCTTCGCC CCCTTTCCCC AACTCTGCAGC CCGGTGGATG CTGGGCGCGG GCTTTCCTG GCCGCTTTAACCCAGGG CTTCCTTCGCC CCCTTTCCCAA AGTCTGCAGC CCGGTGGATG CTGGGCGCG GCTTTCCTG GCCGCTTTAACCCAGGG CTTCCTTCGCC CCCTTTCCCAA AGTCTGCAGC CCGGTGGATG CTGGGCGCG GCTTTCCTG GCCGCTTTAACCCAGGG CTTCCTTCGCC CCCTTTCCCAA AGTCTGCAGC CCGGTGGATG CTGGGCGCG GCTTTCCTG GCCGCTTTAACCCAGGG CTTCCTTCGCC CCCTTTCCCC AACCCAGGG CTTCCTTCGCC CCCTTCCCAA AGTCTCCAAC CCGGGGCGGATG CTGGCAGTG CTGCAGTG CTGCACCAGGG CTTCCTCTGCCC CCCTTCCCCAA AGTCTCCAAC CCGGGCGGATG CTGCAGTG CTG ENSG00000182457. ENSG00000183250: Human ATGGGGTGG ACTGCAGAAG GACCACAGTA GAGAATCCCT CACCAATAAG GAACTGGTT AATCAGGAGT GGCCAGAAGG CTCCTCTCCA GGCCTCACAG AGGGAACAC TGGTCTAGT AGAGACCTG GTCCTCCCA TACAGGACTA GAGAACCTGGT AATCAGGACT GCCAGAAGG CTCCTCTCCA GGCCTCAT-G Haman AGOGGCACGC GTGAGGATCC TGCAGGCCAA GAGACAACAG GGATTACAAA CCCCAGCCC AGCCTTGCAG CTGACCTTGC AGGTGACGCC CTGCCGGGT GTCTCGGTGC AGCTGACAT CAGGGGCCT TGCTGGACAG AAGCTCCAAG AGCTCCAAG AGCTCCAAG AGCATCAAA CCCCAGCCC AGCCTTGCAG CTGACCTTGC AGGGAGACAC CTGCCGGTG GTCCCGGTG AGCTGACAT CAGGGCCT TGCTGGACAG AAGCTCCAAG AGCTCCAAG AGCTCAACAT CAGGGCCT TGCTGACAGA AAGCTCCAAG AGCTCAACAT CAGGGCCT AGCTGACAT AGCTGACACT AGCTCAACAT CAGGGCCT AGCTGACAT AGCTCCAAG AGCTCAACAT CAGGGCCT AGCTGACAT AGCTCCAAG AGCTCAACAT CAGGGCCT AGCTGACAT AGCTCCAAG AGCTCAACAT CAGGGCCT AGCTGACAT AGCTCCAAG AGCTCCAAG AGCTCCAAG AGCTCAACAT CAGGGCCT AGCTGACAT AGCTCCAAG AGCTCCAAG AGCTCAACAT CAGGGCCT AGCTGACAT AGCTCCAAG AGCTCAAG AGCTCCAAG AGCTCCAAG AGCTCCAAG AGCTCCAAG AGCTCAAGA AGCTCAAGA AGCTCCAAG AGCTCAAGA AGCTCCAAG AGCTCAAGA AGC Human TCCACACTTG GCCCCCAGGC GCTGGAGCTG GAGCACTGCC ACGAGAGGGG ATCCTGCCGT GGCTGCGCCA GCTTCAGCCC TTTCCCTGCA CCGAGATGTC CCAGTGAGCC GCTGGGTCT CACAGTTCCC GTTGGGCCAT CAGAGGAAGAGCTC ACCACACTCA ACCCCCAGGG GCTGGGGTCT CACAGTTCCA GTTAGCCCAT GGCTGCATCA GTTTCAGCC TTTCCCCCC CCGAGACGTC CCAGAGACGC GCTGGGTCT CACAGTTCCT GTTAGCCCAT CAGAGGAAGAGCT GCTGGTTCCAT GTTAGCCCAT CAGAGGAAGACT CAGAGAGAAGACT CAGAGAAGACT CAGAGAAGACT CAGAGGAAGACT CAGAGAAGACT CAGAGAA Human GGAGCTATGG GCTGA Rhesus GGGGCTGTGG GCTGA Clustal ** *** *** *****

ENSG00000187488:
Human ATGITICTC ATCICAGGCC CGTGCCTGGG ACCCCAGGTG GGCAGCCTTG AGCCCAGGGG ACTCAGTGCC CTCCATGCCC TGGCTGGCAG AAAC-CTCA ACAGCAGTT GGGCACCGTG GGCACCCTC AGCCCAGGGG ACTTAGTCCC CTCCATGAC AGGCTGGCAG AAAC-CTCA ACAGCGGTC GGGCACCGT GG-CTCTCCT CLustal ************************************
Himan GCCTTGTTTG CCCCTCAGGC TGCCAGGCAG ACTGGGGGCA GGACAGCCGG AAGCTGAGAC CAAGGCTCCT CACAGAAGGG CCCAGGAAGT CCCCGCCCTT GGGACAGCCT CCTCCTAGC CCCTGCACGG CACCAGTTC CCGAGGGACG Rhesus GCCTTGTTTG CCCCTCAGCG TGCCAGGCAG ACTGGAGGCA CACCAGTTC CAAGAAGAG CCCGGGAAGG CCCCGCCCTT GGGACAGCCT CTCTGAAGC CC-TGCACGG CACCAGCTC CAAGGATG CLUstal ************************************
Human CAGCAGGCCG COTCCCGCAG CGGCCGTGGG TCTGCACAGC CCAGGCCCC CCAGGGCCC CAGGGCCG GACTCTCCTA CACCCAGTA AATGCTGTG CCCTTCTCC CGTGCCCC TGATGCCCC TCCCCACAG GCCCAGGAGA AGGCCCC CAGGAGCTG GACTCTGCTA CACCCAGTG AGCGCCATGT CCTTCTCCC CC-TGCCC
Himan CCCGTGGGGC ACGGAACAGG AGGGTCTGGA CCCTGTGGCC CAGCCAAGG CTACCAGACA GCCACAACCA GCCACACCA CATCCAGTGC CTGGGGCCTG GCCACTGGCT CTTCACAGTG GACCCCAGCA CCTCGGGGTG GCAGAGGGAC GTACAAGCA GCTACAAGCA GCTACAAGCA CCTCCAGTGC CTGGGGCCTA GCCACTGGCT CTTCACAGTG GACCCACACCA CCTCGGGGTA GCCACTGCATTGC CTGGGGCCT GCCACTGGCT CTTCACAGTG GACCCCACCA CCTCGGGGTA GCCACTGGCACACACA CCTCGGGGTA GCCACTGCATTGC GACCCACTGC CTTCACAGTG GACCCACACACA CCTCGGGGTA GCCACACACA CCTCGGGGTA GCCACTGGCACACACA CCTCGGGGTA GCCACTGCATTGC GACCCACTGC CTTCACAGTG GACCCACACACA CCTCGGGGTA GCCACACACA CCTCGGGGTA GCCACTGCATTA GCCACTGC CTTCACAGTG GACCCACACACA CCTCGGGGTA GCCACACACA CCTCGGGGTA GCCACACACA CCTCGGGGTA GCCACTGCATTA GCCACTGCT CTTCACAGTG GACCCACACACACA CCTCGGGGTA GCCACACACACA CCTCGGGGTA GCCACACACACA CCTCGGGGTA GCCACACACACA CCTCGGGGTA GCCACACACA CTCGGGGTA GCCACACACA CCTCGGGGTA GCCACACACA CCTCGGGGTA GCCACACACA CTCGGGGTA GCCACACACA CCTCGGGGTA GCCACACACA CCTCGGGGTA GCCACACACA CCTCGGGGTA GCCACACACACA CCTCGGGGTA GCCACACACA CCTCGGGGTA GCCACACACA CCTCGGGGTA GCCACACACA CCTCGGGGTA GCCACACACA CCTCGGGGTA GCCACACACA CCTCGGGGTA GCCACACACACA CCTCGGGGTA GCCACACACACA CCTCGGGGTA GCCACACACACA CCTCGGGGTA GCCACACACACACACACACACACACACACACACACACA
Human GGCCCCCACG GCCCAGCAGA CATGCGAGCT TCCAGAGTGC AATCTATGTG ATGTCTTCCA ACGTTAA Rhesus GGTCCCCACT GCCCGGCAGA TCCAGCAGCT TCTGGAGGGC AACCCATGTG ACATCTACA Clustal ** ****** **** ***** ***** **** ** *** ** ****
ENSG0000189223:
Human ATGGGGAAGG GTAC CATAT ACTCACAGAA ATGAGTTATT TAAAGAAGAC GGTCCAGATT CCACAGTCCA AAAAAAAAA — ———————————————————————
Hmman TICCTOTTGG CTCACATATC AGAICTICAA GGTCAACATT AAATGGGTGA GTGATGCTTC COCCTCTGTG AAATGGGTT AAGTGGGT TAGGGTATGGC TAGACCACAC CCTGCACTC GGCCTTCAGA AGCCCAGGA GAGAAGCCTC CCAGAAAGCAA CAGACCAAA CAGACCAACACACACA
Human CCTTCCAGAA CCTTCTCAT CCTCCCACCA ACCTCCCCAG CCCTGTCCT CTCTTTGA Rhesus CCTTCCAGAA CCTTCTCCAT CCTCCCACCA CCCTGTCCT CTCTTT Clusta ********* ********* ********* ********
ENSCOURD 196273:
Hmman ATGGGCATAG GTACTGGGCA CACCTGGATG AACAAGGGAG GTAAGGATG GACTTTCTG GACAAGAG GAGATGGAGA ATAAACATGG AAACAAGCAA GATCATTCTG GAGAAAATGC AATCAGATGA TGTGCTAGAT RHSSUS ATGGGCCTAG ATGCCTAGA TGCTGGAGA AACAAGGAG CACCTGAGA AACAAGGAG CAACAGGAG TAAAGCTG GAAAATGC AATCAAGCAG AATCATCTG GAGAAAATGC AATCAGATGA TGTGCTAGATA TGTGCTAGATAC TAAAAGGTG AAACAAGGAA GATCATCTG GAAAAATGC AATCAGATGA TGTGCTAGATAC TAAAAGGTG AAACAAGGAA GATCATCTG GAAAAATGC AATCAGATGA TGTGCTAGATAC TAAAAGGTG GAAAAGGAA AATCAGAAGAA AACAAGGAG AACAGTGAGAAAATGC AAACAGGAGA AACAGTGAGAAAATGC AAACAGGAGAAAATGC AAACAAGGAGAAAATGC AAACAAGGAAAATGC AAACAAGGAGAAAATGC AAACAAGGAGAAAATGC AAACAAGGAGAAAATGC AAACAAGGAGAAAATGC AAACAAGGAGAAAATGC AAACAAGGAGAAAATGC AAACAAGGAAAATGC AAACAAGGAGAAAATGC AAACAGGAGAAAATGC AAACAAGGAGAAAATGC AAACAAGGAGAAAATGC AAACAAGGAGAAAATGC AAACAAGGAAAATGC AAACAAGGAGAAAATGC AAACAAGGAGAAAATGC AAACAAGGAAAATGC AAACAAGGAAAATGC AAACAAGGAAAATGC AAACAAGGAAAATGC AAACAAGGAAAATGC AAACAAGAAAATGC AAACAAGAAAAGAA
Rhesus GGTAACAGAG AGAGGTTGAA TGAGAGAGAG GGCTGTGACA GCCTCTCTGA GAAGCTGAAA TCCAAGCAGA ACCCGAAAGA CGAGGAGAAA CTCAGATACA TAAAGACTGG GAAAAGGATT CAGGTAGAGG GAACAGTGCG TGCAAAGGCC Clustal ********* ******** *****************
Human CTGAGGTGGG TGCAGTAG Rhesus CTGAG-TGGG TGCAGTAG Clustal ***** **** *************************
ENSG00000197916: Human ATGCAGCCCT GTACTCCTGG CCTCAAGCCA TCCTCCCACC TCAGCCTCCA GAGTAGCTGG GAGCACAAGT GTGCACCATC ACACCCAGCT AACGTTTATT TTTTTTAGA GAGAGTCTCA CTCACTATGT TGCCCAGGCT GGTCTTAAAA
Human ATGCAGCCCT GTACTCCTGG CCTCAAGCCA TCCTCCCACC TCAGCCTCCA GAGTAGCTGG GAGCACAGT GTGCACCATC ACACCTATATT TTTTTTATAG GAGATCTCA CTCACT TGT TGCCCAGGCT GGTCTTAAAA Rhesus ATGCAGCCTT GACCTCCTGG CCTCAAGCCA TCCTCCCACC TCGGCCTCCA GAGTAGCTGG GAGCACAAGT GTGCACCGTC ACGCCCAGCT AATGTTTATT TTTTTTATAG AGACATCTCA CTCACCT GGCCTAGGCT GACCTCAGCT GACCTAGCT GACCTCAGCT GACCTAGCT GACCTCAGCT GACCTCAGCT GACC
Human CTCCTGGCCT CAACTGATCC TCCTCCT TTGGCCTCCC AAAGTGCTGG GACCATAGGC ATGACCTGCC ATTGCCAGCT AATTGTTTTA TTTTTACATT TGCTGAGGCA GGGTCTGCT -TGTGGCC-G TGCAGATCTT GAACTCCTGG Rhesus CTCCTGGCCT CAACTGATCC TGTCCCTCCT TTGGCTTCCC AAAGCTCTGG GACCATAGGC CTGAGCTGC AATTTA TTTTTACATT TGCTGAGGTG GGGTCCACT GTGTGGCCCA, GGCAGATCTT GAACTCCTGG Clustal ************************************
Human CCTTGAGCAG TACCTCCCTC CTGGGTCTCT TACAGTGCTG GGATGATAGG GGTGAGCCGC TGTGCCCGGC CCGGGGTTTC TTTTTGAAGT GGTGA Rhesus CCT
ENSC00000198547:
Human ATCTICTA GOCTOTTA GACTECOGG GETCAMSCGA TITCTCECC TCASCCTCC AACATGCTGG ATCACAGOCA GTGGCCCACT GOCTGGCCA GTTTTCCCTT TACAAAAACT GGAATGCTGA GCCGGCCAC TACAGTCTG GCTTTCACTGCCCA GTTACAGACACT GCATGCACC GTACACCCAC GTACACCAC
Hmman GCTGGACTCA CTGCCCACCT CTGGGACCTT GGCGGGGGG CGGGAAGGAG GACCTCAAAG GCTCAGCCAGA TCCACCCCA GCCCAGCCAC CACGCCCACC CTCCTCCTC GCAACACCCA GGCCCTTATC AGGAAAGGAT TTGGGTTGGT Rhesus ACTGGACTCA CTGCCCACCT CTGGGACTT GGCGGGGGG GGGAAGGAG GACCTCAAAG GACCTAGAGCAGT CTCAGCGTA CCCAGACCACCA CCAGACCACC TCCTCCTCT CACAACACCCA GGCCCTTATC AGGAAAGGAT TTGGGTTGGT Clustal ************************************
Hmma GGGGAGGGG -GGGGGAGG TTGGAGGCT CAGGCTCAGC AAGGTGGGT GGAAGATGG GGAAGTGGG GGGGCCTGC TGGGGGGGG AGGCCATGG GAGGATGGC CAGAATGGG CAGGTGGGT CGTTTGGCCA CLustal ************************************
Human ASCICITGICC TOGGIGGOCT GGACCICAAC AIGITICEAG GACTICIGCC TOCCAICCIT GCCAGGCAAG TIGCCIGCAC CITTAATIAG CAAGCAGCAG TITCITCCCA AITCAICACG GIGGGIGTIT AATIAG GACTICIGCC TOCCAICCIT GCCAGGCAAG TIGCCIGCAC CITTAATIAG CAAGCAGCAG TITCITCCCCG AITCAICACG GIGGGIGTIT AATIAG CLUSTAL ************************************
ENSG00000203930;
Human ATC CACTGG AAAAATTCST AGACATGGAA TTCCTGGATC AAATGATACT AAGGGGGACT TGCCTGGAAG CAGACTTGTG TCCCCAGTAT ACAAACTCAC CCTTTAATGC ACACACTGAC CAGATAACAC AAACACA—T TTACCCCCAC Rhesus TTC COCTGG AAAAATTCAT AGACATGGAA TTCCTGGATC AAATGATACT AAGGGGGACT TGCCTGGAAG CAGACTTGTA TCCGCAGTGT ACAAACTCAT CCTTTAGTGC CCACACTGGC CGCATAACAC AAACACA—T TTACTCCCAC
Himman AGCACCTAGA CTCTTCTCAG AGTACAGACA CTTGCCTTCC AGTACAGACA CATATCCAA GGCACACGA CAAAGCACCAC AGCACAGAA TTTTCCCCCAG AACCACTGA CACCCCCCTTTACT TAGACTCTC CAGAGGCACAC AGTACAAGACACTACACACACTACACACACACACACACAC
Clustal ***** *** * *** **** *** ******** *****
Risesus TAGTACTCC TTCA Clustal ******** * ** *

ENSG00000204091.

Human Rhesus Clustal	ATGAAGAGGA	GGGAGGCAGT	CTGCACGCAC	CGCCATT	CTAGGAACTG	GAAAGCGCCT * ****	CCCGCTCCCC	CCGCCCTTAG	GAAGATCCAT ********	CCTTGTGGAA	CCTTACCCAG	GCTTACCAGO	C CTTTGCTGAC	GTTGATCTAT CTTGATCTAT	TTGGACTAGT * **
Human Rhesus Clustal	ATCAGTCAGT	AGGACTTGAG	ACGTTGGTTC	TCTACACTTG	CACCCTCCTT	GTCCCCATCA	. AAATATCCAG	TACTCTACCT	CCAGGGAGTA	GACTTGACCC	TCAAATAGCA	AGTTCAGCC1	TCCCAGGTC1	AGGTTCCCTG AGGTTCCCTG	GGGGTTTAAG
Human Rhesus Clustal	ATTCGTATGG	TTCCTTAGTA	TAGAGGGCT/	A GCTGTGAGTT A GCTGTGAGAT * ******** *	GGAATCCCAC	TATGAGCTTT	AG								
ENSG0000	0204292:														
Human Rhesus Clustal	ATGACCTTTT ATGACCTTTT *********	TCTCAACCAT TCTCAACCAT *********	GCGCAAGTGG GTGCAAGTGG * *******	TATTTCTGCG TATTTCTGCG **********	TGCTTCAAAT TGCTTCAAAT ********	ATCACAGGCC ATCACAGGCG ********	GGATTGTCAG GGATTGTCAG ********	GAAACCAAGG GAAGCCGAGG *** ** ***	AGGGGCCTTT AGGGGCCTTT ********	TGG.AGAGAA TGA.AGAGAA ** ******	TGATGCTGAG TAATGCTGAG * ******	C-ATCCGGGT CCATCCGGGA * ******	CCCTGGACAG CCCTGGATGA ******	CCAGCAGCCC I C-AGAAGCCC I * ** ***** *	GAGGCAGAC GAGGCAGAC *******
Rhesus	AGAAATTTGG	ACAACTCAGG	ACGGGGAACT	TGGAAGGCAG	CGCCTACAGG	TCTGAGTGGT	CCCTGCCTGT	GTTGACTCAA	TTCTTCCTCC	AAGGCAAGAG	CCGCTAGGAA	CAGAGTCAGG	ACATCCTACT	GCCCAAGGCT G GCCCAAGGCT G	TTGAGCTCG
Human Rhesus Clustal	GCCACGGG	CTGTACAGGA	AGGATGACTG	GGGAGGCCTC GGGAGGCCTC *********	AGGAAACTTA	CAATCACAGG	AAACTTACAA	TCACGATGGA	AGGCAAAGTG	GAAGCAGGT-	GTGGCTTCAT	GGCAGGAGCA	GGAGGAAGGT	GGTGGGGAGG T GG-GGGGAGG T ** ****** *	GCTACATAC
Rhesus	TTTTAAACAA	CTGGATCTTG CTGAATCTTG *** ******	TGA												
ENSG0000	0204380:														
Rhesus	ACGGCGCTC	TCATCTGCCC	TGCCTCTCTG	CAGCACTTTC CACCACCTTC ** *** ***	CTTTTCTCCA	C-AGCTTCTG CTGGCTTCTG * *******	GGACCCCACC	CGGCTTCTCT	CTCATGTCGC	-GCTTCTCAG	ACTCATCTGC ACTCATCTGC	CCAAGGG	CTCCAGGAGT	GCCCCAGGTC ACCCCAGGTC *******	CTGTGTTGTC
Rhesus	TTCATCTTAG	CACTCTCCAA CACTCTCCGA ********	GGTGCCTTCT	TCTGCTTCTT	GGCTTTAATA	CAACCTATGG	ACCCATGGCC	ATAGGCTGGC	ACACATCTGC	CTTTAGCCCT CCTTAGCCCT * *******	GACTGCTCTC	TAGAATTGCA	GATTCTTTCC	TCCAAT-GCT TCCAATTGCT	TTCTTGACAC
Human Rhesus Clustal	TGGCACATAG CGGAACGTAG ** ** ***	ACAGCTAATT ATAGCTAATT * ********	AGACTTCTCA AGACTTCTCA	AACTGGACAT AACTGGACAT ************	TGTCAAAACT TGTCAAAACT **********	CTGAGCTGCT CTGAGCTGCT	CACC CACCTGCTCA ****	CTTCCAAG CCCTTCCAAG *******	CATTCCTGTC CATTCTTCTC ***** * **	CCTTCCCCCC CCTTACCCCC **** *****	ATCAACAGCA ATCAAGCC ***** **	CTTCTGTGCT CTTCTGTGCT	TGCAGCTGAT TGCAGCTGAT	CCAGCCAAAG CCAGCCAAAG **********	ATCTAGGTGT ATCTAGGTGT ********************************
Rhesus	ACCCTTATTT	CCCCCCTTTC CCCCCCTTTC *********	CTCACTCCTA	A											
ENSG0000	0204626:														
Human Rhesus Clustal	ATGCACAGCC ATCCACAGCC	TGCC#	C	AGGCGCACAC AGGCGCACAC *********	AGCGACACAC	ACAAGCCACT	GGTTGGCCTC	CTCCCCAGCG	CCCTGGGGAC	AGCCCAGGCC AGCCCAGGCC ********	CTTCTCCAGC	GCTTCTGTCC	TGCCCACCTT	CCCTCTGTGG A	GGAACGGCT
Human Rhesus Clustal	CAGACAGGAG CAGACAGGAC ********	ACCCCGTGGC	CCTCCCCCAG	GGCCCAGAGA GGCCCAGAGA *********	AGTGGGTGCG	GGGCGGTGGC	CTCTCCCCCA	GGAAT	GAGGC	ATCAAGGTCG	ACGGACTTAG	ACCACCCTGG	GCCCCCAGGC	TAGAAAGATG C TAGGAAGATG C *** ****** *	ATGGCCCCA
Human Rhesus Clustal	GAGTCAGAAT GAGTCAGAAT	GGGCACCATG GGGCACCATG	GCAACCCCAG GCAACCCCGG	CTACCCTGTG CTACCCTGGG **********	AGCCGAAGTG AGCCGAAGTG	GCTGGGGAGC GCTGGGGAGC **********	AGGAAGTCGA AGGAAGTAGA ******* **	AGCCTCACAG AGCGTCACAG	AGAAAGTGGT AGAAAGCGGC ****** **	CTCCGGGGAG CCCCGGGGAG * *******	GAGGACCCAG GAGGACCCAG	CAGATGTGCA CAGACATAGA **** * *	AAGAG AAGGGGAGAA *** *	AGGAACA C GACAGGAGCA C **** ** *	ACTCCTGTG ACGCCTGTG ** *****
Human Rhesus Clustal	GCCCCAGAGA	GAGTGGCAGC	CCAGACACC-	GCCACCTCCC GCCAGCTCCC **** *****	C-GCCACTGA										
ENSG0000	0204666:														
Rhesus	ATGTCACTAG	ACAGTCGGGC	CCTCAAGGAC	CTGGCAACTG	GAGGCTTGGA	CCTCGGGTCG	GCTTCCCACG	CGAAGCTTGC	TCCCCACCTG	CATCCGCACG	TTGGTGGAGA	CGCTGCCCCG	GCCCCACGGA	TACTTCCGCG (CATGTCAGAC
Human Rhesus	TCCCTGATGA TCCCTGATGA	ACTACCCTTC	CCAGAGTACC CCAGAATCCC	GCGGGAGC C	GGGCTCCTGA	GGGCGACGGT GGGCGACGGT	CCTCTGATGG CCTCTGATGG	CAGATGCGGG CCGATGCGGG	AGAAACTCTG AGAAACCCTG	GCGTCAGGCG GCGTCAGGCG	GCCCTCGCGT GCCCTCGAGT	GGAGCACACG GGGGCACACG	AAGTCGTGGC AAGTCGTGGC	* * ** *** TTATTCTGGC TTATTCTGGC T	TTCAGTATGT TTCAGTATGC
Human Rhesus Clustal	GGGGTGGAGA GGGGTGGAGA *********	AGGCGATCCA AGGCGATCCA *********	CGCAGCTGCG CGAGGCTGCC ** *****	TCTATTTCCT TCTGTTTCCT *** ******	GTGGATCAAT ATGGATCAAA ********	CGCAAAATAC CGCAGAAATC **** ** *	GTTCTGTAA GTTCTGTAA ********								
ENSG0000	0204674:														
Human Rhesus Clustal	ATGCCCCTCC	CAGGAACCCC CAGTACCCCC	AGGACCTGTC	ACCACCTCCC ACCACCTCCC	CACAGACCCC CACAGAACCC	CACCCCCCGC CACCCCCCGC	CCCCTCACCA CCCCTCACCA	CCGACTGGCG CTGACTGGCG	CATCTTGTCC CATCTTGTCC	GGCAAGGGGT GGCAAGGGGT	CCGGGGGCTC CCGGGGGCTC	GGCCCGGGCT GGCCCGGGCT	GTCTCCAAGC GTCTCCAAGC	TGCGCTCCTC (CAGCTCAGGG CAGCTCGGGG
Human Rhesus	AACAGCTTGC AAGAGCTTGC	TCCGGATCAG TCCGGATCAG	AGACCTGGGG AGACCTGGGG	GTGAGGAAGA GTGAGGAAGA	GTCAGGAGGA GTCAGGAGGA	GGCCGCCCCT GGACGCCCCT	CCTTCCCCCC TCTTCCCC	GGCCCCAGTC GGCCCCAGTC	ACGGGCACAT ACAGGCACAT	GCACAGACCA GCACAGACCA	CAAACCCCTA CAAACCCCTA	CTGGGCAGAC CTGTGCAGAC	ACAAACACAC ACAAACACAC	GACCCGGAGC A	ACAC ACACACACCA
Clustal Human Rhesus Clustal	** ******	******	CCAC	CAGAGCACGG CAGAGCACGG	TGGGGTCGCT TGGGGTCGCT	GCTCTGCCGG GCTCTGCCGG	CTCAGGTGGT CTCAGGTGGT	AGGACAGTGC AGGACAGCGC	CACCAGGAGG CACCAGGAGG	CCACAGAAGA CCACAGAAGA	CTGA CTGA	*** *****	*******	******	****

ENSG00000205056;
Human ATSTICAACA AATGCTCCTT TCATICCTCT AITTACAGAC CIGCCOCAGA CAATICTGCT AGCAGCCTTT GTGCTATTAT CTGTTTTCTA AACTTAGTAA TTGAGTGTGA TCTGGAGACT AA-CT_TGAA ATAAATAAGC TGATTATTA AATGCTCATTA AATG
Human THATTITC CAAAACAACA GAATACGATT TAGCAAATTA CTCTTAAGA TATTATTITA CATTICCTAC CTGAGTTGAT GTGTGAGCAA TATGTCACTT TCATAAAGCC AGGTATACATTATGGA CAGGTAAGTA Rheeus THTATTITC CAAAACAACA GAATATGAT AGCAAATTA CTCTTAAGGA TATTATTITC CACTICTAGA TATTCCTAC CTGAGTTGAT GTGTGAGCAA TATGTCACTT CCACAAAGCC AGGTATATA ACATTACGGA CAGGTAAGTA CACTTACGGA CAGGTAAGTA CACTTA
Human AAAACATAI TAITIATICI ACGITITIGI CCAAAAATIT JAAATICAA CTCTTCCCCC GTGTTCCTA A Rhesus AAAACATAI TAITIATICI ACGITITIGI CCAACAGTIT TAAATITCAA CTCTTCCCCA TCTCTCCTA A Clustal **** ***** ******** ******* ****** ****
ENSG00000205056; Human ATGGGGGGG GGAAAGTTT TGCATTGGAC CAAATCACTG CCTTAGAAGG AAAGAGATTG CAATCCCATT CATTITTAAG ATCTGCAATG GGTTGGGATG ATACCCATT
Human AGGAGAGGA GGAAAAGTTI TGCATTGGAC CAAATCACTG CCTTAGAAGG AAAGAATTC CAATCCCATT CATTITTAAG ATCTGCAATG GGTTGGGATG ATACCCATTT ATGGAGAGGA GGAAAAGTTI TGCATTGGAC CAAATCACTA CCTTAGAAGG AAAGAGATTT CAATCCCATT CATTITTAAG ACCTGCAATG GGTTGGGATG ATACCCACTT GGTCTCTTG GCAATTGAC GGTCTCTTG GCAATTGAC CTTTGGCATG GATACCCACTT GGTCTCTTG GCAATTGAC AAAGAAAAAAA AAAGAAAAAA AAAGAAAAAA AGAAAAAAAA
Rhesus ICTICGCAI CITIGCCAIA GGATATCAIC GAC Clustal **** *** * ********** ********** **
ENSG00000205373;
Human Arga COCAA CCCTCGGGTC CCCAGGGGC GCTCCAGGGC GGAGCGCCAA CTCCCAGGGC CCTTCCGACC CCCGCGTCCC ATTGTTCCGA ATCTCACTCA CCTCGGAGGA TGCCGGGGG GGCCTGGCTG GGGGCGTCAG CTCATCGACC CCCACGTCCC ATTGTTCCGA ATCTCACTCA CCTCGAGGA TGCCGGGGA GGCCTGGCTG GGGGGCTCAG CTCAGGGC CACGAGCTCC CACGAGCTC CACGAGCTCC CACGAGCTC CACGAGC
Human CGCAGCCCA GAAAGCTAGG TCGTGTGG CAGGATCCCC GAAGGCCTAC CCGCGCACTT CTCCGCCTAC CCTCCCGAAGC GGGGGCAGCC GGGGGCCCTT CACCCTCCTC GCGAGACAGC GGAGACCCCA GCGGCGCCTG CCACCCCTGT Thesus CGCCAGCCCA GAAACCTAGG TCGTGAAGC CAGGATCCCC GAAGACCCTAC CCGCCGACTT CTCCGCCTAC CCTCCCAAGC GGGGCCGCTC CACCCTCCT CACCCTCCT CGCGAACAGC GGAGACCCCA GGGGCGCTG CCACCCCTGT CTCCGCAGC GGGGCGCCTT CACCCTCCT CACCCTCCT CGCGAACAGC GGAGACCCCA GGGGCGCTG CCACCCCTGT CTCCGCAGC GGGGCGCTG CACCCCTGT CACCCTCCT CACCCTCCT CACCCTCCT CGCGAACAGC GGAGACCCCA GGGCGCCTG CCACCCCTGT CACCCTCCT CACCCTCT CACCCT
Haman GAGGCAAAGG GCTCATCACC AATGGCAGGT CGGAAGCAGG GCAGAGAGG GAGAGAGTG AGACCCACCC CCCAGCTCCC G-CGCATCAA AACACAACAC CGCCTTCCT CACGCATGG CAGCAGATG ACGCCGACCT CGGGGGGGG GCTCAGCCGA GAGACAGG GCAAAGCAGG GCAAAGAGTG AGACCCACCC ACCACTCCC GCCCCTCCA AACACACACC CGCCCTTCCC CACGCATGG CAGCAGAGTG GCGCCGCCC CGAGGGGGG GCTCAGCCGC CTCAGCCC TCCACCCATGC CACGCATGC CACGCATGC CACGCATGC AATGCCACCC TCCACCCATGC CACGCATGC
Human COGGCCCAA TGOGGCCCCT CCCCGCGCG TCCAGACCC GGAGGAGGGC AGCGGACC TCCCCATCTT GTTACTGGTA CTCAGCCACT GGGGACACTG ACTGAATGTT CGCCCCTAAC TTACCCGGAA AACACGAGAA ACTAGTTGGAT CTCAGCCCC TGCGCAACTG ACTGAATGTT CGCCCCTAAC TTACCCGGAA AACACGACAA ACTAGTTGGAT CTCAGCCCT TGTTACTGGTA CTCAGCCCT TGCGAACTG ACTGAATGTT CGCCCCTAAC TTACCCGGAA AACACGACAA CTAGTTCGAT CTCAGCCCT TGTTACTGGTA CTCAGCCCT TGCGAACTG ACTGAATGTT CGCCCCTAAC TTACCCGGAA AACACGACAA CTAGTTCGAT CTCAGCCCT TGTTACTGGTA CTCAGCCCT TGCGAACTG ACTGAATGTT CGCCCCTAAC TTACCCGGAA AACACGACAA CTAGTTCGAT CTCAGCCCT TGCCACCT TGCCACCT TGCGAACTG ACTGAATGTT CGCCCCTAAC TTACCCGGAA AACACGACAA CTAGTTCGAT CTCAGCCCT TGCCACCT TGCCACCCT TGCCACCT TGCCACCT TGCCACCT TGCCACCT TGCCACCT TGCCACCT TGCCACCCT TGCCACCT TG
Human GTOGTTICAA CCTTACCAAA CTCTGCGGGA ACTTACGAAA TIATCTTIAG TGTCTAGATA G Rhesus GTOGTTICAA CCTCACCAAA CTCTGCGGGA ACTTACGAAA TIGTCTCTAG TGTCTAGATA A
Clustal ******** *** ****** * ****** * ***** ** *** *** *** ****
ENSG00000205557:
ENSG00000205557: Human ATSTITCGAT TICACACAAA GAAAGAGCAC ACGICCACCA ICTICAGIGG GGGCTGICTI TIGCITCACT GGCAAGCAGGC ACTGAATITI ICTIGCATGA CAAATCIGGA GGTTTACTGG TGAGAGAGCC AATGGGCATT Rhesus ATGGCCAATT TICCCCACACG GAAAGACCA ACGICCACCA ICTITGGIGG GGGGTGICTI TIGCITCACT GCGTTCACTG GCAGTCGGC ACTGAATTIT ICTIGCATGA CAAATCIGGA GGTTTACTGG TGAGAGAGCC AATGGGCATT CLustal **** **** **************************
ENSG00000205557: Human AIGTITCGAT TICACACAAA GAAAGAGCAC ACGTCCACCA ICTICAGTGG GGGCTGTCTT TIGCTTCACT GGC
ENSG00000205557: Human AIGTITCGAT TICACACAAA GAAAGAGCAC ACGTCCACCA ICTICAGTGG GGGCTGTTT TIGCTTCACT GGC
ENSG00000205557; Human ATENTIOGAT TICACACAAA GAAAGAGCAC ACGTOCAACCA ICTICAGTGG GGGCTGCTT TIGCTICACT GGC
ENSGOOOOO205557: Human AIGHTICGAT TICACACAAA GAAAGAGCAC ACGICCACCA ICHTCAGIGG GGGCTGICTT TIGCTICACT GGC
ENGGOOOOO205557; Human ATCHTTOGAT TICACACAAA GAAAGAGCAC ACCICCACCA TCTICAGTGG GGGCTGTCIT TECCTICACT GGC
ENGGOOOD0205557. #################################
ENGGOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
EMSCOOO00205557. Human Rhesus AIGTITCART TICACACAAA GAAAGAGCAC AGGICCACCA TUTICAGTOG GGGCTGTTT TIGCTICACT GGCAAGCAGGC ACTGAATTIT TUTIGCATGA CAAATCTGGA GGTTTACTGG TGAGAGAGCC AATGGGCATT Clustal ************************************
ENGINEERING TICACCACA GAAGGCCA COTICACCA COTICACACA COTICACACACA COTICACACACA COTICACACA COTICACACA COTICACACA COTICACACA COTICACACACA COTICACACACA COTICAC
ENGINEERING TICHCUCANA CANAGGGGG ACCICACA TOTTCGGTG GOCCUTCHT TICHTOAT GOC
EMBRON ATOTITICAL TICACACAA GAMAGAGAN ACTICACTA RITTERATOG GOGUTETIT TICATECAT GOC

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Human Rhesus Clustal	ATGTGGTGGC ATGTGGTGGC	ATTTGTGCAC ATTTGTGCAT ********	TCACAGTGCT TCACAGTCCT ******* **	GTGCACCCAC GTGCAACCAC ***** ****	CCACACCGTC TCACGCCATC *** ** **	TAGTTTCAAA TACTTTCAAA ** ******	AGGCATTCAT ATGTTTTCAT * * *****	CTCCCCAGAA CTCCCCAGAA *********	GAAACCTCCC GAAACCTCCC	GTCCTCATTA ATCGTTGCTA ** * **	AGCAGTTACC AGCAGTTACC	CCTCCTTGGT	ATCCCCCAAG ATCCCCCAAG	CCCCTCTC CCCCTCG TT AATGAAA	agg
Human Rhesus Clustal	CTGGGG GAAACTGAGG *** **	TCCGAAGAGG CCCGGAGAGA *** ****	GACTTGCCAG GACTTGCCAG *******	TGAGCGGAGC TGGGCGGAGC ** ******	TOTGATAATA TOTGAGAA ***** **	AGGAATCAGG -GGAATCAGG ********	CACCCA-CTG CACCCATCTG ****** ***	CTGGTCCAGG CTGCTTCAGT *** * ***	CCTGGGTTGG CCTGGGTTGG *******	TTTTCCACCC TTTTCCACCC	AGCAGAGGTG AGCAGAGGTG ********	GCAGAGCCAG ACAGAGCCGG ************	GAGGGTCTGG GAGGTTCTGG	GAGCGCTACA GGGGAGC GAGCGCCACA GGGGAGC ****** *** *******	DOC DOC ***
Human Rhesus Clustal	ATGCTTGCCG ATGCTTGCAG ***********	CCGGAGCCCT CCAGAGCCCT ** ******	GCCCCGCCCC GCCCC *****	GAGCTTCCCC GAGCCTCCCC **** *****	ACCAGGGGGC ACCAGGGGGC *******	AGCAGAGAGC AGCAGAGCGC ******* **	TTTCCAGAAC TTTCCAGAGC ********	CCGCCGCGGG CGGCCGCGGG * *******	GCTGGAGGGA GCTGGCGGGA ***** ****	AGCAGTGGCT AGCAGTGGGT ********	CAGAGCTGCT CAGACCCGCT **** * ***	GACAAACCTC AACAAGCCTC **** ****	ATGTTG ATTCATGTTG	ACCCCAGACC GCTGTCT ACCCCAGATC GCTGTCT ******* * *******	CTG CTG ***
Rhesus	TGGGTTGGGC TGGGTTGAGC ******* **	TTGGGAATT-	GGAGGC	CGCATGATTG CACATGATTG * *******	GAAACATGAA	GACGGCTCAG	CCTGGCTGGA	GCAGCGGGAA	GCGCCATCAC	GTTTACTGA					
ENSG000	00206096:														
Human Rhesus Clustal	ATGGAAGGTG ATGGAAGGTG ********	ATTGTCTCAA ATCGTCTCAA ** ******	GGTGGTCTGC GGTGGTCTGC *********	TCTTCGCAAC TCTTCGCAAC *********	TCTCCTTCTT TCTCCTTCCT ***********	TCTGGTAACC TCTGATAACC **** *****	TCGCCCAGCA TCGCCCAGCA *********	TCCCTCTAGG TCCCTCTAGG *********	TCGAGGGAGG TTGTAGGAGA * * ****	GGTGGTGTTG AGTGGTGTTG ********	GCCTCATTGC GCTTCAGGGC ** *** **	TTTTAACCTG TGCTAACCTG * ******	GATTCCTGTA GATTCCTGTA ********	CCATCCCTCA TGGTTCTC CCATCCCTCA TGGTTCTC	TC TC ***
Human Rhesus Clustal	CTACAAACCT CTACACACCT *****	TTGCAAAGAA	ACCOA	TACTAGCAGA	ATTTTAGTGC	ATGCCCTCTG	TGTTCTTCCA	AGGCCCTCTT	AGGGAATAGA	CAATTCTGCA	GGCACTTTCG	TTGCAAACAG	AATCTCAGTG	AAGAAATGGT AGCGTCAC AAGAAATGGT AGCATCAC	STC
Human Rhesus Clustal	CAAGATACTA CAAGATATTA ******* **	ATCAACATGG GTCAACACAG ****** *	CAATCTTCAC CAATCTTCAC **********	TACAGGATGA TACAGGATGA *********	GAACTGTTTT GAACTGTTTT *********	CCCTTTGCCC CCTTTTGCCC ** *******	CAGGTAGGAC CAGGTAGGAC ********	ATAGGCCGCC ATAGGCTGCC ****** ***	TTAG TCAG * **						
ENSG000	ENSG00000206110.														
Human Rhesus Clustal	ATGTTCTTCT ATGTTCTTCT **********	CCATTCAGCT CCATTCAGCT *********	TCATGGAGAG TCATGGAGAG ********	ACTITICCCAG GCTITITCCGG **** ** *	GTTTCAGCCC GTTCCAGCCC *** *****	ACGCTACGAA ATGCTAGGAA * **** ***	GCTAGACAGG GCTACACAGA **** ****	AGAGTGGCCC AGAGTGGCCC ********	CCAC COGCCC 7 C-AC COGCCC 7 * *********	IGTTTGGAAC (IGTTTGGAAC (CCAGCTGGGG CTAGCTGGGG * ******	CATGCGGTGT CGTGCGGTGT * *******	TTGGAACACA TTGAAGCACG	TGGGCAGATT GGGGAGAGG TGGGCAGATT GGGGTGAGG	C C *
Human Rhesus Clustal	CAGAAGAGCC CAGAAGAGCC *********	TCATCCAGAG TCTTCCAGAG ** ******	CCAAGGACAA CCAAGGATGA *******	GCCTTGAGGC GCCTTGAGGC *******	TGAAGAGCTC TGAAGAGCTC ********	ACCAAGGCCA ACCGAGGCCA *** ******	CTACAAGAGA CTACAAGACA *******	GCAAAAAAAA GAAAGAAAAA * ** *****	GAGCCTCAGA (GAGCCTCAGA (GACTCCTCGA GACTCCTCAG ********	TAAATAACCA TAAATAACCA	GAACAGAGAG GAACAGAGAG ********	CAAAGGTGGA (CACAGGTGGA (GAGCAGGAGG GCAAGGCAC GAGCAGGAGG GCGAGGCAC	Γ Τ *
Human Rhesus Clustal	GAGACTCCAC	AAGCTTCCGG	GGAGAAGGAG	AGTCAGATGC AGTCACATGT ***** ***	TTGAAGACGC	CTCCTCGATG	CTGCACAGCT	CTGAGGGAAA	GTGGCTTTGA						
ENSG000	00206113:					_									
Human Rhesus Clustal	ATGG GGAGGT ATAG GGAGGT ** ******	GCTCCTGGCA GCTCCTGGCA *******	CCCAGAATGT CCCAGAATGT *******	GTGTCAGGCC GTGTCAGGCC ********	AGGCTCTGGT AGGCTCTGGT ********	GAAAGAA-GC GAAAAAAAGC **** * *	CTTGGCCGGG CTTGGCCAGA ********	ACCCGGGATA ACCCGGGATA ********	TGACATCCAC TGACATCCAC *********	ACTGCGGTTC GCTGAGGTTC *** *****	CATCCTCAGT CATCCTCAGT *******	CAACACAGAT TAACACAGAC *******	GAGAAGGGTC GAGAAGGGTC ******	AGCCCTGGAG CGCCCCCA AGCCCTGGAG TGCCCCCA	TG .TG **
Human Rhesus Clustal	CCCCACCCCC	ACTTTGGAGG	GCATCTTATC	ACGGGAAATG	GGTCCTCCAT	CCCCCAGGGG	CCCCAGGGCT	GTGGCAGTGA	GGGTGGGTGA	GGTCACAGCT	TGCGCTGTAT	TTGTGGTAAC	CGAGACTTGG	GAATCACTGA CTGGGTCT GAATCACTGA CCGGGTCT ********** * ******	CC
Human Rhesus Clustal	GACAGAGGCA	GGGGCTGGCC	TGGGCAGTGA	GGCCCCTGGG	GAACCGAAGG	CTGCAGGCAT	CCATACACAT	CTCCTTCATC	TTCCTACCCA	CACCTGGAAG	AAGTCACAGG	CCCACCTGGA	GGCTGCCCAA	CTCCTCAGCT CCTGTCCT CTCTTCAGCT CCTGTCCT *** ****** ********	CC
Human Rhesus Clustal	CATCCCTGGG TGTCCCTGGG *******	TTTTCCTCAC TTTTCCTTAG **********	AGCTCCATCC AGCTCCATCC *********	TGGTCCTGGC TGGTCCTGGC ********	ACCCCCTGCA AACCCCTGCA * *******	ACCTCGGCAG ACCTTGGCAG **** *****	CCCTGCCCCA CCCCACCCCA *** *****	CTCAGGGGCC CTCAGGGGCC *******	TCCCTGTCAC TCCCTGTCAC **********	CTGGTCTCAG CCAGTCTTGG * **** *	CTCCCACCAC CTCCCACCCC **********	GAGGTGCTGA CAGGTGCTGA ********	TCTCACATCC TCTCACATCT *********	ACCACCTGTC AGTGGCAG GCCACCTGTC AGTGGCAG ********* *******	GT GT **
Rhesus	GCCCAGGGAA	CAGGAGCTTA	GATTGCAGGG	CCCCTGCCTC CCCCTGCCTC ************	CAG										
ENSG000	00212693:														
Human Rhesus	ATGFATGACC GTGFATGACC	ATGGGTATGA ATGGGTATGG	TACCTCCAGA TACCTCCAGA	AATGTTAACA AATGTTAACA	ACTTATTCTT	CTGCCATGAG CTGCCATGAG	TACCCCTCAT TACCCCTCAT	CAGGGTTGGT CAGGGTTGGT	TTCAATGACA TTCAGTAATA	GGTTTTGGTG GGTTTTGGTG	ATGTTCCTGA ATGCTCCTGG	CCATATGAAG CCACATGAAG	TGGTTTATGT TGGTTTATAT	TTAGAAACAT TCAAATTG TTGGAAACAT CCAAGTTG	AG AG
Clusta1	*******	sokokokokokok	*****		solosolosolos	kiokiokioki	xxxxxxxxx	xxxxxxxxx	**** * * *	*okokokokokokok	*** *****	stokok stokokok	********	** ******* *** *** CAAAGGCTTT TATTTCCA TAAATGCTTG TGTTTCCA	okok:
Clustal Human Rhesus	CGTTGCATT CATTTTATT	TTCATCTCT	G CCTCCCATT	CCCACTGAAT G CCCACTGAAT G CCCACTGAAT	GCTTTGCTTT	CTGTGCATCA	A AGACAGAGTT	TAAAACCAC	AAAACATCCA AAAACATCCA	TCTTGA	*******	** ******	*******	*** **** * *****	**
Human	00212736: ATGCTAAAC	r ggttggccc.	A AATCCAACA	G ATTGCAAAGA	GTGGCAGGG	C CTGGCAGCTC	G TCTGGAAGCO	CTTCATCTTA	L CAGACAAGGA	AGTGGTGTCA	AATGGACAG	Γ AAAGGTGAAT	CACATACTC	GCTATAGCCT GCTCCCA	GCT
Rhesus Clustal Human		k skok sk skokolosk	k stokolokolokolok	*************			s skataskataska skat	s de destablishment		stokokokok stokokok	s stokokokokok ok s	k sokolokokokoko	k ok okololok okol	: xokokokokokok xokokokok	***
Rhesus Clustal Human						TGTGTCTCA	TCTGCGAGTC	CAGCTCCTTC	TGGATGGTGA	CACCTTCCCC	AGCTTGGTT	C ACCCTGTGGG	TACCCAA	GTACAGATGC CATCCCG GTCCAGACGC CATCCCG	3TG ***
Rhesus Clustal	CTGTGATCT	CCAGCCACT	CTCCATTTC	T GTCACAGCCC T GCCACAGCCC * * ********	AGAAAGTGA										
ENSG000	00214112:							,,,,,	_						
Human Rhesus Clustal	ATGGAAAAGT ATGGAAAAGT ********	GGAAACTTGG GGAAACTTGG ********	CAGACAGATC CAGACAGATC	CAGCCTCCCT CAGCCTCCCT	GGCCACTGGC GGCCATTGGC ***** ****	CCATGCTCGT CCATGCTCGT *********	GGCTCCTGGA GGCTCCTGGA *********	TGGCGCTGCC TGGTGCTGCC *** *****	-ACGTTCTGA CACGTTCTGA *********	GCAGCTTGGG GCAGCTCGGG ****** ***	ACAGGTGGAG ACAGGTGGAG ********	ATCAGGACTG ATCAGGACTG	GCAGCTGCAA GCAGCTGCAA *********	GGACACACCA GAGCCACA GGACAGACCA GAGCCACA ***** **** *******	GA **

	ATGGAAAAGT GGAAACTTGG ATGGAAAAGT GGAAACTTGG **********************************	CAGACAGATC	CAGCCTCCCT	GGCCATTGGC	CCATGCTCGT	GGCTCCTGGA	TGGTGCTGCC	CACGTTCTGA	GCAGCTCGGG	ACAGGTGGAG	ATCAGGACTG	GCAGCTGCAA	GGACAGACCA	GAGCCACAGA
Rhesus	AACTAAAGAG AATTTCCAAA AACTAAAGAG AATTTCCAAA	AGGAGGCTAT	GGTGAAGTCT	CTGATGATGC	AAAGAAAACA	AGGAGAATGG								

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Human ATGGCCATGG CCCACGCAGG GCTCTGCGGG TGGAGAGGGG AAGTCAGCT AGACTCCAGA GAGAAACCT GGGCAAACCC GAAAGGCCTG AGGAAACCT GAATTGGGGT TAGGCATGAG GGGAGGGAGT CTCTGGGGAA AACGGCCCG AGGAAACCT CTGAAAACCT CTGAAACCT CTGAAACC
Haman GCTGTGGGG GCCCTGAGGG CTCCTGGGC TCCAGGCCTC CAGGCCCCC GCGTCTGCC CCGCCCGCC GCTGGGGCT CCCCCCAGGA GCCCACCCGC GGCGGGGCT CTTTCTCCAT GCTGCCCAGG GAATTCAAT GCCTGGTGCT CTTTCTCCAT CTCCCAGGG CTCAGGGCGCAGG CAGCAGCCAGG GAATTCCAA
Human GGGATGCGC AGCCCTTCTG TICGCTTCTG GCAATCCTGG CGTCTCCCAA TGAGAGGGCT CTCAAAATGA AGCTTTTAAT AAACTCCAGA GTAAGGAACT CGGGATTGTG CGCCAAAGGC CGCCCATTGC ACTTTGTGAG CAATCGGTAA GCGTTTTAAT AAACTCCAGA GTAAGGAACT CGGGATTGTG CGCCAAAGGC CGCCCATTGC AATTTGTGAG CAATCGATAA CACTTTTAAT AAACTCCAGA GTAATGAACT CGGGATTGTGTGAG CAATCGATAA CAATCGATAA ACCTTTTAAT AAACTCCAGA GTAATGAACT CGGGATTGTG CGCCAAAGGC CCCCCATTGC AATTTGTGAG CAATCGATAA ACCTTTTAAT AAACTCCAGA GTAATGAACT CGGGATTGT CGCCAAAAGGA CCCCCAATGC AATTTGTGAG CAATCGATAA ACCTTTTAAT AAACTCCAGA GTAATGAACT CGGGATTGT CGCCAAAAGGA CCCCCAATGC AATTTGTGAG CAATCGATAA ACCTTTTAAT AAACTCCAGA GTAATGAACT CGGGATTGT CGCCAAAAGGA CCCCCAATGC AATTGTGAG CAATCGATAA AACTTCAAATGAAATG
ENSG00000214780:
Human ATGARCTCTG TGTTCAGACA GCCTGGCTCC AACTTCAGCT TCCCCATTTA TCAGCCGTCT GCCTCGGTA CCCATGGCCT CAGTTTCTC TGTGAAGTGA GCCCTCAAAT GCTTACCCCT CAAGATTATC GTGGGAAGCA A-CAAGGGCC AGTTTC
Human CAGAGGATGC CCTGGGTGCA TGGTGGCCAT GGACACATGG CCGGCCGTGC TTCCTGAGCT CCTGGCTTT TGGGGAGAAG GCAGCTTGG GGTGCCAGGG GTGACCTTT GCTGCAGAAG GCAAACTGTT TGCTTGAGCC CAGACGAGAC CCTGGGTGC TGGTGCCAGGG GTGACCTTT GCTGCAGAAG GCAAACTGTT TGCTTGAGCC CCGCCTTC TGCCGGCAAG GCAGCAGGAGC CCAGGCTTGG GGTGCCAGGG GTGAACCTTT GCTGCAGAAG GCAAACTGTT TGCTTGAGCC CLustal "************************************
Human TGTGAGGCTG TTCTAAACT ACAGGCCCCT GGGGGCAGAG GGAGAAGAAC TAACATTIGG TAAGGCCTG CTGGTGCCCA CTGCTGTATC ATGTGCCTAT GATTGCGTGA GCTCATCAGC CTTCCTGGGT ATCCAGCTC TGGGAGACAC TACATTIGG TAAGGCCCTG CTGGTGCCCC CTGCTGTACC ACGTGCCTAT GATTGCGTGA GCTCATCAGC CTTCCCAGGT ATCCAGCTC TGGGAGACAC TACATTIGG TAAGGCCCTG CTGGTGCCCC CTGCTGTACC ACGTGCCTAT GATTGCGTGA GCTCATCAGC CTTCCCAGGT ATCCAGCTC TGGGAGACAC TACATTIGG TAAGGCCCTG CTGGTGCCCC CTGCTGTACC ACGTGCCTAT GATTGCGTGA GCTCATCAGC CTTCCCAGGT ATCCAGCTC TGGGAGACAC
Human CACAAGGAGC CCTGCCACT GCTACCGTCA GGATTTTAAT GGCACACTGA GGCTCAGAGA GGGAAAGGGG CTTGTCCAGA GCCACACAGG GACCTCGTGG CACAGGACC TCCAGGAAGG GACCCAGGGC CAGACCTGA GCACAGGACC CTGCAGAAGAGCC CTGCCACAGA GCCACACAGG GACCCACAGG GACCCAGGGC CAGACCTGG CACAGAGACC CTGCAGAAGAGC CACACAGGACCTGC CACAGAGACC CTGCAGAAGAGC CACACAGGACCTGA CACACAGGAACCGG CTGCCACAGA GCCACACAGG GACCCACAGG GACCCAGGGC CAGACCTGG CACACAGGACCTGC CACAGACCTG CTCAGGAAGG GACCCAGGGC CAGACCTGG CACACAGG GACCCAGGGC CAGACCTGG CACACAGGACCTGC CACACACGG GACCCACAGGC CACACACGG CACACACA
ENSG0000215071;
Human ATGCAGATAT GCTTCTTAGC CTTGTGGGGT GGAAT T TGGCTGTAG CTACTTCTGC TGAAACTGCC CTTAGGACAT CATATGCATC TITGAAAGCC AAATACATAA GTGAACACAT CTGCGTGTAT GTGTATACAC -CATACATC Rhesus ATGCAGATAC GCTCCTTAGC CTCGTGGGGT GGAATTACC TGGCTGTAG CTACTGCTGC TGAAACTGCC CTTAGGACATATGAATC TITGAAAGAC AAACACATAA GTGAACACAT CTGCATGTAT GTGTATACAC CGATACACC
Clustal ******** ****** ******* ******* ******
Clustal ******** * ** * ********* *** * ******
ENSG0000215458.
Human Rhesus ATGCCATGCA GACTTCTACA TCAAAGGGAA ACAGGTCAG GAGGCCCAG GACTCCCAC CACCGGGCC AGGCTGCAC AAGCCCCAA CACTCCCAC CACTGCAC CACCGCGCC AAGCCCCACCACCACCACCACCACCACCACCACCACCACC
Human CATCAAGGGA GTG GGG-GACAC ATCITCTGGG GGTGACGCC CTGCAAGTG AGTITCCCCA TCTGTGCCCC CTTGTGAAG CTGCAAGG CTGC
Human Rhesus ACACACCG GAAATCTGA AACCTGGG- ACGGACGACG TGCACCCCTG GGAAAGAGAA CAGAGGAGAG CCGTTATCA ACGTCCTCCT GTGCCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCA GGGAGGCCCC GTGTGGCCTC GAAATCTGA ACCTCGTG GAAATCTGA AACCTCGGG ACGAGGAGAGAG CAGAGGAGAGA CAGAGGAGAG CCGTTATCA ACGTCCTCCT GTGCCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCCA GGGAGGCCCC GTGTGGCCTC GTGCCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCCA GGGAGGCCCC GTGTGGCCTC GTGCCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCCA GGGAGGCCCC GTGTGGCCTC GTGCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCCA GGGAGGCCCC GTGTGGCCTC GTGCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCCA GGGAGGCCCC GTGTGGCCTC GTGCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCA GGGAGGCCCC GTGTGGCCTC GTGCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCA GGGAGGCCCC GTGTGGCCTC GTGCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCA GGGAGGCCCC GTGTGGCCTC GTGCCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCA GGGAGGCCCC GTGTGGCCTC GTGCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCA GGGAGGCCCC GTGTGGCCTC GTGCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCA GGGAGGCCCC GTGTGGCCTC GTGCCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCA GGGAGGCCCC GTGTGCCCTC GTGCCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCA GGGAGGCCCC GTGTGCCCTC GTGCCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCA GGGAGGCCCC GTGTGCCCTC GTGCCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCA GGGAGCCCC GTGTGCCCTC GTGCCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCA GGGAGCCCC GTGTGCCCTC GTGCCTCAGT TTCCAGAAAT AAGTCAGACT CAGTGCCCCA GGGAGCCCC GTGTGCCCTC GTGCCTCAGT TTCCAGAAT AAGTCAGACT CAGTGCCCCCA GGGAGCCCC GTGTGCCTC GTGCCTCAGT TTCCAGAAT AAGTCAGACT CAGTGCCCCC GTGTGCCCTC GTGCCTCAGT TTCCAGAAT AAGTCAGACT CAGTGCCCCC GTGTGCCTC GTGCCTCAGT TTCCAGAAT AAGTCAGACT GAGAGAGAAC AAGCCAGAGAGAC AAGCCAGAGAC AAGCCAGAGAC AAGCCAGAGAC AAGCCAGAGACAC AAGCCAGAGAC AAGCCAGACAC AAGCCAGAGAC AAGCCAGACAC AAGCCAGACAC AAGCCAGAGAC AAGCCAGACACAC AAGCCAGAGAC AAGCCAGACAC AAGCCAGACAC AAGCCAGAGAC AAGCCAGACACAC AAGCCAGACACACAC
Human CGGAGAGCAC GGACCGGC CTITGTGCAG GTGAGGAAAC TGAACCCCAG AGCAGTGAGG GACTGGCCTG GGGACCCTGG GCTCAGCCCT GGGCGCCTTC CCTCTGCCCA TCTCAGAC GGGCACAGCC AGCACCGCCT CACCCCAACG
Human CGCCTCCAGA CTGGGCCTCC AGGGGCCACATC CTCTCTCTC CGCCCTAGA CCCCCACCT CGCCCTAGACC CAGGGCCTGC GGGCACATC CTCTCTCTC AGGCCCTT CCCCCTAGA CCCCCACCT CGCCCTCCA AGGCCTGC GGGCCTCC AGGCGCTCC AGGCCTCCA AGCCTTGAGA CTCCTCTCTC AGGCCCTC CACCTTGACC ACGGCCTGC GGGACTCCA AGACTTGAGA CTCCTTTCC AGGTCCTC CCCCTCAGA CCCCACCTC CGCCACCTC CACCTCCACCC CGCGCTCCC AGCGCCTCC CACCTC CGCCACCTC CGCACCTC CGCCACCTC CGCCA
Human TOTTICCAGG GGGCGGCGGA TGGCTGCTCA CTCAGGGACG CCAACACCAA CAGGAAGGGA CCCATGCACG CATCGACTI CCCTCCCAGG CTCTGCCTTC ACTCAATGTC CCTGTGGGGC ACTCGGGGCT CCCCGCCCC CTCCCCTGCC Rhesus TOTTICCAGG GGGGGGCAGG GGGGGCAGG CACTGAGGAC CCGGGACACAA CAGGAAGGGG CCCATGTGCA GGTCTGACTT TCTTCCAGG CTCTGCCTTC ACCCATGCC CTCTGGGGC ACCTGGGGCT CCCCGCCCC CTCCCCTGCC Clustal
Human CACAGCCGTG AGGTTGCTTC CTAG Resus CACAGCCGAG AGGCTTCTTC CCAG Clustal ******* * *** * **** * **** * ***
ENSG0000215494.
Human ATGCCTTCCC AGCCGCACCT CAGTGCGTGT TCTGTTGAAT CTCCGGGTGC TGCAGCCAGG TTGACACAGC GACACCTCAC AGCTGTTTCCT CGTGGAGGTG GGCAGACCGG TACATTCCAT ATGGGGTTAC TGCCCAAGGA ACAAGAGTC Rhesus ATGCCTTCCC AGCCGCATCT CAGTTCATGT TCTGTTGAAT CTCTGGGTGC TGCGGCCAGG TTGACACAGC GACACCTCAC AGCTTCATT TATGAGGTTG GGCAGACTGG TACATTCCAT ACGGGGTTAC TGCCCAATAG ACAAGAGCTC LILISTAL ************************************
Human GCTCCTGTC CAGCCCTTGAC CCTCCAACC ACCATGGGGC GGCTATTTAG TGTGCACTGG CAAATCCTGG GGCCCTGTC TCCCTGCAAC GTTTACCCAA AAGGTGATAG TGAACAATCT GCTTCCAAGT CGAAACAGGC TTTCCCATT CAGCCCCTGCAAC ACGTGATAC CTTCCAACT CGAAACAGGC TTTCCCATT CTTCCAATCT GAACCAACT GTTCACCCAA AAGGTGATAG CTTCCAACT CGAACAACGC TTACCCCAACC ACGTGATAC AAGGTGATAC CTTCCAACT CGAACAACGC TTACCCCAACC ACGTGATACAACT CAACCAATCT CAACCAATCT CAAACCAATCT CAACCAATCT CAACCAATCT CAACCAATCT CAAACCAATCT CAACCAATCT CAACCAATCT CAAACCAATCT CAAACC
LIMBARD CITATEGRAMA AGGGAATGGA ATGGCCTCTG TOCG
Human CCGAGTCCTT GCAGGATTAG GGGCCTTTGC TCCATGAGAC CCCACGGGCT TTGA Rhesus CCAAGTCCTT GCTGGATTAG GGGCCTTTGC TCCATGAGAC CCCAAGGGCT TTGA Clustal ** ******* ** ******* ******* ****** ****
ENSGO0000215848. ATC ATGGCG CCCCCCAGAA GAGATCTAAG GTTGAGCACA GGAGCAGGGG TGGTAGAGAG GCCTCAGCAC TGGGCTTAGT TCCCAGAGCA CTTAGAGGAC TGTGGGTAAT AAGAAAAGTA CTGGAGGAAT CAGAATGGGG GAATATCAGC Rhesus ACGNATGGGG CCCCCCAGAA AAGATGTAAG GTTGAGCACA GGAGCAGGGG TGGTAGAGAG GCCTCAGCAC TGGGCTTAGT TCCCAGAGGA CTTAGAGGAC TGTGAGTAAT AAGAAAAGTA CTGGAGGAAT CAGAATGGGG TAGTAGAGGAG GCCTCAGCAC TGGGCTTAGT TCCCAGAGGA CTTAGAGGAC TGTGAGTAAT AAGAAAAGTA CTGGAGGAAT CAGAATGGGG TAGTAGAGGAG GCCTCAGCAC TGGGCTTAGT TCCCAGAGGA CTTAGAGGAC TGTGAGTAAT AAGAAAAGTA CTGGAGGGAAT CAGAATGGGG TAGTAGAGGAG GCCTCAGCAC TGGGCTTAGT TCCCAGAGGA CTTAGAGGAC TGTGAGTAAT AAGAAAAGTA CTGGAGGGAAT CAGAATGGGG TGGTAGAGGAG GCCTCAGCAC TGGGCTTAGT TCCCAGAGGA CTTAGAGGAC TGTGAGTAAT AAGAAAAGTA CTGGAGGGAAT CAGAATGGGG TAGTAGAGGAG GCCTCAGCAC TGGGCTTAGT TCCCAGAGGA CTTAGAGGAC TGTGAGTAAT AAGAAAAGTA CTGGAGGAAT CAGAATGGGG TGGTAGAGAGG GCCTCAGCAC TGGGCTTAGT TCCCAGAGGA CTTAGAGGAC TGTGAGTAAT AAGAAAAGTA CTGGAGGAAT CAGAATGGGG TGGTAGAGAGG GCCTCAGCAC TGGGCTTAGT TCCCAGAGGA CTTAGAGGAC TGTGAGTAAT AAGAAAAGTA CTGGAGGAAT CAGAATGGGG TGGTAGAGAGG GCCTCAGCAC TGGGCTTAGT TCCCAGAGGA CTTAGAGGAC TGTGAGTAAT AAGAAAAGTA CTGGAGGAAT CAGAATGGGG TGGTAGAGAGG GCCTCAGCAC TGGGCTTAGT TCCCAGAGGA CTTAGAGGAC TGTGAGTAAT AAGAAAAAGTA CAGAATGGGG TGGTAGAGAGG GCCTCAGCAC TGGGCTTAGT TCCCAGAGGA CTTAGAGGAC TGTGAGTAAT AAGAAAAGTA CAGAATGGGG TGGTAGAGAGG GCCTCAGACAC TGGAGGAGA TGTAGAGGAC TGTAGAGGAG TGTAGAGGAG TGTAGAGGAG GCCTCAGACAC TGGAGGAGA TGTAGAGGAC TGTAGAGGAG TGTA
Clustal ++++++++++++++++++++++++++++++++++++
Rhesus AGGAGGAGG AGAGGGTAGG ATGTGGCCAG GCAGTATCAT TIGCCAGTIT GAGGGTCTCT CTGGGGCCTG TGAAAAGGTG CTGTGTACTT GAGGAAATGC TCCACCTTCT CTCCTCAGCC CAGCACTCTA GTTTCCATCT TTATAACTCT CLustal ************************************
Rhesus GGTAAAACTG CACCCTTCA GAGGCCACTC ATAGCCTCCT CAACAAAGAC CTCTGGCCCT TCCCAAGCCC AGTCCTCCTT GACCT—ATG GAAAATTTTA TGCTATTTTC TCAGTCTTTT CCTTTGACCT TCGGTTATTC TGTTATATCC CLUSTATIC TCTTATATCC TCTTTTATTC TCAGTCTTTT CTTTTATTC TCAGTCTTTCTTTATTCT TCAGTCTTTTCTTT
Rhesus GTGATCATCT GTTCTTGGTT CCATTCATC AGTCCTCCAG ATGGACCAGT TCCTGGT Clustal ********* ********** ********** ******

ENSG00000218478.

Human Rhesus Clustal	ATGTACTTTT	GTGGCCTTGG	TGTCCGATGG TGTCCAACGG ***** * **	GGCTGGGGGA	GAGTGCTCTC	CACTGACCCA	GCGGCACACC	GATGTGCAGT	GCGCATGCGT	CTGTGTGGGG CTGTTTGGGG **** *****	GCAGCCACAC	CCCTCGGCTG	CTGCTTCCTT	GGGCTGCCTT	TCTAGGGGCA	A.
Human Rhesus Clustal	TGTGCCTGGA	CCTACGAGGT	CTGCACTGAG CTGCACTGAG	CTCCATTTGA	ATGATACCTT	CCCCATCCCG	TTTCCCC-AT	GGAAGCACCG	CTTCAGGGTT	ATTCAGTCCT	CTGCCTCATG	GCTGAAACTG	CTCATCTCGT	CTGCAGATGT	CTACTATCCT	Γ
Human Rhesus Clustal	GTCTACCTAA	TGCACTATTA	TGTATTGATT TGTATTGATT *********	CTCCATGAGA	CAGAGAGAG-	AGACTAT	CAGATAGTTT CAGATAGTTT	ACACCCAAAG	GGTAGGTTTT	TGTATATTTT	TCCAGCCTTT	TTTATTAAGG	GGAAGGGGAG	AGTTTAAAAG	CCCAAACCGT	ľ
Human Rhesus Clustal	TGTGGTTTTA TGTGGTTTTA ********	AGGTGTTTCA	TTTTTAA													
ENSG0000	00221891.														_	
Human Rhesus Clustal	ATGGAAGGAT ********	GCGTAGTGCG *** *****	GCGGGGCAGC GCGTGGCAGC *** ******	TGCCCTCTTC	TCCCCGGACC	CAGCGCCTGG ********	AGAGGCAGCC **** *****	CTGCAGGGTG	GGCTGGGCGA ********	ACTAAACTGC * ******	GTTCCTGGTG ********	CAGGGCTTCG ********	GGTCTCCCTA *********	ACATACC TA	AACGTTGAAC	
Human Rhesus Clustal	AGCCGCCGCC	TTGGCAGTGT	CTCTTTGCTC CTCTTTGCTC ******************	AGAGATCCTG	AGACGACCAC *******	ACTCGTCCAA * *******	CAGCAGTCGC	TCCACCAAGC	CTGGGGAAAG	CGAATCGTTT ********	TCTCCGCGTG	CCCTGTCAGC	CGCTCATGCT	GCCCAGAGAG ********	GAAGGAATTT *** ***	
Human Rhesus Clustal Human	******	*****	TCACGCCACC TCACGGCACT ***** *** CCTGTCCTAT	*****	GGCCACTCCA ********	AGTCAGAAGG ********	ACCACCAGGA *********	AAAGTCAGGA *********	AGAGAATCAC ****** ***	CATCAGGTTG *******	CAGCCTCTTT ********	TTGTGACAAG *********	GACTAGATGG *******	TTGGTTTGGT ** * ***	CTGCAGTGGG CTGCAGTGGG *********	
Rhesus Clustal	CTGTCTTCCC *** ** ***	GCTGTACTGG	CCTCTCCTGT *** **** *	AG												
ENSG0000	00221899:															
Human Rhesus Clustal	ATGAATACGT ATGAATATGT ******* **		CGCCTCCTTC CGCCTCCTTC													
Human Rhesus Clustal	GAGGGCCCGG	AAGTCGGGCC	TGGGACAGAG CGGGACGGAG ***** ***	GAGCCGGCCC	ACCGCCTCCC	GGTCGGAAGC	GGCAGTGCAG	GTGAGGCCGC	GGCCAGCCTC	GGGACTGCGC	GGGTAAGGAG	CGGGAGGGCC	GACTGCACCG	CGAAGTTGGC	GGGGGACGGC	
Human Rhesus Clustal	CACGCACGCC CGCGCACGCC * *******	TCGCCTCGGC TCGTCTCGGA *** *****	CTTCCTGCAC CTTCCTGCCC ***********	CGTAGGG CGTAGGGGCT ******	CCGCCCTC GGCCGCCCTC *******	CCGCCACCCC CCGCCACCCC **********	TGGGCACCTG AGGGCACCTG ********	TCGACCACGT CCGACCACGT ********	CTGGGCGAGG CTGGGCGGGG ******	GCGGGTCGGC GCGGGCCGGC *****	TCCCGCCCTC TCCCGCCCTC ********	GGGCCCTCAC GGGCCCTCAC ********	C CCCACCCCGG *	GCGG CCAGCCGCGG ****	CGGGGACGCC CGGGGACGTC ***********	
Human Rhesus Clustal	GGGTCAGCGA	AGGGTTAAGG AGGGTTAAGG	GACTCGCTCC GACTTGCTCC	CTCCTCTCGG CTCCTCTCGG	CTCCCTCACC CTCCCTCACC	CTTGGAAAGT CTTGGAAAGT	CCCCGAAATG	A A								
ENSG0000	00221953:															
Human Rhesus Clustal	ATG GCCTGT GTG GCCTGT	GCACCCTCCA GCACCCTGCA ******* **	GCCCCTGGGC GCCCCTGGGC ********	CCTCCTCGAA CCTCCTGGAA ****** ***	AATCCTCCAC AATCCTTCGC ****** * *	ATCCTGCGGG ATCCTGTGGG ****** ***	ACCTGGACCG ACCTGGACCG **********	CCAGCGGCCT CCAGCGGCCT *******	CCCAAGCCTG CCCAACCCTG *****	GCCCATTTGC GCC-ATCTGC *** ** ***	CCCGTCGCCT CCC-TCGCCT *** ******	CCGCCTGGCA CCGCCTGGCA ********	TTCGACTTCT TTGGACTTCT ** ******	TAGAACCGCG GAGAACCCTG *******	GGCACGAGGG GGCACGAGGG	
Human Rhesus Clustal	CAGCGTGGGG CAGCGTGGGC ********	GCAGTGGTGG GCAGGGGAGG **** ** **	CTGTCAGTCC CTGTCAGTCC ********	ACGCGGGCCG AGGCCGGC-G * ** *** *	CCGAGAGGAC CTGAGAGGAC * *******	GCGCCCACCC GCGTCCACCC *** ******	CACCCTCCAA CACCCTCCAA *********	ACGCCGTCCT ACGCCGTCCT *********	CCTGCTTCAG GCTGCTTCAG ********	CCAGAGCCGT CCAAAGCCGT *** ******	CCCTGACATG CCTGGAGACG ** ** *	GGCCCAGGGA GGCCCAGGGA ********	CGCGGCTG CTCCCCGCTG * * ****	CAGAGGCCAC CAGCCTCGAG *** * *	TTCCGG CTCCGGGGTG *****	į
Human Rhesus Clustal	GCCCCGCGGC	TCCCAGGGGT	GGCCTCGCG- GGCCCCGCGG **** ****	CTCCAGGAGT	CGCACCCTCC CACACACTCC * *** ****	GCCGCGCCAG	CTCGGACCGA	CCGCAGACTT	CGCGAGCAGA	AGCAGCGCCG AGCAGCGCCG *********	CGCGGGCCCT	GACCCCACAC	CCTGCCCCGG	CGCCTCCGCC	TGCAGGACCC	3
Human Rhesus Clustal	TCC(****	C CGGGCTCGC	T GGGTCCCTC T GGGTCCTTC * ****** **	C TCCCCCGCO * **** ***	G CTCCCCCGA * ****** *	C CGCGCGCGG	T GCCGACG-G0 * *** *** *	TCCAAGGCGG	G CGCCAGCCA.	A GACGGTCCC * ********	G GCCACGCAG * **** ** *	C GGTGGGTGC	G GCGGGTGCG * *	G CGGGTGCGG	C GGGTGCGGC	
Human Rhesus Clustal	GGTGCGGCCC **	C GCACCACGG		- GGCGGGGAG	G ACGCGCTCC * *******	C AGTCTCCGG	G AGCGGACGG C AGCAGACAG *** *** *	A CCCCTCCGA	C TOOGACTOO	G ACTCCGACT	C CGACTCCGA	C TOOGACTOO	G GCCGCCTCC	T CCCCGCCGA T CCCCGCCGA * *********	G GTCCCTCCG	G
Human Rhesus Clustal	GGGCGGCCGC	CGCACACTT	T CCGGAGCGG T CCGGAGCGG * ********	G AGCGACTGT	G A											
ENSG000	00221990:														_	
Human Rhesus Clustal	ACGCCTCATG	TCTTTATGTT	GGCCTCGTCG GGCCTTGCCG ***** *	TCCGCACTGC	AGTGTGGCAG	GGGCGTCCCA	CCTTTGCCGC	GGACTGAGGT	GGGCGCCGAG	CATTCAGTA/	ACGAGGAAAG	C GAAAGCGGGG	AAAGTTGGG1	A ATCAAGCGT	C TGT¢-TGCC	Т
Human Rhesus Clustal	GCCACCAGCA	GACTAGCGGC	TTTGGGTACC TTTGGGTACC	CCTTGGACCC	AAACACGAAC	TCAGCCCCTG	CAGGAGCACA	GTCATCGGCA	CCCACGTGGG	AACAGTGCCC	-TGGGATGG	TGGCCACGG	ATGTTTCTG(G GGCCCCTCA	G AGGCCCAGC)G
Human Rhesus Clustal	GCGCGGGTCT	TGGAGAATGA	ATGTGGGTCA ATGTGTGTCA ***** ****	CTGGGCCGCT	GCTGCAGAGG	GCCGGTCCTG	A									
ENSG000	00223857:															
Human Rhesus Clustal	GTCCCTGG (CGGACACATC	TCCCCGGAAC GCCCTGGGAC *** ** **	CTCCACGCCC	ATGGCCACTA	GGCAGAGGGA	GTGTTCCTTC ,	ACCTCCTGCT (CTTACACCTC 4	GAGCTGCAAC :	GCGGACGACG	AGGGCATGCG	CAGCACCTGC	GAAGATGCTT	CCCTGTGCAA	
Human Rhesus Clustal	GAAGCGCCT(GAAGTGACT(**** * ***	G TCGGGCGCG G CCAGGCGCG * * ******	G GATTCGGGG G AGTTCGGGG * ******	C TGGCATCTG C CGGCATCGG * ******	G GACGCGGGC G AGCACGGGC * * *****	T GAGGTGGGA C FAGGTGGGA *******	G GCGGGCCTGG G GCGGGCCTGG	C ATCTGAAGA C GTCTGAAGA * ********	A TACGCTCGG A TGCGCTTGG * * **** **	A GGCTGGCAG A GGCTGGCAG * ********	G TTGCTGCCC G TTGCAGCTC * **** ** *	C CGCCTCGCA C CGCCTCGCA * *********	C GACCCTCGC C GACCCTCGC	T TCCCACCTG T TCCCAACTG * ***** ***	T GAAATGCAG T GAAATGCAG * ********	A A
Human Rhesus Clustal	GAACAGGGC:	T TCATTTATT	T AACGAATCG T AACGAATCG * ********	T TTCTGAGCT	C CTGCTGTGA	G CCGGGCATG	G AACAAGCGC	G GGTACTGTG C TGAACCAGG * ** **	G AGACGGGGT	G GCCCCTGA C TTGGCGTT *						
1000																

ENSG00000224013. Haman CACGTOTEC CTTTGGCTGA AGCAAATAT GGCTCCGTG CACCAAGGC TGGGCGGCC GGGTTTCCCT AGGGATGGG ACCCCTCC CGGGGGTG TGGGGTGG CACCAGGGC CTCCGAGAA ATCGCTGGTG CACCAAGGC TGGCGGGC GGGTTTCCT AGGGATGGG ACCCCTCC CTGGGGGTG TGGGAGTGG CACCAGGGC CTCCGAGAA ATCGCTGGAG CACCAGGGC TTCCGAGAA ATCGCTGGAG ACCACCTGGAG ACCACCTCC CTGGGGGTG TGGGAGTGG CACCAGGGC TTCCGAGAA ATCGCTGGAG ACCACCTGGAG ACCACCTGGAGTGG ACCACCTGGAGTGG ACCACCTGGAGTGG ACCACCTGGAGTAG ACCACTGGAG ACCACCTGGAGTAG ACCACTGGAG ACCACCTGGAGTAG ACCACTGGAG ACCACCTGGAGTAG ACCACTGGAG ACCACCTGGAGTAG ACCACTGGAG ACCACTGGAGTAG ACCACTGGAGTAG ACCACTGGAG ACCACTGGAGTAG A ENSG00000224376: ENSG00000225021. ENSG00000225860. ENSG00000225917: | AGCCCOGGCC CTGCCTGCCC GCTATITTGG TTCCATCCT TCTGCATATT TATGCTTGCC TGTTACATTC CCTGGCCTCT GAGTGTCCTT TGGCAGTTTC CAAAGCATTT GGCAGAAG GAGCTTGGGC AGCTTGAGA CAGGTGGGCC AGCTTGGCCC GCTGCTTGCC GATGTCCT TGCAATCTT GGCAGTTTC CAAAGCATTT GGCAGTTTC CAAAGCACTT GGCAGTTTC CAAAGCACTT GGCAGTTTC GAAAGCACTT GAAAGCACTT GGCAGTTTC GAAACCACTT GGCAGTTTC GAAACCACTT GGCAGTTTC GAAACCACTT GGCAGTTTC GAAACCACTT GGCAGTTTC GAAACCACTT GGCAGTTTC GAAACCACTT GGCAGTTTC GAAACCACT GGCAGTTTC GAAACCACTT GGCAGTTTC GAAACCACTT GGCAGTTTC GAAACCACT GGCAGTTTC GAAACCACTT GGCAGTTTC GAAACCACTT GGCAGTTTC GAAACCACTT GGCAGTTTC GAAACCACT GGCAGTTTC GAAACCACT GGCAGTTTC GAAACCACT GGCAGTTTC GAAACCACT GGCAGTTTC GAAACCACT GGCAGTTTC GAAACCACT GA Human Rhesus Clustal Co CCCCAGGGG GCCCGACCGC CCCGACCGC CAGGCT-TI CAGGGCTGG CCCCCGGGACAGCT-TI CAGGGCTGG CACTTCCAC ACTGTCTTTC GGGACTGGGG TAGGAGACA CCCCTTGGCC ACCACTGTC CCTTACTTTC TCGCCTTTACT TGGGGTGGAC GACTTCCAC ACTGTCTTTA GGGACTGGGG TAGGAGACA CCCCTTGGCC ACCACTGTC CCTTACTTC TCGCGTTTACT TGGGGTTGGA Rhesus Clustal Co Human Rhesus Clustal Co ENSG00000230294: ATGACATCCA ACTGGGCTC TCCTGGCCCC CAGAGAAGAG CTGCCCAGTG CATGTGCTGC CTGCACCGTG ACGTCCCCTA TGAACAGGC CCACAGGCAG TGGCTGGCTG GGGGGATGCC CCTGCCCCTA GCTGGAGTTC CCCCAGGTGG ATGACAAGGC CAACAGGCAG TGGCTGGCTG GGCAGAGCC CATGCCAGG CTGCCCTA GCTGGAGTTC CCCCAGGTGG TGGCAGGCAG TGGCTGGCTG GGCAGAGCC CCTGCCCTA GCTGGAGTTC CCCCAGGTGG Human CTGCTTCTTC CCCACCCCGA GGGTCACAGC CCAGCCCCAAG CTCCAAGGGA ATGGAGCAGC TGCCTGCACC AAGCTTCCCT CTCTGGAGA AAGCACCTCC TCTTCTCCCT CACGTGCTC CTGATGACCG CCAGGCTCCT TGACATGGTT Rhesus CTGCTTCTTT CCCACCCGGA GGGTCACAGC CCACCCCAAG

ENSG00000235766: ATGCTCTCGT CCTGCTTGGA CCCAGCAGCG TGGGACTGTG GGGCCGAGGG CAGGGATGGG AGAGAAGAA TGGTTCTGGG CTGGAAGCG. GACAGGGGGA CCACTCCCC GCCAGCCCC ACCAGCCCC ACCAGCCCC ACCAGCCCC ACCAGCCCC ACCAGCCCC ACCAGCCCC ACCAGCCAC CACCAGCAGCA CCCTTCTCTCC GGTGCAGGGC ACCTGCTTGG GGACGCTGGC GAGAGCCCCT TACCTTCACA TCCGTGTCCG AATCGCTGGA GCTGCTGGGA AGCTGTGGAA AGCTGTGGTG TCCTTGCTGG ATGGAGGTGC GGCAGTGAGG CGGCGCCCCT TACCCAGCCC GGTGAGGGC ACGGGGCCCC TACCTACCA TCCATGCCC AGTGCGTGAG ACCTGTGGTG ACCTGTGGTG TCCTTGCTGG ATGGAGGTGC GGCAGTGAGG CGGTGCCCCT TACCCAGCCC ENSG00000236081: Human CCTGCTCTGC ACCCCGAATT CACTCTCAGC CCCCACCTAG TITAAA Rhesus CCTGCTCTGC ACCCCGAATT CACTCTCAGC CCCCACCTGG CTTAAACCCLustal ENSG00000236314: Human GCTGTGGCTG CTGTGAGCTG CAGCCAGGCC TCTCCCCGCGT CCCCAGGGTC TGGAAGGGAGG GCCTCTGCAC ATT-TTATAA GCCACAGACT GCGAAGGCCT GGAACCCAC CTTCCACCAC T-AACAAAGA AAGGGATAGT TTCAGAACTTG GCCTCTCCTCCTC CTGTGAACTG CAGCCAGGCC TCGCAAGGAGA AAGGGATAGT TTCAGAACTG GCTCTCACCAC TTCACACCAC T-AACAAAGA AAGGGATAGT TTCAGAACTG CTUSTAC AATGTTATCA CCCGGGGCCT CCGAAGGCCT GGAACCCTAC CTTCACCCA T-AACAAAGA AAGGGATAGT TTCAGAACTG CTUSTAC AATGTTATCA CCCGGGGCCT CCGAAGGCCT GGAACCCTAC CTTCACCCA T-AACAAAGA AAGGGATAGT TTCAGAACTG CTUSTAC AATGTTATCA CCCGGGGCCT CCGAAGGCCT GGAACCCTAC CTTCACCCA T-AACAAAGA AAGGGATAGT TTCAGAACTG CTUSTAC AATGTTATCA CCCGGGGCCT CCGAAGGCCT GGAACCCTAC CTTCACCCA T-AACAAAGA AAGGGATAGT TTCAGAACTG CTUSTAC AATGTTATCA CCCGGGGCCT CCGAAGGCCT CCGAAGGCCT CCTCACCCA CTTCACCCA T-AACAAAGA AAGGGATAGT TTCAGAACTG CTUSTAC AATGTTATCA CCCGGGGCCT CCGAAGGCCT CCTCACCCA T-AACAAAGA AAGGGATAGT TTCAGAACTG CTUSTAC AATGTTATCA CCCCGAAGGCCT CCGAAGGCCT CC ENSG00000240057: ENSG00000243926. ENSG00000244291: ENSG00000247796: ENSG00000258376 Human ATC GGAAAT CGCCAGGAG GGCTGGGGA ACCTGGTGCC TTCCCCCGC CCCCCTGAGC TTTACCTCCC TGCGACAGA GCGGTGCCT CGGCCGGGC CCACGCAGCT GGAGCCTCCA TCTCTCCTGC GGACCAGGC CACCGCGAG CACCGGGC CCACCAGGT GCGCCTCACCGCA CCCCTGGGC CTCACCCGC TTACCTCAC TGCGACAGA GCGGTGCCT CGCGCCGGGC CCACACAGCT GCGCCTCA TCTCTCCTGC GGACCAGGC CACCGGGAG CACCAGGT GCGCCTCA TCTCTCCTGC GGACCAGGC CACCAGGT GCGCCTCA TCTCTCCTGC GGACCAGGC CACCAGGT GCGCCTCA TCTCTCCTGC GGACCAGGC CACCAGGT GCGCCTCA TCTCTCCTGC GGACCAGGC CACCAGGT GCGCCTCA TCTCTCTCTC GGACCAGGT ACCTCAGGC CACCAGGT GCGCCTCA TCTCTCTCTC GGACCAGGT ACCTCAGGT AC Human ACCTGA-Rhesus ACCCGGA Clustal *** *

ENSG00000260456:

Human Rhesus Clustal	ATGC TGCGA GCCGGT ACGC TGCGA GCCGGT * ******	CCCC ACTGCCCC	CG CGGCGTTTTC	ACCATCATCA	TGAGGCCACT	GGAGCAGCCT	CGGGCGCTGC	TGACGGGGAT	CCGGGCGCGG	GGTGCGTCGG	GCTCTGCAGG GCTCTGCAGG *******	TTGGCACTCA	CACCCGGCGC	GCAGGATGG	C
Rhesus	AGGAATAGCA CATTIO	CAAAC CTACAAGA CAAAC CTACAAGA	AA GAAGTGTGCC	TCCCAGGTCA	TTCGATGCAC TTCGATGCAC *********	CCTGGCCCCT	GGGCCGTCTG	CTGTGAGTGC	CAGACCAGAT	TCGGGGGCCG	CCTACCTGTG	TCCAGGGTGG CCCAGGGTGG *******	AAGCAGCACT	GCCTTACTG	G
Rhesus	GTCCCTCTGT CCCTG/ GTCCCTCTGT CCCTG/ ************************************	GACC CCGAAAGC	AG CACCCCCGCT	GGATGCATGC	TCCTGGCACA	ACTGCTGGCG	GATCTGCGGT	GACGAGCGCC	TGCTGCCCAA	GTGCCAGCAG	CTCCAGGCCC	CCGACCAGGA	CGAGCTACCG	GCTCGCCCA	G
Human (Rhesus Clustal	CGCGTCTGCT GCCCCT TGTGTCTGCT GCGCCT * ******* ** ***	COGC CTCCTGA													
ENSG00000	0261644:														
Human A Rhesus A Clustal *	ATGTCCTTTA TGACCT	TACA GCTCACCTO	GG AACCCTCCAC	CTAGGGCCCG CCAGGGCCTG * ****** *	AGGCAGCACA AGGCAGCGCA ******* **	TCCTCTCGTG TTCTCTTGTG * **** ***	CCCGGGCACT CCCAGGCACT *** *****	TCCAGGCATT GCCAGGCATT *******	GCCCTGAGTA GCCCTGAGTA	CTGGGCACT CTGGGCGCC ******	CACACACTGO CACACACTGO **************	GCTGGACCA GCTGGACCA ********	C TCACCGGAC C TCACCGGAC	T GAATAAGO T GAAGAAGO	GAG GAG ***
Human G Rhesus G Clustal *	CTTGA CTTGA														
ENSG00000	180838														
DIEDUCCOC	100000.								_						
Human Rhesus Clustal	ATGGGGAGGG ACA	AGATGGGT GGAGG AGATGGGT GGAGG	AGTGG CAGATGG.	AGG ATGGGGAG AGG ATGGGGAG	GG ACAGATGG	GT GGAGGAGT	GG CAGATGGA	GA GATGGGGA	GAGGAT CG AAGACGGT * * *	GG CTGGAG GG ATGAGGAT ** ** *	CG GGGCGAGG	AC ACCGGTGG	AC AGAT GC AGATAGAG * ****	GG	
Human Rhesus Clustal	GCTG GATGGCTGAG GGA ****	ACAATTGT GGTGA	TTGTT GGGGGTG TTGTT CGGCG-G ***** ** *	CAG GTTGGGGA	ACG GGTCGGGG ACG GGTGAGGG	AT GGGTGTGA	AG GAAAACAG	CA CACAGATG CA CATAGGTG ** ** ** **	TG GGGCCAGA	AT GGCCAGAA	AG ATT-AATA GG AATGAATA * * * ****	GT TCAGTGGC.	AG AGACCTAA	GG CACTGGC	GGC ATC *
Human Rhesus Clustal	TGTCGTCCCC CCA	A-TCACGG ATGCG	C-TGG TCCCGCT	CTC CTCCGGC-	C TGCGTGCA	GT TCTCCACA	TT CAGGCAGT	CT CTCGTTGC	TC ACCTGGGG	CC TTTGCAGG	GG TAGCACAG	CA GCAGGGCA	GT GCCTGTGG GT GC-TGTGG	GG TGGAGTG	GGA
Human Rhesus Clustal	GGGGCCTCAG AGG AGGGGCTCAG AGG	GCTGCCAC -TAG													
ENSG00000	253929:														
Human Rhesus Clustal	ATGCAGTGTC CAAGG	GTGGAG AGAGGTC	AGA GTGGATCCA	G AGGAGCCAA	G AGAAGATGT(C CGGCACAGTO	ACCTAGGCT	C AAGTCAAGGT	CCTTATTTCT	CT-CTGAAC	C ATCACATTCC C ATCACAGTCC * ****** ***	TTGTGCAGAG	TGAGGCAGC	A CTGACTGA	GT
Human Rhesus Clustal	TCTACTAGCA AATGG	CTGGAG ATGTGGT	TCC TGTTGGCCT	T TTAACTGA											
ENSG00000	0057105.														
Human		TORROR CORCORD	ecc ckalecce	l concorrece	e coektteet	e ceeree. **	C CCACCTCCA	A CTCATCCCC	e receeers	e etecekoek	C CTACCCACC	k C. kC.CCCCCC	c kecekkee	or retrever	ecc
Human Rhesus Clustal	ATGTGCTGGC CACG GTGTGCTGGC CACG *********** *****	TGGGCC CCGCCGG	GCC GACTCGA	CGTGCTGTC	G CCCGCCGCT * *** **	C CAGTGCTAA * * **** **	G GGACCTGGA	A GAGATCCCG * * ******	G TGCAGCTCC * *** ****	G CTCCCACC# * ********	G CGAGGGAGC	A GAGGCGCGG * *******	G AGGGAAGG * ******	G CGTCCCG(3GG ***
Human Rhesus Clustal	GTCGCCAGCA CGCTO GTCGCCAGCA CGCTO ***********	GCGGGC AGGGCTG GGGGGC ACGGCTG * **** * *****	GCA GCCGCCTCC GCA GCCGCCCCC	CA CGCCCCCGC CA CGC ** ***	G CTGGAAGCC TGGAAGCC ******	T CGTCTTTGT T CGTCTTTGT * *******	A ACATCGAGG A ACATCC-GG * ***** **	T ATCCTGTAA T GTCCTGTAA * *******	C TAGATGGGT C TAGATGGGT * *******	C CTGGCCTGC C CTGTCCTGC * *** *****	G GAGGTAGTT G GAGGTGGTT * ***** ***	T CCCCTGTGA T CTCCTGTGA * * ******	A GCCAGGGA A GCCAGAGA * ***** **	CT CAGCCAG(TT CACCCAG(* ** ****	JAG JAG ***
Human Rhesus Clustal	CGTGAGGGGA CCCG CGTGAGGGGA GCCG *********** ***	GATCCT GA GGTCCT GA * **** **													