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                                                                RING→
Human         ATGGCTTCTGGAATCCTGGTTAATGTAAAGGAGGAGGTGACCTGCCCCATCTGCCTGGAA(20)
Chimp         ATGGCTTCTGGAATCCTGGTTAATGTAAAGGAGGAGGTGACCTGCCCCATCTGCCTGGAA
Gorilla       ATGGCTTCTGGAATCCTGGTTAATGTAAAGGAGGAGGTGACCTGCCCCATCTGCCTGGAA
Orangutan     ATGGCTTCTGGAATCCTGGTTAATGTAAAGGAGGAGGTGACCTGCCCTATCTGCCTGGAA
Gibbon        ATGGCTTCTGGAATCCTGGTTAATGTAAAGGAGAAGGTGACCTGCCCCATCTGCCTGGAA
Rhes_cDNA     ATGGCTTCTGGAATCCTGCTTAATGTAAAGGAGGAGGTGACCTGTCCCATCTGCCTGGAA
Baboon        ATGGCTTCTGGAATCCTGCTTAATGTAAAGGAGGAGGTGACCTGTCCCATCTGCCTGGAA
AGM           ATGGCTTCTGGAATCCTGCTTAATGTAAAGGAGGAGGTGACCTGTCCCATCTGCCTGGAA
AGM_cDNA      ATGGCTTCTGGAATCCTGGTTAATGTAAAGGAGGAGGTGACCTGTCCCATCTGCCTGGAA
Tant_cDNA     ATGGCTTCTGGAATCCTGCTTAATGTAAAGGAGGAGGTGACCTGTCCCATCTGCCTGGAA
Patas         ATGGCTTCTGGAATCCTGCTTAATGTAAAGGAGGAGGTGACCTGTCCTATCTGCCTGGAA
Colobus       ATGGCTTCTGGAATCCTGGTTAATATAAAGGAGGAGGTGACCTGCCCCATCTGCCTGGAA
DLangur       ATGGCTTCTGGAATCCTGGTTAATATAAAGGAGGAGGTGACCTGCCCCATCTGCCTGGAA
PMarmoset     ATGGCTTCCAGAATCCTGGTGAATATAAAGGAGGAGGTAACCTGCCCCATCTGCCTGGAA
Tamarin       ATGGCTTCCAGAATCCTGGTGAATATAAAGGAGGAGGTGACCTGCCCCATCTGCCTGGAA
Squirrel      ATGGCTTCCAGAATCCTGGGGAGTATAAAGGAGGAGGTGACCTGCCCCATCTGCCTGGAA
Owl           ATGGCTTCCAGAATCCTGGTCAATATAAAGGAGGAGGTGACCTGCCCCATCTGCCTGGAA
Titi          ATGGCTTCCAGAATCCTGGTGAATATAAAGGAGGAGGTGACCTGCCCCATCTGCCTGGAA
Saki          ATGGCTTCCAGAATCCTGATGAACATAAAGGAGGAGGTGACCTGCCCCATCTGCCTGGAA
Howler        ATGGCTTCCAAAATCCTGGTGAATATAAAGGAGGAGGTGACCTGCCCCATCTGCCTGGAA
Spider        ATGGCTTCCGAAATCCTGTTGAATATAAAGGAGGAGGTGACCTGCCCCATCTGCCTGGAA
Woolly        ATGGCTTCCGAAATCCTGGTGAATATAAAGGAGGAGGTGACCTGCCCCATCTGCCTGGAC

Human         CTCCTGACACAACCCCTGAGCCTGGACTGCGGCCACAGCTTCTGCCAAGCATGCCTCACT(40)
Chimp         CTCCTGACACAACCCCTGAGCCTGGACTGCGGCCACAGCTTCTGCCAAGCATGCCTCACT
Gorilla       CTCCTGACACAACCCCTGAGCCTGGACTGCGGCCACAGCTTCTGCCAAGCATGCCTCACT
Orangutan     CTCCTGACACAACCCCTGAGTCTGGACTGCGGCCACAGCTTCTGCCAAGCATGCCTCACT
Gibbon        CTCCTGACACAACCCCTGAGTCTGGACTGCGGCCACAGCTTCTGCCAAGCATGCCTCACT
Rhes_cDNA     CTCCTGACAGAACCCCTGAGTCTGCACTGCGGCCACAGCTTCTGCCAAGCGTGCATCACT
Baboon        CTCCTGACAGAACCCCTGAGTCTGCCCTGTGGCCACAGCTTCTGCCAAGCGTGCATCACT
AGM           CTCCTGACAGAACCCCTGAGTCTGCCCTGCGGCCACAGCTTCTGCCAAGCGTGCATCACT
AGM_cDNA      CTCCTGACAGAACCCCTGAGTCTGCCCTGCGGCCACAGCTTCTGCCAAGCGTGCATCACT
Tant_cDNA     CTCCTGACAGAACCCCTGAGTCTGCCCTGCGGCCACAGCTTCTGCCAAGCGTGCATCACT
Patas         CTCCTGACAGAACCCCTGAGTCTGCCCTGCGGCCACAGCTTCTGCCAAGCGTGCATCACT
Colobus       CTCCTGACAGAACCCCTGAGTCTGCACTGCGGCCACAGCTTCTGCCAAGCGTGCATCACT
DLangur       CTCCTGACAGAACCCCTGAGTCTGCACTGCGGCCACAGCTTCTGCCAAGCGTGCATCACT
PMarmoset     CTCCTGACAGAACCTCTGAGCCTAGACTGTGGCCACAGCTTCTGCCAAGCCTGCATCACT
Tamarin       CTCCTGACAGAACCTCTGAGCCTAGACTGTGGCCACAGCTTCTGCCAAGCATGCATCACT
Squirrel      CTCCTGACAGAACCTCTGAGCCTAGACTGTGGCCACAGCTTCTGCCAAGCATGCATCACT
Owl           CTCCTGACAGAACCCCTGAGCCTGGACTGTGGCCATAGCTTCTGCCAAGCATGCATCACT
Titi          CTCCTGACAGAACCCCTGAGCCTAGACTGTGGCCACAGCTTCTGCCAAGCATGCATCACC
Saki          CTCCTGACAGAACCCCTGAGCCTAGACTGTGGCCACAGCTTCTGCCAAGCATGCATCACT
Howler        CTACTGACAGAACCTCTGAGCCTAGACTGTGGCCACAGCTTCTGCCAAGCATGCATCACT
Spider        CTACTGACAGAACCTCTGAGCCTAGACTGTGGCCACAGCTTCTGCCAAGCATGCATCACT
Woolly        CTACTGACAGAACCTCTGAGCCTAGACTGTGGCCACAGCTTCTGCCAAGCATGCATCACT
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Human         GCAAACCACAAGAAGTCCATGCTAGACAAAGGA---GAGAGTAGCTGCCCTGTGTGCCGG(59)
Chimp         GCAAACCACAAGAAGTCCATGCTAGACAAAGGA---GAGAGTAGCTGCCCTGTGTGCCGG
Gorilla       GCAAACCACAAGAAGTCCATGCTAGACAAAGGA---GAGAGTAGCTGCCCTGTGTGCCGG
Orangutan     GCAAACCACAAGAAGTCCACGCTAGACAAAGGA---GAGAGAAGCTGCCCTGTGTGCCGG
Gibbon        GCAAACCACAAAACGTCCATGCCAGACGAAGGA---GAGAGAAGCTGCCCTGTGTGCCGG
Rhes_cDNA     GCGAACCACAAGAAGTCCATGCTATACAAAGAAGGAGAGAGAAGCTGCCCTGTGTGCCGG
Baboon        GCAAACCACAGGAAGTCCATGCTATACAAAGAAGGAGAGAGAAGCTGCCCTGTGTGCCGG
AGM           GCAAACCACAAGGAGTCCATGCTATACAAAGAAGAAGAGAGAAGCTGCCCTGTGTGCCGG
AGM_cDNA      GCAAACCACAAGGAGTCCATGCTATACAAAGAAGAAGAGAGAAGCTGCCCTGTGTGCCGG
Tant_cDNA     GCAAACCACAAGGAGTCCATGCTATACAAAGAAGAAGAGAGAAGCTGCCCTGTGTGCCGG
Patas         GCAAACCACAAGAAGTCCATGCTATACAAAGAAGAAGAGAGAAGCTGCCCTGTGTGCCGG
Colobus       GCAAACCACAAGAAGTCCATGCTATACAAAGAAGGAGAGAGAAGCTGCCCTGTGTGCCGG
DLangur       GCAAACCACAAGAAGTCCATGCTATACAAAGAAGGAGAGAGAAGCTGCCCTGTGTGCCGG
PMarmoset     GCAAACCACAAAGAGTCTACGCTACACCAAGGA---GAGAGAAGCTGCCCTTTGTGCCGG
Tamarin       GCAAACCACAAAGAGTCTACGCCACACCAAGGA---GAGAGAAGCTGCCCCTTGTGCCGG
Squirrel      GCAAATCACAAAGAGTCTATGCTACACCAAGGA---GAGAGAAGCTGCCCTTTGTGCCGG
Owl           GCAAATCACAAAAAGTCTATGCCACACCAAGGA---GAGAGAAGCTGCCCTTTGTGCCGG
Titi          GCAAACCACAAAGAGTCTACGCTACACCAAGGA---GAGAGAAGCTGCCCTTTGTGCAGG
Saki          GCAAACCACAAAAAGTCTATGCTACACCAAGGA---GAGAGAAGCTGCCCTTTGTGCCGG
Howler        GCAAACCACAAAGAGTCC-----------AGA---GAGAGAAGCTGCCCTTTGTGCCGG
Spider        GCAAACCACAAAGAGTCTACGCTACACCAAGGA---GAGAGAAGCTGCCCTTTGTGCCGG
Woolly        GCAGACCACAAAGAGTCTACGCTACACCAAGGA---GAGAGAAGCTGCCCTTTGTGCCGG

Human         ATCAGTTACCAGCCTGAGAACATACGGCCTAATCGGCATGTAGCCAACATAGTGGAGAAG(79)
Chimp         ATCAGTTACCAGCCTGAGAACATACGGCCTAATCGGCATGTAGCCAACATAGTGGAGAAG
Gorilla       ATCAGTTACCAGCCTGAGAACATACGGCCTAATCGGCATGTAGCCAACATAGTGGAGAAG
Orangutan     GTCAGTTACCAGCCTAAGAACATACGGCCTAATCGGCATGTAGCCAACATAGTGGAGAAG
Gibbon        ATCAGTTACCAGCATAAGAACATACGGCCTAATCGGCATGTAGCCAACATAGTGGAGAAG
Rhes_cDNA     ATCAGTTACCAGCCTGAGAACATACAGCCTAATCGGCATGTAGCCAACATAGTGGAGAAG
Baboon        ATCAGTTACCAGCCTGAGAACATACAGCCTAATCGGCATGTAGCCAACATAGTGGAGAAG
AGM           ATCAGTTACCAGCCTGAGAATATACAGCCTAATCGGCATGTAGCCAACATAGTGGAGAAG
AGM_cDNA      ATCAGTTACCAGCCTGAGAATATACAGCCTAATCGGCATGTAGCCAACATAGTGGAGAAG
Tant_cDNA     ATCAGTTACCAGCCTGAGAATATACAGCCTAATCGGCATGTAGCCAACATAGTGGAGAAG
Patas         ATCAGTTACCAGCCTGAGAACATACAGCCTAATCGGCATGTAGCCAACATAGTGGAGAAG
Colobus       ATCAGTTACCAGCCTGAGAACATACGGCCTAATCGGCATGTGGCCAACATAGTGGAGAAG
DLangur       ATCAGTTACCAGCCTGAGAACATACGGCCTAATCGGCATGTGGCCAACATAGTGGAGAAG
PMarmoset     ATGAGTTACCCGTCTGAGAACTTGCGGCCTAATCGGCATTTGGCCAATATAGTGGAGAGG
Tamarin       ATGAGTTACCCGTCTGAGAACTTGCGGCCTAATCGGCATTTGGCCAACATAGTGGAGAGG
Squirrel      CTCCCTTACCAGTCTGAGAACCTGCGGCCTAATCGGCATTTGGCCAGCATCGTGGAGAGG
Owl           ATCAGTTACTCGTCTGAGAACCTGCGGCCTAATCGGCATTTGGTCAACATAGTGGAGAGG
Titi          ATCAGTTACCCGTCTGAGAACCTGCGGCCTAATCGGCATTTGGCCAACATAGTGGAGAGG
Saki          ATCAGTTACCCATCTGAGAACCTGCGGCCTAATCGGCATTTGGCCAACATAGTGGAGAGG
Howler        GTCAGTTACCACTCTGAGAACCTGCGGCCTAATCGGCATTTGGCCAACATAGCGGAGAGG
Spider        GTCAGTTACCAGTCTGAGAACCTGCGGCCTAATCGGCATTTGGCAAACATAGCGGAGAGG
Woolly        GTCGGTTACCAGTCTGAGAACCTGCGGCCTAATCGGCATTTGGCAAACATAGCCGAGAGG
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                                                                B-box2→
Human          CTCAGGGAGGTCAAGTTGAGCCCA---GAGGGGCAGAAAGTTGATCATTGTGCACGCCAT(98)
Chimp          CTCAGGGAGGTCAAGTTGAGCCCA---GAGGGGCAGAAAGTTGATCATTGTGCACACCAT
Gorilla        CTTAGGGAGGTCAAGTTGAGCCCA---GAGGGGCAGAAAGTTGATCATTGTGCACGCCAT
Orangutan      CTCAGGGAGGTCAAATTGAGCCCA---GAGGGGCAGAAGGTTGATCACTGTGCACGCCAT
Gibbon         CTCAGGGAGGTCAAGTTGAGCCCAGAGGAGGGGCAGAAGGTTGATCACTGTGCACGCCAC
Rhes_cDNA      CTCAGGGAGGTCAAGTTGAGCCCAGAAGAGGGACAGAAGGTTGATCACTGTGCACGCCAT
Baboon         CTCAGGGAGGTCAAGTTGAGCCCAGAAGAGGGGCTGAAGGTTGATCACTGTGCACGCCAT
AGM            CTCAGAGAGGTCAAGTTGAGCCCAGAAGAGGGGCAGAAGGTTGATCACTGTGCACGCCAT
AGM_cDNA       CTCAGAGAGGTCAAGTTGAGCCCAGAAGAGGGGCAGAAGGTTGATCACTGTGCACGCCAT
Tant_cDNA      CTCAGAGAGGTCAAGTTGAGCCCAGAAGAGGGGCAGAAGGTTGATCACTGTGCACGCCAT
Patas          CTCAGAGAGGTCAAGTTGAGCCCAGAAGAGGGGCAGAAGGTTGATCACTGTGCACGCCAT
Colobus        CTCAGGGAGGTCAAGTTGAGCCCAGAAGAGGGGCAGAAGGTTGATCACTGTGCACGCCAT
DLangur        CTCAGGGAGGTCAAGTTGAGCCCAGAAGAGGGGCAGAAAGTTGATCACTGTGCACGCCAT
PMarmoset      CTCAAAGAGGTCATGCTGAGCCCAGAGGAGGGGCAGAAGGTTGATCACTGTGCACGCCAT
Tamarin        CTCAAAGAGGTCATGCTGAGCCCAGAGGAGGGGCAGAAGGTTGGTCACTGTGCACGCCAT
Squirrel       CTCAGGGAGGTCATGCTGAGACCAGAGGAAAGGCAGAACGTTGATCACTGTGCACGCCAT
Owl            CTCAGGGAGGTCATGCTGAGCCCAGAGGAGGGGCAGAAGGTTGATCACTGTGCACACCAT
Titi           CTCAGGGAGGTCGTGCTGAGCCCAGAGGAGGGGCAGAAGGTTGATCTCTGTGCACGCCAT
Saki           CTCAGGGAGGTCATGCTGAGCCCAGAGGAGGGGCAGAAGGTTGATCACTGTGCACGCCAT
Howler         CTCAGGGAGGTCATGTTGAGCCCAGAGGAGGGGCAGAAGGTTGATCGCTGTGCACGCCAT
Spider         CTCAGGGAGGTCATGTTGAGCCCAGAGGAAGGGCAGAAGGTTGATCGCTGTGCACGCCAT
Woolly         CTCAGGGAGGTCATGTTGAGCCCAGAGGAAGGGCAGAAGGTTGATCGCTGTGCACGCCAT


Human          GGAGAGAAACTTCTACTCTTCTGTCAGGAGGACGGGAAGGTCATTTGCTGGCTTTGTGAG(118)
Chimp          GGAGAGAAACTTCTACTCTTCTGTCAGGAGGACGGGAAGGTCATTTGCTGGCTTTGTGAG
Gorilla        GGAGAGAAACTTCTACTCTTCTGTCAGGAGGACGGGAAGGTCATTTGCTGGCTTTGCGAG
Orangutan      GGAGAGAAACTTCTACTCTTCTGTAAGGAGGACGGGAAGGTCATTTGCTGGCTTTGTGAG
Gibbon         GGAAAGAAACTTCTACTCTTCTGTCAGGAGGACAGGAAGGTCATTTGCTGGCTTTGTGAG
Rhes_cDNA      GGAGAGAAACTCCTACTCTTCTGTCAGGAGGACAGCAAGGTCATTTGCTGGCTTTGTGAG
Baboon         GGAGAGAAACTCCTACTCTTCTGTCAGGAGGACAGCAAGGTCATTTGCTGGCTTTGTGAG
AGM            GGAGAGAAACTCCTACTCTTCTGTCAGGAGGACAGCAAGGTCATTTGCTGGCTTTGTGAG
AGM_cDNA       GGAGAGAAACTCCTACTCTTCTGTCAGGAGGACAGCAAGGTCATTTGCTGGCTTTGTGAG
Tant_cDNA      GGAGAGAAACTCCTACTCTTCTGTCAGGAGGACAGCAAGGTCATTTGCTGGCTTTGTGAG
Patas          GGAGAGAAACTCCTACTCTTCTGTCAGGAGGACAGGAAGGTCATTTGCTGGCTTTGTGAG
Colobus        GGAGAGAAACTCCTACTCTTCTGTCAGGAGGACAGGAAGGTCATTTGCTGGCTTTGTGAG
DLangur        GGAGAGAAACTCCTACTCTTCTGTCAGGAGGACAGGAAGGTCATTTGCTGGCTTTGTGAG
PMarmoset      GGAGAGAAACTTCTACTCTTCTGTCAGCAGGATGGAAATGTCATTTGCTGGCTTTGTGAG
Tamarin        GGAGAGAAACTTCTACTCTTCTGTGAGCAGGATGGAAATGTCATTTGCTGGCTTTGTGAG
Squirrel       GGAGAGAAACTTCTACTCTTCTGTGAGCAGGATGGAAATATCATTTGCTGGCTTTGTGAG
Owl            GGAGAGAAACTTGTACTCTTCTGTCAGCAGGATGGAAATGTCATTTGCTGGCTTTGTGAG
Titi           GGAGAGAAACTTCTACTCTTCTGTCAGCAGGATGGAAATGTCATTTGCTGGCTTTGTGAG
Saki           GGAGAGAAACTTCTACTCTTCTGTCAGCAGGATGGAAATGTCATTTGCTGGCTTTGTGAG
Howler         GGAGAGAAACTTCTACTCTTCTGTCAGCAGCATGGAAATGTCATTTGCTGGCTTTGTGAG
Spider         GGAGAGAAACTTCTACTCTTCTGTCAGCAGCATGGAAATGTCATTTGCTGGCTTTGTGAG
Woolly         GGAGAGAAACTTCTACTCTTCTGTCAGCAGCATGGAAATGTCATTTGCTGGCTTTGTGAG
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                                                  Coiled-Coil→
Human       CGGTCTCAGGAGCACCGTGGTCACCACACGTTCCTCACAGAGGAGGTTGCCCGGGAGTAC(138)
Chimp       CGGTCTCAGGAGCACCGTGGTCACCACACGTTCCTCACAGAGGAGGTTGCCCGGGAGTAC
Gorilla     CGGTCTCAGGAGCACCGTGGTCACCACACGTTCCTCACAGAGGAGGTTGCCCAGGAGTAC
Orangutan   CGGTCTCAGGAGCACCGTGGTCACCACACATTCCTCACGGAGGAGGTTGCCCAGAAGTAC
Gibbon      CGGTCTCAGGAGCACCGTGGTCACCACACATTCCTCACGGAGGAGGTTGCCCAGGAGTAC
Rhes_cDNA   CGGTCTCAGGAGCACCGTGGTCACCACACTTTCCTCATGGAGGAGGTTGCCCAGGAGTAC
Baboon      CGGTCTCAGGAGCACCGTGGTCACCACACTTTCCTCATGGAGGAGGTTGCCCAGGAGTAC
AGM         CGGTCTCAGGAGCACCGTGGTCACCACACTTTCCTCATGGAGGAGGTTGCCCAGGAGTAC
AGM_cDNA    CGGTCTCAGGAGCACCGTGGTCACCACACTTTCCTCATGGAGGAGGTTGCCCAGGAGTAC
Tant_cDNA   CGGTCTCAGGAGCACCGTGGTCACCACACTTTCCTCATGGAGGAGGTTGCCCAGGAGTAC
Patas       CGGTCTCAGGAGCACCGTGGTCACCACACTTTCCTCATGGAGGAGGTTGCCCAGGAGTAC
Colobus     CGGTCTCAGGAGCACCGTGGTCACCACACGTTCCTCATGGAGGAGGTTGCCCAGGAGTAC
DLangur     CGGTCTCAGGAGCACCGTGGTCACCACACGTTCCTCATGGAGGAAGTTGCCCAGGAGTAC
PMarmoset   CGGTCTCAAGAACACCGTGGTCACCACACATTCCTCGTGGAGGAGGTTGCAGAGAAATAC
Tamarin     CGGTCTCAAGAACATCGTGGTCACCACACATTACTCGTGGAGGAGGTTGCAGAGAAATAC
Squirrel    CGGTCTCAAGAACACCGTGGTCACAACACATTCCTCGTGGAGGAGGTTGCACAGAAATAC
Owl         CGGTCTCAAGAACACCGTGGGCACCAGACATTCCTTGTGGAGGAGGTTGCACAGAAATAC
Titi        CGGTCTCAAGAACACCGTGGTCACCACACATTCCTCGTGGAGGAGGTTGCACAGACATAC
Saki        CGGTCTCAAGAACACCGTGGTCACCACACATTACTCGTGGAGGAGGTTGCACAGACATAC
Howler      CGGTCTGAAGAACACCGTGGTCACCGCACATCCCTCGTGGAGGAGGTTGCACAGAAATAC
Spider      CGGTCTCAAGAACACCGTGGTCACAGCACATTCCTCGTGGAGGAGGTTGCACAGAAATAC
Woolly      CGGTCTCAAGAACACCGTGGTCACAGCACATTCCTCGTGGAGGAGGTTGCACAGAAATAC

                 Exon3→
Human       CAA|GTGAAGCTCCAGGCAGCTCTGGAGATGCTGAGGCAGAAGCAGCAGGAAGCTGAAGAG(158)
Chimp       CAA|GTGAAGCTCCAGGCAGCTCTGGAGATGCTGAGGCAGAAGCAGCAGGAAGCTGAAGAG
Gorilla     CAA|GTGAAGCTCCAGGCAGCTCTGGAGATGCTGAGGCAGAAGCAGCAGGAAGCTGAAGAG
Orangutan   CAA|GTGAAGCTCCAGGCAGCTCTGGAGATGCTGAGGCAGAAGCAGCAGGAAGCTGAAGAG
Gibbon      CAA|ATGAAGCTCCAGGCAGCTCTGCAGATGCTGAGGCAGAAGCAGCAGGAAGCTGAAGAG
Rhes_cDNA   CAT|GTGAAGCTCCAGACAGCTCTGGAGATGCTGAGGCAGAAGCAGCAGGAAGCTGAAAAG
Baboon      CAT|GTGAAGCTCCAGACAGCTCTGGAGATGCTGAGGCAGAAGCAGCAGGAAGCTGAAAAG
AGM         CAT|GTGAAGCTCCAGACAGCTCTGGAGATGCTGAGGCAGAAGCAGCAGGAAGCTGAAAAG
AGM_cDNA    CAT|GTGAAGCTCCAGACAGCTCTGGAGATGCTGAGGCAGAAGCAGCAGGAAGCTGAAAAG
Tant_cDNA   CAT|GTGAAGCTCCAGACAGCTCTGGAGATGCTGAGGCAGAAGCAGCAGGAAGCTGAAAAG
Patas       CAT|GTGAAGCTCCAGACAGCTCTGGAGATGCTGAGGCAGAAGCAGCAGGAAGCTGAAAAG
Colobus     CAC|GTGAAGCTCCAGACAGCTCTGGAGATGCTGAGGCAGAAGCAGCAGGAAGCTGAAAAG
DLangur     CAC|GTGAAGCTCCAGACAGCTCTGGAGATGCTGAGGCAGAAGCAGCAGGAAGCTGAAAAG
PMarmoset   CAA|GGAAAGCTCCAGGTAGCTCTGGAGATGATGAGGCAGAAGCAGCAGGATGCTGAAAAG
Tamarin     CAA|GAAAAGCTCCAGGTAGCTCTGGAGATGATGAGGCAGAAGCAGCAGGATGCTGAAAAG
Squirrel    CGA|GAAAAGCTCCAGGTAGCTCTGGAGACAATGAGGCAGAAGCAGCAGGATGCTGAAAAG
Owl         CGA|GAAAAGCTCCAGGTAGCTCTGGAGATGATGAGGCAGAAGCAGAAGGATGCTGAAAAG
Titi        CGA|GAAAATCTCCAGGTAGTTCTGGAGATGATGAGGCAGAAGCATCAGGATGCTGAAAAG
Saki        CGA|GAAAATCTCCAGGTAGCTCTGGAGACGATGAGGCAGAAGCAGCAGGATGCTGAAAAG
Howler      CGA|GAAAAGCTCCAGGCAGCTCTGGAGATGATGAGGCAGAAGGAGCAGGATGCTGAAATG
Spider      CAA|GAAAAGCTCCAGGTAGCTCTGGAGATGATGAGGCAGAAGCAGCAGGATGCTGAAAAG
Woolly      CGA|GAAAAGCTCCAGGTAGCTCTGGAAATGATGAGGGAGAAGCAGCAGGATGCTGAAAAG
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                                                    Exon4→
Human       TTGGAAGCTGACATCAGAGAAGAGAAAGCTTCCTGGAAG|ACTCAAATACAGTATGACAAA(178)
Chimp       TTGGAAGCTGACATCAGAGAAGAGAAAGCTTCCTGGAAG|ACTCAAATACAGTATGACAAA
Gorilla     TTGGAAGCTGACATCAGAGAAGAGAAAGCTTCCTGGAAG|ACTCAAATACAGTATGACAAA
Orangutan   TTGGAAGCTGACATCAGAGAAGAGAAAGCTTCCTGGAAG|ACTCAAATACAGTATGACAAA
Gibbon      TTGGAAGCTGACATCAGAGAAGAGAAAGCTTCCTGGAAG|ACTCAAATACAGTATGACAAA
Rhes_cDNA   TTGGAAGCTGACATCAGAGAAGAGAAAGCTTCCTGGAAG|ATTCAAATAGACTACGACAAA
Baboon      TTGGAAGCTGACATCAGAGAAGAGAAAGCTTCCTGGAAG|ATTCAAATAGACTACGACAAA
AGM         TTGGAAGCTGACATCAGAGAAGAGAAAGCTTCCTGGAAG|ATTCAAATAGACTACGACAAA
AGM_cDNA    TTGGAAGCTGACATCAGAGAAGAGAAAGCTTCCTGGAAG|ATTCAAATAGACTACGACAAA
Tant_cDNA   TTGGAAGCTGACATCAGAGAAGAGAAAGCTTCCTGGAAG|ATTCAAATAGACTACGACAAA
Patas       TTGGAAGCTGACATCAGAGAAGAGAAAGCTTCCTGGAAG|ATTCAAATAGACTACGACAAA
Colobus     TTGGAAGCTGACATCAGAGAAGAGAAAGCTTCCTGGAAG|ATTCAAATAGACTATGACAAA
DLangur     TTGGAAGCTGACATCAGAGAAGAGAAAGCTTCCTGGAAG|ATTCAAATAGACTGCGACAAA
PMarmoset   TTAGAAGCTGATGTCAGAGAAGAGCAAGCTTCCTGGAAG|ATTCAAATACAAAATGACAAA
Tamarin     TTGGAAGCTGACGTCAGAGAAGAGCAAGCTTCTTGGAAG|ATTCAAATACGAAATGACAAA
Squirrel    TTGGAAGCTGACGTCAGACAAGAGCAAGCTTCCTGGAAG|ATTCAAATACAAAATGACAAA
Owl         TTGGAAGCTGACGTCAGAGAAGAGCAAGCTTCCTGGAAG|ATTCAAATACAAAATGACAAA
Titi        TTGGAAGCTGACGTCAGAGAAGAGCAAGCTTCCTGGAAG|ATTCAAATACAAAATGACAAA
Saki        TTAGAAGCTGACGTCAGAGAAGAGCAAGCTTCCTGGAAG|ATTCAAATACGAGATGACAAA
Howler      TTGGAAGCTGACGTCAGAGAAGAGCAAGCTTCCTGGAAG|ATTCAAATAGAAAATGACAAA
Spider      TTGGAAGCTGATGTCAGAGAAGAGCAAGCTTCCTGGAAG|ATTCAAATAGAAAATGACAAA
Woolly      TTGGAAGCTGATGTCAGAGAAGAGCAAGCTTCCTGGAAG|ATTCAAATAAAAACGACAAA

Human       ACCAACGTCTTGGCAGATTTTGAGCAACTGAGAGACATCCTGGACTGGGAGGAGAGCAAT(198)
Chimp       ACCAACGTCTTGGCAGATTTTGAGCAACTGAGAGACATCCTGGACTGGGAGGAGAGCAAT
Gorilla     ACCAACGTCTTGGCAGATTTTGAGCAACTGAGAGACATCCTGGACTGGGAGGAGAGCAAT
Orangutan   ACCAGCGTCTTGGCAGATTTTGAGCAACTGAGAGACATCCTGGACTGGGAGGAGAGCAAT
Gibbon      ACCAACATCTTGGCAGATTTTGAGCAACTGAGACACATCCTGGACTGGGTGGAGAGCAAT
Rhes_cDNA   ACCAACGTCTCGGCAGATTTTGAGCAACTGAGAGAGATCCTGGACTGGGAGGAGAGCAAT
Baboon      ACCAACGTCTCGGCAGATTTTGAGCAACTGAGAGAGATCCTGGACTGGGAGGAGAGCAAT
AGM         ACCAACGTCTCGGCAGATTTTGAGCAACTGAGAGAGATCCTGGACTGGGAGGAGAGCAAT
AGM_cDNA    ACCAACGTCTCGGCAGATTTTGAGCAACTGAGAGAGATCCTGGACTGGGAGGAGAGCAAT
Tant_cDNA   ACCAACGTCTCGGCAGATTTTGAGCAACTGAGAGAGATCCTGGACTGGGAGGAGAGCAAT
Patas       ACCAACGTCTTGGCAGATTTTGAGCAACTGAGAGAGATCCTGGACTGGGAGGAGAGCAAT
Colobus     ACCAACGTCTTGGCAGATTTTGAGCAACTGAGAGAGATCCTGGACTGGGAGGAGAGCAAT
DLangur     ACCAATGTCTTGGCAGATTTTGAGCAACTGAGAGAGATCCTGGACTGGGAGGAGAGCAAT
PMarmoset   ACCAACATCATGGCAGAGTTTAAGCAACTGAGAGACATCCTGGACTGTGAGGAGAGCAAA
Tamarin     ACCAACATCATGGCAGAGTTTAAGCAACTGAGAGACATCCTGGACTGTGAGGAGAGCAAA
Squirrel    ACCAACATCATGGCAGAGTTTAAGCAACTGAGAGACATCCTGGACTGTGAGGAGAGCAAT
Owl         ACCAACATCATGGCAGAGTTTAAAAAACGGAGAGACATCCTGGACTGTGAGGAGAGCAAA
Titi        ACCAACATCATGGCAGAGTTTAAGCAACTGAGAGACATCCTGGACTGTGAGGAGAGCAAT
Saki        ACCAACATTATGGCAGAGTTTAAGCAACTGAGAGACATCCTGGACTGTGAGGAGAGCAAT
Howler      ACCAGCACCCTGGCAGAGTTTAAGCAACTGAGAGACATCCTGGACTGTGAGGAGAGCAAC
Spider      ACCAACATCCTGGCAGAGTTTAAGCAACTGAGAGACATCCTGGACTGTGAGGAGAGCAAT
Woolly      ACCAACATCCTGGCAGAGTTTAAGCAACTGAGAGACATCCTGGACTGTGAGGAGAGCAAT
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Human         GAGCTGCAAAACCTGGAGAAGGAGGAGGAAGACATTCTGAAAAGCCTTACGAACTCTGAA(218)
Chimp         GAGCTGCAAAACCTGGAGAAGGAGGAGGAAGACATTCTGAAAAGCCTTACGAAGTCTGAA
Gorilla       GAGCTGCAAAACCTGGAGAAGGAGGAGGAAGACATTCTGAAACGCCTTACGAAGTCTGAA
Orangutan     GAGCTGCAAAACCTGGAGAAGGAGGAGGAAGACATTCTAAAAAGCCTTACGAAGTCTGAA
Gibbon        GAGCTGCAAAACCTGGAGAAGGAGGAGAAAGACGTTCTGAAAAGGCTTATGAGGTCTGAA
Rhes_cDNA     GAGCTGCAGAACCTGGAGAAGGAGGAAGAAGACATTCTGAAAAGCCTTACGAAGTCTGAA
Baboon        GAGCTGCAGAACCTGGAGAAGGAGGAAGAAGACATTCTGAAAAGCCTTACGAAGTCTGAA
AGM           GAGCTGCAGAACCTGGAGAAGGAGGAAGAAGACATTCTGAAAAGCCTTACGAAGTCTGAA
AGM_cDNA      GAGCTGCAGAACCTGGAGAAGGAGGAAGAAGACATTCTGAAAAGCCTTACGAAGTCTGAA
Tant_cDNA     GAGCTGCAGAACCTGGAGAAGGAGGAAGAAGACATTCTGAAAAGCCTTACGAAGTCTGAA
Patas         GAGCTGCAGTACCTGGAGAAGGAGGAAGAAGACATTCTGAAAAGCCTTACGAAGTCTGAA
Colobus       GAGCTGCAGAACCTGGAGAAGGAGGAGGAAGACATTCTGAAAAGCCTTACGAAGTCTGAA
DLangur       GAGCTGCAGAACCTGGAGAAGGAGGAGGAAGACATTCTGAAAAGCCTTACGAAGTCTGAA
PMarmoset     GAGCTGCAAAACCTGGAGAAGGAGGAGAAAAACATTCTGAAAAGACTTGTACAGTCGGAA
Tamarin       GAGCTGCAAAACCTGGAGAAGGAGGAGAAAAACATTCTGAAAAGACTTGTACAGTCTGAA
Squirrel      GAGCTGCAAAACCTGGAGAAGGAGGAGAAAAACATTCTGAAAAGACTTGTACAGTCTGAA
Owl           GAGTTGCAAAACCTGGAGAAGGAGGAGAAAAACATTCTGAAAAGACTTGTACAGTCTGAA
Titi          GAGCTGCAAAACCTAGAGAAGGAGGAGAAAAACATTCTGAAAAGACTTGTACAGTCTGAG
Saki          GAGCTGCAAATCCTAGAGAAGGAGGAGAAAAACATTCTGAAAAGACTTACACAGTCTGAA
Howler        GAGCTGCAAAAACTGGAGAAGGAGGAGGAAAACCTTCTGAAAAGACTTGTACAGTCTGAA
Spider        GAGCTACAAAACTTGGAGAAGGAGGAGGAAAACCTTCTGAAAACACTTGCACAGTCTGAA
Woolly        GAGCTGCAAAACCTGGAGAAGGAGGAGGAAAACCTTCTGAAAATACTTGCACAGTCTGAA

Human         ACTGAGATGGTGCAGCAGACCCAGTCCCTGAGAGAGCTCATCTCAGATCTGGAGCATCGG(238)
Chimp         ACTGAGATGGTGCAGCAGACCCAGTCCGTGAGAGAGCTCATCTCAGATCTGGAGCGTCGG
Gorilla       ACTGAGATGGTGCAGCAGACCCAGTCCGTGAGAGAGCTCATCTCAGATCTGGAGCATCGG
Orangutan     ACTGAGATGGTGCAGCAGACCCAGTCCGTGAGAGAGCTCATCTCAGATGTGGAGCATCGG
Gibbon        ATTGAGATGGTGCAGCAGACCCAGTCCGTGAGAGAGCTCATCTCAGATCTGGAGCATCGG
Rhes_cDNA     ACGGAGATGGTGCAGCAGACCCAGTACATGAGAGAGCTCATCTCAGAACTGGAGCATCGG
Baboon        ACGGAGATGGTGCAGCAGACCCAGTACATGAGAGAGCTCATCTCAGATCTGGAGCATCGG
AGM           ACGGAGATGGTGCAGCAGACCCAGTACATGAGAGAGCTCATCTCAGATCTGGAGCATCGG
AGM_cDNA      ACGGAGATGGTGCAGCAGACCCAGTACATGAGAGAGCTCATCTCAGATCTGGAGCATCGG
Tant_cDNA     ACGGAGATGGTGCAGCAGACCCAGTACATGAGAGAGCTCATCTCAGATCTGGAGCATCGG
Patas         ACGAAGATGGTGCGGCAGACCCAGTACGTGAGAGAGCTCATCTCAGATCTGGAGCATCGG
Colobus       ACTGAGATGGTGCAGCAGACCCAGTACATGAGAGAGCTCGTCTCAGATCTGGAGCATCGG
DLangur       ACTGAGATGGTGCAGCAGACCCAGTACATGAGAGAGCTCATCTCAGATCTGGAGCATCGG
PMarmoset     AGTGACATGGTGCTGCAGACCCAGTCCATTAGAGTGCTCATCTCAGATCTGGAGCGTCGC
Tamarin       AGTGACATGGTGCTGCAGACCCAGTCCATGAGAGTGCTCATCTCAGATCTGGAGCGTCGC
Squirrel      AATGACATGGTGCTGCAGACCCAGTCCGTGAGAGTGCTCATCTCAGATCTGGAGCGTCGC
Owl           AATGACATGGTGCTGCAGACCCAGTCCGTGAGAGTGCTCATCTCAGATCTGGAGCATCGC
Titi          AATGACATGGTGCTGCAGACCCAGTCCATAAGCGTGCTCATCTCGGATCTGGAGCATCGC
Saki          AATGACATGGTGCTGCAGACCCAGTCCATGGGAGTGCTCATCTCAGATCTGGAGCATCGC
Howler        AATGACATGGTGTTGCAGACCCAGTCCATAAGAGTGCTCATTGCAGACCTGGAGCGTCGC
Spider        AATGACATGGTGCTGCAGACCCAGTCCATGAGAGTGCTCATCGCAGATCTGGAGCACCGC
Woolly        AATGACATGGTGCTGCAGACCCAGTCCATGAGAGTGCTCATCGCAGATCTGGAGCATCGC
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                                                Exon5→                Exon6→
Human          CTGCAGGGGTCAGTGATGGAGCTGCTTCAG|GGTGTGGATGGCGTCATAAAAAG|GACGGAG(258)
Chimp          CTGCAGGGGTCAGTGATGGAGCTGCTTCAG|GGTGTGGATGGCGTCATAAAAAG|GATGGAG
Gorilla        CTGCAGGGGTCAGTGATGGAGCTGCTTCAG|GGTGTGGATGGCGTCATAAAAAG|GATGGAG
Orangutan      CTGCAGGGGTCAGTGATGGAGCTGCTTCAG|GGTGTGGATGGCATCATAAAAAG|GATGCAG
Gibbon         CTGCAGGGGTCAGTGATGGAGCTGCTTCAG|GGTGTGGATGGCGTCATAAAAAG|GATGAAG
Rhes_cDNA      TTGCAGGGGTCAATGATGGATCTACTGCAG|GGTGTGGATGGCATCATTAAAAG|GATTGAG
Baboon         TTGCAGGGGTCAATGATGGAGCTACTGCAG|GGTGTGGATGGCATCATTAAAAG|GATTGAG
AGM            TTGCAGGGGTCAATGATGGAGCTGCTGCAG|GGTGTGGATGGCATCATTAAAAG|GATTGAG
AGM_cDNA       TTGCAGGGGTCAATGATGGAGCTGCTGCAG|GGTGTGGATGGCATCATTAAAAG|GGTTGAG
Tant_cDNA      TTGCAGGGGTCAATGATGGAGCTGCTGCAG|GGTGTGGATGGCATCATTAAAAG|GATTGAG
Patas          TTGCAGGGGTCAATGATGGAGCTGCTGCAG|GGTGTGGATGGCATCATTAAAAG|GATTGAG
Colobus        TTGCAGGGGTCAGTGATGGAGCTGCTGCAG|GGTGTGGATGGCATCATAAAAAG|GATTGAG
DLangur        TTGCAGGGGTCAATGATGGAGCTGCTGCAG|GGTGTGGATGGCATCATAAAAAG|GATTGAG
PMarmoset      CTGCAGGGGTCAGTGATGGAGCTTTTACAG|GGTGTGGATGACGTCATAAAAAG|GATTGAG
Tamarin        CTGCAGGGGTCAGTGCTGGAGCTGTTACAG|GGTGTGGATGATGTCATAAAAAG|GATTGAG
Squirrel       CTGCAGGGGTCAGTGGTGGAGCTGTTACAG|GATGTGGATGGTGTCATAAAAAG|GATTGAG
Owl            CTGCAGGGGTCAGTGATGGAGCTGTTACAG|GGTGTGGATGGTGTCATAAAAAG|GATTGAG
Titi           CTGCAGGGGTCAGTGATGGAGCTGTTACAG|GGTGTGGATGGCGTCATAAAAAG|GGTTAAG
Saki           CTGCAGGGGTCAGTGATGGAGCTGTTACAG|GGTGTGGATGAAGTCATAAAAAG|GGTTAAG
Howler         CTGCAGGGGTCAGTTATGGAGCTGTTACAG|GGTGTGGAAGGCGTCATAAAAAG|GATTAAG
Spider         CTGCAGGGGTCAGTGATGGAGCTGTTACAG|GATGTGGAAGGCGTCATAAAAAG|GATTAAG
Woolly         CTGCAGGGGTCAGTGATGGAGCTGTTACAG|GGTGTGGAAGGCATCATAAAAAG|GACTACG

Human          AACGTGACCTTGAAGAAGCCAGAAACTTTTCCAAAAAATCAAAGGAGAGTGTTTCGAGCT(278)
Chimp          AACGTGACCTTGAAGAAGCCAGAAACTTTTCCAAAAAATCAAAGGAGAGTGTTTCGAGCT
Gorilla        AACGTGACCTTGAAGAAGCCAGAAACTTTTCCAAAAAATCGAAGGAGAGTGTTTCGAGCT
Orangutan      AACGTGACCTTGAAGAAGCCAGAAACTTTTCCAAAAAATCAAAGGAGAGTGTTTCGAGCT
Gibbon         AACGTGACCTTGAAGAAGCCAGAAACTTTTCCAAAAAATCGAAGGAGAGTGTTTCGAGCT
Rhes_cDNA      AACATGACCTTGAAGAAGCCAAAAACTTTTCACAAAAATCAAAGGAGAGTGTTTCGAGCT
Baboon         AACATGACCTTGAAGAAGCCAAAAACTTTTCACAAAAATCAAAGGAGAGTGTTTCGAGCT
AGM            AACATGACCTTGAAGAAGCCAAAAACATTTCACAAAAATCAAAGGAGAGTGTTTCGAGCT
AGM_cDNA       AACATGACCTTGAAGAAGCCAAAAACATTTCACAAAAATCAAAGGAGAGTGTTTCGAGCT
Tant_cDNA      AACATGACCTTGAAGAAGCCAAAAACATTTCACAAAAATCAAAGGAGAGTGTTTCGAGCT
Patas          AACATGACCTTGAAGAAGCCAGAAACATTTCACAAAAATCAAAGGAGAGTGTTTCGAGCT
Colobus        GACATGACCTTGAAGAAGCCAAAAACTTTTCCCAAAAATCAAAGGAGAGTGTTTCGAGCT
DLangur        AACATGACCTTGAAGAAGCCAAAAACTTTTCCCAAAAATCAAAGGAGAGTGTTTCGAGCT
PMarmoset      AAAGTTACTTTGCAGAAGCCAAAAACGTTTCTTAATGAAAAAAGGAGAGTATTTCGAGCT
Tamarin        ACAGTGACTTTGCAGAAGCCAAAAACCTTTCTTAATGAAAAAAGGAGAGTATTTCGAGCT
Squirrel       AAAGTGACTTTGCAGAAGCCAAAAACCTTCCTTAATGAAAAAAGGAGAGTATTTCGAGCT
Owl            AAAGTGACTTTGCAGAATCCAAAAACCTTTCTTAATGAAAAAAGGAGAATATTTCAAACT
Titi           AATGTGACTTTGCAGAAGCCAAAAACTTTTCTTAATGAAAAAAGGAGAGTATTTCGAGTT
Saki           AACGTGACTTTGCAGAAGCCGAAAACTTTTCTTAATGAAAAAAGGAGAGTATTTCGAGCT
Howler         AACGTGACTTTGCAGAAGCCAGAAACCTTTCTTAATGAAAAAAGGAGAGTATTTCAAGCT
Spider         AATGTGACTTTGCAGAAGCCAAAAACCTTTCTTAATGAAAAAAGGAGAGTGTTTCGAGCT
Woolly         AATGTGACTTTGCAGAAGCCAAAAACCTTTCTTAATGAAAAAAGGAGAGTGTTTCGAGCT
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                                                    Exon7→          SPRY→
Human          CCTGATCTGAAAGGAATGCTAGAAGTGTTTAGAG|AGCTGACAGATGTCCGACGCTACTGG(298)
Chimp          CCTGATCTGAAAGGAATGCTAGAAGTGTTTAGAG|AGCTGACAGATGTCCGACGCTACTGG
Gorilla        CCTGATCTGAAAGGAATGCTAGAAGTGTTTAGAG|AGCTGACAGATGTCCGACGCTACTGG
Orangutan      CCTAATCTGAAAGGAATGCTAGAAGTGTTTAGAG|AGCTGACAGATGTCCGACGCTACTGG
Gibbon         GCTGATCTGAAAGTAATGCTAGAAGTGTTGAGAG|AGCTGAGAGATGTCCGACGCTACTGG
Rhes_cDNA      CCTGATCTGAAAGGAATGCTAGACATGTTTAGAG|AGCTAACAGATGCCCGACGCTACTGG
Baboon         CCTGATCTGAAAGGAATGCTAGACATGTTTAGAG|AGCTAACAGATGTCCGACGCTACTGG
AGM            CCTGATCTGAAAGGAATGCTAGACATGTTTAGAG|AGCTAACAGATGTCCGACGCTACTGG
AGM_cDNA       CCTGATCTGAAAGGAATGCTAGACATGTTTAGAG|AGCTAACAGATGTCCGACGCTACTGG
Tant_cDNA      CCTGATCTGAAAGGAATGCTAGACATGTTTAGAG|AGCTAACAGATGTCCGACGCTACTGG
Patas          CCTGCTCTGAAAGGAATGCTAGACATGTTTAGAG|AGCTAACAGATGTCCGGCGCTACTGG
Colobus        CCTGATCTGAAAGGAATGCTAGACATGTTTAGAG|AGCTAACAGATGTCCGACGCTACTGG
DLangur        CCTGATCTGAAAGGAATCCTAGACATGTTTAGAG|AACTAACAGATGTCCGACGCTACTGG
PMarmoset      CCTGATCTGAAAGGAATGCTACAAGCATTTAAAG|AGCTGACAGAAGTCCAACGCTACTGG
Tamarin        CCTGATCTGAAAGCAATGCTACAAGCATTTAAAG|AGCTGACAGAAGTCCAACGCTACTGG
Squirrel       CCTGATCTGAAAAGAATGCTCCAAGTGTTAAAAG|AACTGACAGAAGTCCAACGCTACTGG
Owl            CCTGATCTGAAAGGAACACTACAAGTGTTTAAAG|AGCCGACAGAAGTCCAACGCTACTGG
Titi           CCTGATCTGAAAGGAATGCTACAAGTGTCTAAAG|AGTTGACAGAAGTCCAACGCTACTGG
Saki           CCTGATCTGAAAGGAATGCTACAAGTGTTCAAAG|AGCTGACAGAAGTCCAACGCTACTGG
Howler         CCTGATCTGAAAGGAATGCTACAAGTGTTTAAAG|AGCTGAAAGAAGTCCAGTGCTACTGG
Spider         CCTGATCTGAAAGGAATGCTACAAGTGTTTAAAG|AGCTGAAAGAAGTCCAGTGCTACTGG
Woolly         CCTAATCTGAAAGGAATGCTACAAGTGTTTAAAG|AGCTGAAAGAAGTCCAATGCTACTGG

                  Exon8→                                  C  A  V  I  S  E  D  K  R
Human          G|TTGATGTGACAGTGGCTCCAAACAACATTTCATGTGCTGTCATTTCTGAAGATAAGAGA(318)
Chimp          G|TTGATGTGACAGTGGCTCCAAACAACATTTCATGTGCTGTCATTTCTGAAGATATGAGA
Gorilla        G|TTGATGTGACAGTGGCTCCAAACAACATTTCATGTGCTGTCATTTCTGAAGATATGAGA
Orangutan      G|TTGATGTGACAGTGGCTCCAAACGACATTTCATATGCTGTCATTTCTGAAGATATGAGA
Gibbon         G|TTGATGTGACAGTGGCTCCAAACAACATTTCATATGCTGTCATTTCTGAAGATATGAGA
Rhes_cDNA      G|TTGATGTGACACTGGCTACAAACAACATTTCGCATGCTGTCATTGCTGAAGATAAGAGA
Baboon         G|TTGATGTGACACTGGCTCCAAACAACATTTCGCATGCTGTCATTGCTGAAGATAAGAGA
AGM            G|TTGATGTGACACTGGCTCCAAACAACATTTCGCATGCTGTCATTGCTGAAGATAAGAGA
AGM_cDNA       G|TTGATGTGACACTGGCTCCAAACAACATTTCGCATGCTGTCATTGCTGAAGATAAGAGA
Tant_cDNA      G|TTGATGTGACACTGGCTCCAAACAACATTTCGCATGCTGTCATTGCTGAAGATAAGAGA
Patas          G|TTGATGTGACACTGGCTCCAAACAACATTTCGCATGTTGTCATTGCTGAAGATAAGAGA
Colobus        G|TTGATGTGACACTGGCTCCAAACAACATTTCACATGCTGTCATTGCTGAAGATAAGAGA
DLangur        G|TTGATGTGACACTGGCTCCAAACAACATTTCACATGCTGTCATTGCTGAAGATAAGAGA
PMarmoset      G|CTCATGTGACACTGGTTCCAAGTCACCCTTCATGTACTGTCATTTCTGAAGATGAGAGA
Tamarin        G|CTCATGTGACACTGGTTCCAAGTCACCCTTCATATGCTGTTATTTCTGAAGATGAGAGA
Squirrel       G|CTCATGTGACACTGGTTCCAAGTCACCCTTCATATACTATCATTTCTGAAGATGGGAGA
Owl            G|CTCATGTGACACTGGTTCCAAGTCACCCTTCATGTACTGTCATTTCTGAAGATGAGAGA
Titi           G|CTCATGTGACACTGGTTGCAAGTCACCCTTCACGTGCTGTCATTTCTGAAGACGAAAGA
Saki           G|TTCATGTGACACTGGTTCCAAGTCACCTTTCATGTGCTGTCATTTCTGAAGATGAGAGA
Howler         G|CTCATGTGACACTGATTCCGAATCACCCTTCATGTACTGTCATTTCTGAAGATAAGAGA
Spider         G|CTCATGTGACACTGGTTCCAAGTCACCCTTCATGTACTGTCATTTCTGAAGATGAGAGA
Woolly         G|CTCATGTGACACTGGTTCCAAGTCACCCTTCATGTGCTGTCATTTCTGAAGATCAGAGA
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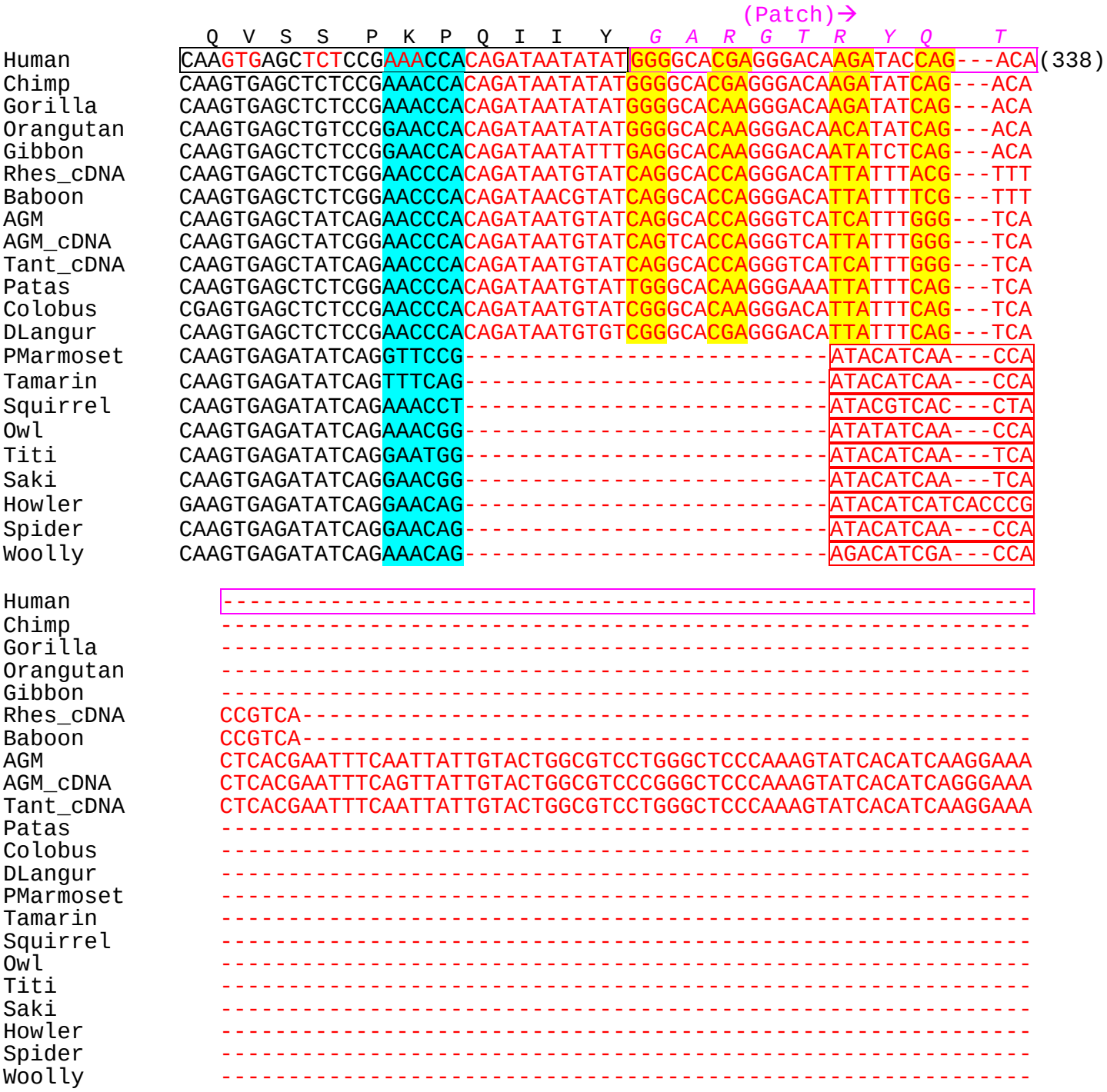
(Patch)→
Q V S S P K P Q I I Y G A R G T R Y Q T
Human CAAGTGAGCTCTCCGAAACCACAGATAATATATGGGGCACGAGGGACAAGATACCAG---ACA(338)
Chimp CAAGTGAGCTCTCCGAAACCACAGATAATATATGGGGCACGAGGGACAAGATATCAG---ACA
Gorilla CAAGTGAGCTCTCCGAAACCACAGATAATATATGGGGCACAAGGGACAAGATATCAG---ACA
Orangutan CAAGTGAGCTGTCCGGAACCACAGATAATATATGGGGCACAAGGGACAACATATCAG---ACA
Gibbon CAAGTGAGCTCTCCGGAACCACAGATAATATTTGAGGCACAAGGGACAATATCTCAG---ACA
Rhes_cDNA CAAGTGAGCTCTCGGAACCCACAGATAATGTATCAGGCACCAGGGACATTATTTACG---TTT
Baboon CAAGTGAGCTCTCGGAACCCACAGATAACGTATCAGGCACCAGGGACATTATTTTCG---TTT
AGM CAAGTGAGCTATCAGAACCCACAGATAATGTATCAGGCACCAGGGTCATCATTTGGG---TCA
AGM_cDNA CAAGTGAGCTATCGGAACCCACAGATAATGTATCAGTCACCAGGGTCATTATTTGGG---TCA
Tant_cDNA CAAGTGAGCTATCAGAACCCACAGATAATGTATCAGGCACCAGGGTCATCATTTGGG---TCA
Patas CAAGTGAGCTCTCGGAACCCACAGATAATGTATTGGGCACAAGGGAAATTATTTCAG---TCA
Colobus CGAGTGAGCTCTCCGAACCCACAGATAATGTATCGGGCACAAGGGACATTATTTCAG---TCA
DLangur CAAGTGAGCTCTCCGAACCCACAGATAATGTGTCGGGCACGAGGGACATTATTTCAG---TCA
PMarmoset CAAGTGAGATATCAGGTTCCG----------ATACATCAA---CCA
Tamarin CAAGTGAGATATCAGTTTCAG----------ATACATCAA---CCA
Squirrel CAAGTGAGATATCAGAAACCT----------ATACGTCAC---CTA
Owl CAAGTGAGATATCAGAAACGG----------ATATATCAA---CCA
Titi CAAGTGAGATATCAGGAATGG----------ATACATCAA---TCA
Saki CAAGTGAGATATCAGGAACGG----------ATACATCAA---TCA
Howler GAAGTGAGATATCAGGAACAG----------ATACATCATCACCCG
Spider CAAGTGAGATATCAGGAACAG----------ATACATCAA---CCA
Woolly CAAGTGAGATATCAGAAACAG----------AGACATCGA---CCA
Human
Chimp
Gorilla
Orangutan
Gibbon
Rhes_cDNA CCGTCA
Baboon CCGTCA
AGM CTCACGAATTTCAATTATTGTACTGGCGTCCTGGGCTCCCAAAGTATCACATCAAGGAAA
AGM_cDNA CTCACGAATTTCAGTTATTGTACTGGCGTCCCGGGCTCCCAAAGTATCACATCAGGGAAA
Tant_cDNA CTCACGAATTTCAATTATTGTACTGGCGTCCTGGGCTCCCAAAGTATCACATCAAGGAAA
Patas
Colobus
DLangur
PMarmoset
Tamarin
Squirrel
Owl
Titi
Saki
Howler
Spider
Woolly

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                F   V   N   F   N   Y   C   T   G   I
Human           TTTGTGAATTTCAATTATTGTACTGGCATCCTGGGCTCTCAAAGTATCACATCAGGGAAA(358)
Chimp           TTTATGAATTTCAATTATTGTACTGGCATCCTGGGCTCTCAAAGTATCACATCAGGGAAA
Gorilla         TTTATGAATTTCAATTATTGTACGGGCATCCTGGGCTCTCAAAGTATCACATCAGGGAAA
Orangutan       TATGTGAATTTCAATTATTGTACTGGCATCCTGGGCTCTCAAAGTATCACGTCAGGGAAA
Gibbon          TTTGTGAATTTCAATTATTGTACTGGCATCCTGGGCTCTCAAAGTATCACATCAGGGAAA
Rhes_cDNA       CTCACGAATTTCAATTATTGTACTGGCGTCCTGGGCTCCCAAAGTATCACATCAGGGAAG
Baboon          CTCACGAATTTCAATTATTGTACTGGCGTCCTGGGCTCCCAAAGTATCACATCAGGGAAG
AGM             CTCACGAATTTCAATTATTGTACTGGCGTCCTGGGCTCCCAAAGTATCACATCAGGGAAA
AGM_cDNA        CTCACGAATTTCAATTATTGTACTGGCGTCCTGGGCTCCCAAAGTATCACATCAGGGAAA
Tant_cDNA       CTCACGAATTTCAATTATTGTACTGGCGTCCTGGGCTCCCAAAGTATCACATCAGGGAAA
Patas           CTCAAGAATTTCAATTATTGTACTGGCATCCTGGGCTCCCAAAGTATCACATCAGGGAAA
Colobus         CTCAAGAATTTCATTTATTGTACTGGCGTCCTGGGCTCCCAAAGTATCACATCAGGGAAA
DLangur         CTCAAGAATTTCATTTATTGTACTGGCGTCCTGGGCTCCCAAAGTATCACATCAGGGAAA
PMarmoset       CTTGTGAAAGTCAAGTATTTTTATGGCGTCCTGGGCTCCCTAAGTATCACATCAGGGAAA
Tamarin         TCTGTGAAAGTCAACTATTTTTATGGCGTCCTGGGCTCCCCAAGTATCACATCAGGGAAA
Squirrel        CTTGTGAAAGTCCAGTATTTTTATGGCGTCCTGGGCTCCCCAAGTATCACATCAGGGAAA
Owl             TTTCTGAAAGTCAAGTATTTTTGTGGCGTCCTGGGCTCCCCAAGTATCACATCAGGGAAA
Titi            TCTGGGAGAGTCAAGTATTTTTATGGCGTCCTGGGCTCCCCAAGTATCACATCAGGGAAA
Saki            TTTGGGAAAGTCAAGTATTTTTATGGCGTCCTGGGCTCCCCAAGTATCAGATCAGGGAAA
Howler          TCTATGGAAGTCAAGTATTTTTATGGCATCCTGGGCTCCCCAAGTATCACATCAGGGAAA
Spider          TCTGTGAAAGTCAAGTATTTTTGTGGCGTCCTGGGCTCCCCAGGTTTCACATCAGGGAAA
Woolly          TCTGTGAAAGCCAAATATTTTTATGGCGTCCTGGGCTCCCCAAGTTTCACATCAGGGAAA

Human           CATTACTGGGAGGTAGACGTGTCCAAGAAAACTGCTTGGATCCTGGGGGTATGTGCTGGC(378)
Chimp           CATTACTGGGAGGTAGACGTGTCCAAGAAAAGTGCTTGGATCCTGGGGGTATGTGCTGGC
Gorilla         CATTACTGGGAGGTAGACGTGTCCAAGAAAAGTGCTTGGATCCTGGGGGTATGTGCTGGC
Orangutan       CATTACTGGGAGGTAGACGTGTCCAAGAAAAGTGCTTGGATCCTGGGGGTATGTGCTGGC
Gibbon          CATTACTGGGAGGTAGACGTGTCCAAGAAAAGTGCTTGGATCCTGGGGGTATGTGCTGGC
Rhes_cDNA       CATTACTGGGAGGTAGATGTGTCCAAGAAAAGTGCTTGGATCCTGGGGGTATGTGCTGGC
Baboon          CATTACTGGGAGGTAGATGTGTCCAAGAAAAGTGCTTGGATCCTGGGGGTATGTGCTGGC
AGM             CATTACTGGGAGGTAGATGTGTCCAAGAAAAGTGCTTGGATCCTGGGGGTATGTGCTGGC
AGM_cDNA        CATTACTGGGAGGTAGATGTGTCCAAGAAAAGTGCTTGGATCCTGGGGGTATGTGCTGGC
Tant_cDNA       CATTACTGGGAGGTAGATGTGTCCAAGAAAAGTGCTTGGATCCTGGGGGTATGTGCTGGC
Patas           CATTACTGGGAGGTAGATGTGTCCAAGAAAAGTGCTTGGATCCTGGGGGTATGTGCTGGC
Colobus         CATTACTGGGAGGTAGATGTGTCCAAGAAAAGTGCTTGGATCCTGGGGGTATGTGCTGGC
DLangur         CATTACTGGGAGGTAGATGTGTCCAAGAAAAGTGCTTGGATCCTGGGGGTATGTGCTGGC
PMarmoset       CATTACTGGGAAGTAGACGTGTCCAATAAAAGGGGTTGGATCCTGGGGGTATGTGGTAGC
Tamarin         CATTACTGGGAGGTAGACGTGACCAATAAAAGGGATTGGATCCTGGGGATATGTGTTAGC
Squirrel        CATTACTGGGAGGTAGACGTGTCCAATAAAAGGGCTTGGACCCTGGGGGTATGTGTTAGC
Owl             CATTACTGGGAGGTAGACGTGTCCAATAAAAGTGAGTGGATCCTGGGGGTATGTGTTAGC
Titi            CATTACTGGGAGGTAGACGTGTCCAATAAAAGTGCTTGGATCCTGGGGGTATGTGTTAGC
Saki            CATTACTGGGAGGTAGACGTGTCCAATAAAAGTGCTTGGATCCTGGGAGTATGTGTTAGC
Howler          CATTACTGGGAGGTAGACGTGTCCAATAAAAGTGCTTGGATCCTGGGGGTATGTGTCAGC
Spider          CATTACTGGGAGGTAGACGTGTCCGATAAAAGTGCTTGGATCCTGGGGGTATGTGTTAGC
Woolly          CATTACTGGGAGGTAGACGTGTCCAATAAAAGTGCTTGGATCCTGGGGGTATGTGTTAGC
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Human          TTCCAACCTGATGCAATG------------------------------------------(384)
Chimp          TTCCAACCTGATGCAATG------------------------------------------
Gorilla        TTCCAACCTGATGCAACG------------------------------------------
Orangutan      TTCCAACCTGATGCAATG------------------------------------------
Gibbon         TTGCAACCTGATGCAATG------------------------------------------
Rhes_cDNA      TTCCAATCCGATGCAATG------------------------------------------
Baboon         TTCCAACCTGATGCAATG------------------------------------------
AGM            TTCCAACCCGATGCAACG------------------------------------------
AGM_cDNA       TTCCAACCCGATGCAACG------------------------------------------
Tant_cDNA      TTCCAACCCGATGCAACG------------------------------------------
Patas          TTCCAACCCGATGCAATG------------------------------------------
Colobus        TTCCAACCCGATGCAATG------------------------------------------
DLangur        TTCCAACCCGATGCAATG------------------------------------------
PMarmoset      TGGAAATGCAATGCAAAA------------------------------------------
Tamarin        TTTAAATGCAATGCAAAA------------------------------------------
Squirrel       TTGAAATGTACTGCAAAT------------------------------------------
Owl            TTGAAGCGCACTGCAAGT------------------------------------------
Titi           TTGAAATGCGCTGCAAAT------------------------------------------
Saki           TTGAAATGCACTGCAAAT------------------------------------------
Howler         TTGAAATGCATTGGAAATTTTCCAGGAATTGAAAATTATCAACCTCAAAATGGCTACTGG
Spider         TTGAAATGCACTGCAAATGTTCCAGGAATTGAAAATTATCAACCTAAAAATGGCTACTGG
Woolly         TTGAAATGCACTGCAAATGTTCCAGGAATTGAAAATTATCAACCTAAAAATGGCTACTGG

Human          ----------TGTAAT------------------------------ATTGAAAAAAAT(390)
Chimp          ----------TGTAAT------------------------------ATTGAAAAAAAT
Gorilla        ----------TGTAAT------------------------------ATTGAAAAAAAT
Orangutan      ----------TATAAT------------------------------ATTGAACAAAAT
Gibbon         ----------TATAAT------------------------------ATTGAACAAAAT
Rhes_cDNA      ----------TATAAT------------------------------ATTGAACAAAAT
Baboon         ----------TATAAT------------------------------ATTGAACAAAAT
AGM            ----------TATAAT------------------------------ATTGAACAAAAT
AGM_cDNA       ----------TATAAT------------------------------ATTGAACAAAAT
Tant_cDNA      ----------TATAAT------------------------------ATTGAACAAAAT
Patas          ----------TATGAT------------------------------GTTGAACAAAAT
Colobus        ----------TATAAT------------------------------ATTGAACAAAAT
DLangur        ----------TATAAT------------------------------ATTGAACAAAAT
PMarmoset      ----------TGGAAT------------------------------GTTCTAAGACCT
Tamarin        ----------TGGAAT------------------------------GTTCTAAGACCT
Squirrel       ----------CAGAGT------------------------------GTTTCAGGAACT
Owl            ----------TGTAGT------------------------------GTTCCAAGAATT
Titi           ----------CGGAAT------------------------------GGTCCAGGAGTT
Saki           ----------CGGAAT------------------------------GGTCCAAGAATT
Howler         GTTATAGGGTTACGGAATGCAGATAACTATAGTGCTTTCCAAGATGCAGTTCCAGAAACT
Spider         GTTATAGGGTTACAGAATGCAAATAACTATAGTGCTTTCCAGGATGCAGTTCCAGGAACT
Woolly         GTTATAGGGTTACAGAATGCAGATAACTATAGTGCTTTCCAGGATGCAGTTCCAGGAACT
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Human         GAAAATTATCAACCTAAATACGGC----------------------------------------(398)
Chimp         GAAAATTATCAACCTAAATATGGC----------------------------------------
Gorilla       GAAAATTATCAACCTAAATATGGC----------------------------------------
Orangutan     GAAAATTATCAACCTCAATATGGC----------------------------------------
Gibbon        GAAAATTATCAACCTAAATATGGC----------------------------------------
Rhes_cDNA     GAAAATTATCAACCTAAATATGGC----------------------------------------
Baboon        GAAAATTATCAACCTAAATATGGC----------------------------------------
AGM           GAAAATTATCAACCTAAATATGGA----------------------------------------
AGM_cDNA      GAAAATTATCAACCTAAATATGGC----------------------------------------
Tant_cDNA     GAAAATTATCAACCTAAATATGGC----------------------------------------
Patas         GAAAATTATCAACCTAAATATGGC----------------------------------------
Colobus       GAAAATTATCAACCTAAATATGGC----------------------------------------
DLangur       GAAAATTATCAACCTAAATATGGC----------------------------------------
PMarmoset     GAAAATTATCAACCTAAAAATGGC----------------------------------------
Tamarin       GAAAATTATCAACCTAAAAATGGC----------------------------------------
Squirrel      GAAAATTATCAACCTAAAAATGGC----------------------------------------
Owl           GAAAATGATCAACCTAAAAATGGC----------------------------------------
Titi          GAAAACTATCAACCTAAAAATGGC----------------------------------------
Saki          GAAAATTATCAACCTAAAAATGGC----------------------------------------
Howler        GAAAATTATCAACCTAAAAATCGCAACCGG---TTTACAGGGTTACAGAATGCAGATAATTGT
Spider        GAAAATTATCAACCTAAAAATGGCAACCGGAGGAATAAAGGGTTACGGAATGCAGATAACTAT
Woolly        GAAGATTATCAACCTAAAAATGGCTGCTGGAGGAATACAGGGTTACGGAATGCAGATAACTAT

Human         ----------------------------------------------------------TACTGG(400)
Chimp         ----------------------------------------------------------TACTGG
Gorilla       ----------------------------------------------------------TACTGG
Orangutan     ----------------------------------------------------------TACTGG
Gibbon        ----------------------------------------------------------TACTGG
Rhes_cDNA     ----------------------------------------------------------TACTGG
Baboon        ----------------------------------------------------------TACTGG
AGM           ----------------------------------------------------------TACTGG
AGM_cDNA      ----------------------------------------------------------TACTGG
Tant_cDNA     ----------------------------------------------------------TACTGG
Patas         ----------------------------------------------------------TACTGG
Colobus       ----------------------------------------------------------TACTGG
DLangur       ----------------------------------------------------------TACTGG
PMarmoset     ----------------------------------------------------------TACTGG
Tamarin       ----------------------------------------------------------TACTGG
Squirrel      ----------------------------------------------------------TACTGG
Owl           ----------------------------------------------------------TACTGG
Titi          ----------------------------------------------------------TACTGG
Saki          ----------------------------------------------------------TACTGG
Howler        AGTGCTTTCCAGAATGCATTTCCAGGAATTCAAAGTTATCAACCTAAAAAGAGCCACTTG
Spider        AGTGCTTTCCGGGATACATTT-----------------CAACCTATAAATGACTCCTGG
Woolly        AGTGCTTTCCAGGATGTATTT-----------------CAACCTAAAAATGACTACTGG
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Human          GTTATAGGGTTA--------------------------GAGGAAGGAGTTAAATGTAGT(411)
Chimp          GTTATAGGGTTA--------------------------GAGGAAGGAGTTAAATGTAGT
Gorilla        GTTATAGGGTTA--------------------------GAGGAAGGAGTTAAATGCAGT
Orangutan      GTTATAGGGTTA--------------------------GAGGAAGGAGTTAAATGTAGT
Gibbon         GTTATAGGGTTA--------------------------GAGGAAGGAGTTAAATGTAAT
Rhes_cDNA      GTTATAGGGTTA--------------------------CAGGAAGGAGTTAAATATAGT
Baboon         GTTATAGGGTTA--------------------------CAGGAAGGAGTTAAATATAGT
AGM            GTTATAGGGTTA--------------------------CAGGAAGGAGATAAATATAGT
AGM_cDNA       GTTATAGGGTTA--------------------------CAGGAAGGAGATAAATATAGT
Tant_cDNA      GTTATAGGGTTA--------------------------CAGGAAGGAGATAAATATAGT
Patas          GTTATAGGGTTA--------------------------CAGGAAGGAGTAAAATATAGT
Colobus        GTTATAGGGTTA--------------------------CAGGAAGGAGTTAAATATAGT
DLangur        GTTATAGGGTTA--------------------------CAGGAAGGAGTTAAATATAAT
PMarmoset      GTTATAGGGTTACGGAATACAGATAACTATAGTGCTTTCCAGGATGCAGTTAAATATAGT
Tamarin        GTTATAGGGTTACAGAATACAAATAACTATAGTGCTTTCCAGGATGCAGTTAAATATAGT
Squirrel       GTTATAGGGTTACGGAATGCAGGTAACTATAGGGCTTTCCAGAGTTCATTTGAATTTCGT
Owl            GTTATAGGGTTACGGAATGCAGATAACTATAGTGCTTTCCAGGATGCAGTTGAATATAGT
Titi           GTGATAGGGTTACGGAATGCAGATAACTATAGTGCTTTCCAGGATTCAGTTAAATATAAT
Saki           GTTATAGGGTTATGGAATGCAGGTAACTATAGTGCTTTCCAGGATTCAGTTAAATATAGT
Howler         TTTACAGGGTTACAGAATCTAAGTAACTATAATGCTTTCCAGAATAAAGTTCAATATAAC
Spider         GTTACAGGGTTACGGAATGTAGATAACTATAATGCTTTCCAGGATGCAGTTAAATATAGT
Woolly         GTTACAGGGTTATGGAACGCAGATAACTATAATGCTTTCCAGGATGCAGGTAAATATAGT

Human          ------GCTTTCCAGGATAGTTCCTTCCATACTCCTTCTGTTCCTTTCATTGTGCCCCTC(429)
Chimp          ------GCTTTCCAGGATGGTTCCTTCCATACTCCTTCTGCTCCTTTCATTGTGCCCCTC
Gorilla        ------GCTTTCCAGGATGGTTCCTTCCATACTCCTTCTGCTCCTTTCATTGTGCCCCTC
Orangutan      ------GCTTTCCAGGATGGTTCCTTCCATAATCCTTCTGCTCCTTTCATTGTGCCCCTC
Gibbon         ------GCTTTCCAGGATGGTTCCATCCATACTCCTTCTGCTCCTTTCGTTGTGCCCCTC
Rhes_cDNA      ------GTTTTCCAGGATGGTTCCTCACATACTCCTTTTGCTCCTTTCATTGTGCCCCTC
Baboon         ------GTTTTCCAGGATGGTTCCTCACATACTCCTTTTGCTCCTTTCATTGTGCCCCTC
AGM            ------GTTTTCCAGGATAGTTCCTCACATACTCCTTTTGCTCCTTTCATTGTGCCCCTC
AGM_cDNA       ------GTTTTCCAGGATGGTTCCTCACATACTCCTTTTGCTCCTTTCATTGTGCCCCTC
Tant_cDNA      ------GTTTTCCAGGATGGTTCCTCACATACTCCTTTTGCTCCTTTCATTGTGCCCCTC
Patas          ------GTTTTCCAGGATGGTTCCTCACATACTCCTTTTGCTCCTTTCATTGCGCCCCTC
Colobus        ------GTTTTCCAGGATGGTTCCTCACATACTCCTTTTGCTCCTTTCATTGTGCCCCTC
DLangur        ------GTTTTCCAGGATGGTTCCTCACATACTCCTTTTGCTCCTTTCATTGTGCCCCTC
PMarmoset      ------GATGTCCAGGATGGTTCTCGCTCTGTTTCTTCTGGTCCTTTGATCGTGCCCCTC
Tamarin        ------GATTTCCAGATTGGTTCCCGCTCTACTGCTTCTGTTCCTTTGATCGTGCCCCTC
Squirrel       ------GATTTCCTGGCTGGTTCCCGCCTTACTCTTTCTCCTCCTTTGATCGTGCCCCTC
Owl            ------GATTTCCAGGATGGTTCCCGCTCTACTCCTTCTGCTCCTTTGATCGTGCCCCTC
Titi           ------GATTTCCAGGATGGTTCCCGCTCTACTACTTATGCTCCTTTGATCGTGCCCCTC
Saki           ------GATTTCCAGGATGGTTCCCACTCTGCTACTTATGGTCCTTTGATCGTGCCCCTC
Howler         TATATTGATTTTCAGGATGATTCCCTCTCTACTCCTTCTGCTCCTTTGATCGTACCCCTC
Spider         ------GATTTCCAGGATGGTTCCTGCTCTACTCCTTCTGCTCCTTTGATGGTGCCCCTC
Woolly         ------GATTTCCAGGATGGTTCCTGCTCTACTCCTTTGCTCCTTTGATTGTGCCCCTC
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Human       TCTGTGATTATTTGTCCTGATCGTGTTGGAGTTTTCCTAGACTATGAGGCTTGCACTGTC(449)
Chimp       TCTGTGATTATTTGTCCTGATCGTGTTGGAGTTTTCCTAGACTATGAGGCTTGCACTGTC
Gorilla     TCTGTGATTATTTGTCCTGATCGTGTTGGAGTTTTCCTAGACTATGAGGCTTGCACTGTC
Orangutan   TCTGTGATTATTTGTCCTGATCGTGTTGGAGTTTTCCTAGACTATGAGGCTTGCACTGTC
Gibbon      TCTGTGAATATTTGTCCTGATCGTGTTGGAGTTTTCCTAGACTATGAGGCTTGCACTGTC
Rhes_cDNA   TCTGTGATTATTTGTCCTGATCGTGTTGGAGTTTTCGTAGACTATGAGGCTTGCACTGTC
Baboon      TCTGTGATTATTTGTCCTGATCGTGTTGGAGTTTTCGTAGACTATGAGGCTTGCACTGTC
AGM         TCTGTGATTATTTGTCCTGATCGTGTTGGAGTTTTCGTAGACTATGAGGCTTGCACTGTC
AGM_cDNA    TCTGTGATTATTTGTCCTGATCGTGTTGGAGTTTTCGTAGACTATGAGGCTTGCACTGTC
Tant_cDNA   TCTGTGATTATTTGTCCTGATCGTGTTGGAGTTTTCGTAGACTATGAGGCTTGCACTGTC
Patas       TCTGTGATTTTTTGTCCTGATCGTGTTGGAGTTTTCGTAGACTATGAGGCTTGCACTGTC
Colobus     TCTGTGATCATTTGTCCTGATCGTGTTGGAGTTTTCGTAGACTATGAGGCTTGCACTGTC
DLangur     TCTGTGATTATTTGTCCTGATCGTGTTGGAGTTTTCGTAGACTATGAGGCTTGCACTGTC
PMarmoset   TTTATGACTATTTGTCCTAATCGTGTTGGAGTTTTCCTAGACTATGAGGCTTGCACTATC
Tamarin     TTTATGACTATTTATCCTAATCGTGTTGGAGTTTTCCTAGACTATGAGGCTTGCACTGTC
Squirrel    TTTATGACTATTTGTCCTAATCGGGTCGGAGTTTTCCTAGACTATGAGGCTCGCACTATC
Owl         TTTATGACTATTTGTCCTAATCGTGTTGGAGTTTTCCTAGACTATGAGGCTTGCACTGTC
Titi        TTTATGACTATTTGTCCTAATCGTGTTGGAGTTTTCCTAGACTATGAGGCTTGCACTGTC
Saki        TTTATGACTATTTGTCCTAATCGTGTTGGAGTTTTCCTAGACTATGAGGCTTGCACTGTC
Howler      TTTATGACTATTTGTCCTAAACGTGTTGGAGTTTTCCTAGACTATGAGGCTTGCACTGTC
Spider      TTTATGACTATTTGTCCTAAACGTGTTGGAGTTTTCCTAGACTGTAAGGCTTGCACTGTC
Woolly      TTTATGACTATTCGTCCTAAACGTGTTGGCGTTTTCCTAGACTATGAGGCTTGCACTGTC

Human       TCATTCTTCAATATCACAAACCATGGATTTCTCATCTATAAGTTTTCTCACTGTTCTTTT(469)
Chimp       TCATTCTTCAATATCACAAACCATGGATCTCTCATCTATAAGTTTTCTCACTGTTCTTTT
Gorilla     TCATTCTTCAATATCACAAACCATGGATTTCTCATCTATAAGTTTTCTCACTGTTCTTTT
Orangutan   TCATTCTTCAATATCACAAACCATGGATTTCTCATCTATAAGTTTTCTCACTGTTCTTTT
Gibbon      TCATTCTTCAATATCACAGACCATGGATTTCTCATCTATAAGTTTTCTCACTGTTCTTTT
Rhes_cDNA   TCATTCTTCAATATCACAAACCATGGATTTCTCATCTATAAGTTTTCTCAGTGTTCTTTT
Baboon      TCATTCTTCAATATCACAAACCATGGATTTCTCATCTATAAGTTTTCTCAGTGTTCTTTT
AGM         TCATTCTTCAATATCACAAACCATGGATTTCTCATCTATAAGTTTTCTCAGTGTTCTTTT
AGM_cDNA    TCATTCTTCAATATCACAAACCATGGATTTCTCATCTATAAGTTTTCTCAGTGTTCTTTT
Tant_cDNA   TCATTCTTCAATATCACAAACCATGGATTTCTCATCTATAAGTTTTCTCAGTGTTCTTTT
Patas       TCATTCTTCAATATCACAAACCATGGATTTCTCATCTATAAGTTTTCTCAGTGTTCTTTT
Colobus     TCATTCTTCAATATCACAAACCATGGATTTCTCATCTATAAGTTTTCTCAGTGTTCTTTT
DLangur     TCATTCTTCAATATCACAAACCATGGATTTCTCATCTATAAGTTTTCTCAGTGTTCTTTT
PMarmoset   TCATTCTTCAATGTCACAAGCAATGGATTTCTCATCTATAAGTTTTCTAACTGTCATTTT
Tamarin     TCATTCTTCAATGTCACAAACAATGGATTTCTCATCTATAAGTTTTCTAACTGTCATTTT
Squirrel    TCATTCTTCAATGTCACAAGCAATGGATTTCTCATCTACAAGTTTTCTGACTGTCATTTT
Owl         TCATTCTTCAATGTCACAAACAATGGATTTCTCATCTATAAGTTTTCTAACTGTCATTTT
Titi        TCATTCTTCAATGTCACAAGCAATGGATTTCTCATCTATAAGTTTTCTAACTGTCATTTT
Saki        TCATTCTTCAATGTCACAAGCAATGGATTTCTCATCTATAAGTTTTCTAACTGTCGTTTT
Howler      TCATTCTTCAATGTCACAAGCAATGGATATCTCATCTATAAGTTTTCTAACTGTCAGTTT
Spider      TCATTCTTCAATGTCACAAGCAATGGATGTCTCATCTATAAGTTTTCTAAGTGTCATTTT
Woolly      TCATTCTTCAATGTCACAAGCAATGGATGTCTCATCTATAAGTTTTCTAACTGTCATTTT
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Human          TCTCAGCCTGTATTTCCATATTTAAATCCTAGAAAATGTGGAGTCCCCATGACTCTGTGC(489)
Chimp          TCTCAGCCTGTATTTCCATATTTAAATCCTAGAAAATGTGGAGTCCCCATGACTCTGTGC
Gorilla        TCTCAGCCTGTATTTCCATATTTAAATCCTAGAAAATGTAGAGTCCCCATGACTCTGTGC
Orangutan      TCTCAGCCTGTATTTCCATATTTAAATCCTAGAAAATGTAGAGTCCCCATGACTCTGTGC
Gibbon         TCTCAGCCTGTATTTCCATATTTAAATCCTAGAAAATGTACAGTCCCCATGACTCTGTGC
Rhes_cDNA      TCTAAGCCTGTATTTCCATATTTAAATCCCAGAAAATGTACAGTCCCCATGACTCTGTGC
Baboon         TCTAAGCCTGTATTTCCATATTTAAATCCCAGAAAATGTACAGTCCCCATGACTCTGTGC
AGM            TCTAAGCCTGTATTTCCATATTTAAATCCCAGAAAATGTACAGTCCCCATGACTCTGTGC
AGM_cDNA       TCTAAGCCTGTATTTCCATATTTAAATCCCAGAAAATGTACAGTCCCCATGACTCTGTGC
Tant_cDNA      TCTAAGCCTGTATTTCCATATTTAAATCCCAGAAAATGTACAGTCCCCATGACTCTGTGC
Patas          TCTAAGCCTGTATTTCCATATTTAAATCCCAGAAAATGTACAGTCCCCATGACTCTGTGC
Colobus        TCTAAGCCTGTATTTCCATATTTAAATCCTAGAAAATGTACAGTCCCCATGACTCTGTGC
DLangur        TCTAAGCCTGTATTTCCATATTTAAATCCTAGAAAATGTACAGTCCCCATGACTCTGTGC
PMarmoset      TCTTATCCTGTATTTCCATATTTCAGTCCTACGACATGTGAATTACCCATGACTCTGTGC
Tamarin        TCTTATCCTGTATTTCCATATTTCAGTCCTATGACATGTGAATTACCCATGACTCTGTGT
Squirrel       TCTTATCCTGTATTTCCATATTTCAATCCTATGACGTGTGAATTACCCATGACTCTGTGC
Owl            TGTTATCCTGTATTTCCATATTTCAGTCCTATGACATGTGAATTACCCATGACTCTGTGC
Titi           TCTTATCCTGTATTTCCATATTTCAGTCCTATGACATGTGAATTACCCATGACTCTGTGC
Saki           TCTGATTCTGTATTTCCATATTTCAGTCCTATGACATGTGAATTACCCATGACTCTGTGC
Howler         TCTTATCCTGTATTTCCATATTTCAGTCCTATGACATGTGAATTACCCATGACTCTGTGC
Spider         TCTTATCCTGTATTTCCATATTTCAGTCCTATGATATGTAAATTACCCATGACTCTGTGC
Woolly         TCTTGTCCTGTATTTCCATATTTCAGTCCTATGACATGTAAATTACCCATGACTCTGTGC

Human          TCACCAAGCTCTTGA(493)
Chimp          TCACCAAGCTCTTGA
Gorilla        TCGCCAAGCTCTTGA
Orangutan      TCACCAAGCTCTTGA
Gibbon         TCACCAAGCTCTTGA
Rhes_cDNA      TCACCAAGCTCTTGA
Baboon         TCACCAAGCTCTTGA
AGM            TCACCAAGCTCTTGA
AGM_cDNA       TCACCAAGCTCTTGA
Tant_cDNA      TCACCAAGCTCTTGA
Patas          TCACCAAGCTCTTGA
Colobus        TCACCAAGCTCTTGA
DLangur        TCACCAAGCTCTTGA
PMarmoset      TCACCAAGCTCTTGA
Tamarin        TCACCAAGCTCTTGA
Squirrel       TCACCAAGGTCTTGA
Owl            TCACCAAGCTCTTGA
Titi           TCACCAAGGTCTTGA
Saki           TCACCAAGATCTTGA
Howler         TCACCAAGCTCTTGA
Spider         TCACCAAGCTCTTGA
Woolly         TCACCAAGCTCTTGA
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