

Mouse 1 MSLTSLALSLSRFRVVLASASPRRQEILGLTGVALEVVPFRFPELTSKAAAPRPQDYARE
 Human 1 MVLCPVIGKLLHKRVVLASASPRRQEILSNAGLRFEVVPSKFKEKLDKASFATPYGYAME
 Orangutan 1 MVLCPVIGKLLHKRVVLASASPRRQEILSNAGLRFEVVPSKFKEKLDKASFATPYGYAME
 Chimpanzee 1 MVLCPVIGKLLHKRVVLASASPRRQEILSNAGLRFEVVPSKFKEKLDKASFATPYGYAME
 Cow 1 MLLCPVIGKLLHKRVVLASASPRRQEILSNAGLRFEVVPSRFKEKLDKASFATPYAYALE
 Opossum 1 MVLCPVIRKLLHKRVVLASASPRRQEILSNAGLRFEVVPSRFKETLDKAAFSPTYEYALE
 Frog 1 MLLNPIVSKLACKRVVLASASPRRQDILINVLGRFEVVPSSWFKETLDKSVFAAPYEYALE
 Chicken 1 MVLSPIVGLKLVSKRVVLASASPRRQEILINVLGRFEVVPSSWFKETLEKSSFAAPYEYALE
 Platypus 189 MALSPIVIGKLVKRVVLASASPRRQEILSNAGLRFEVVPSKFKEKLDKSLFEAPYEYALE

Mouse 61 TATGKAQEVAAARIVQEDPEPTIVIGADTVVAVDGRILEKPKDREDAALGDLRSLSGKQHQ
 Human 61 TAKQKALEVANRIYQKDLRAPDVIIGADTIVTVGGLILEKPVDKQDAYRMLSRSLSGREHS
 Orangutan 61 TAKQKALEVANRIYQKDLRAPDVIIGADTIVTVGGLILEKPVDKQDAYRMLSRSLSGREHS
 Chimpanzee 61 TAKQKALEVANRMHQ-----TVGGLILEKPVDKQDAYRMLSRSLSGREHS
 Cow 61 TAKQKALEVADRMVQKDLRAPDVIIGADTIVAVGGLILEKPVDKQDAYRMLSRSLSGKEHS
 Opossum 61 TAKQKALEVANRMNKKDFRSPDVIIGADTIVSDGQILEKPADKQHAYSMLSRSLNGKEHS
 Frog 61 TAKQKALEVARRMHMKHLKTPDIVIGADTIVTLEEAILEKPVDKQDAYNMLSRSLSGKEHS
 Chicken 61 TAKQKALEVANRMHVKHLRTPDIVIGADTIVTVEQILEKPVDKQDAYRMLSRSLSGKEHS
 Platypus 249 TAKQKALEVAHRLHRKDFRSPDVIIGADTIVAVEGLILEKPVDKQDAYNMLSRSLNGREHS

Mouse 121 VFTGVAIVTWG-GCEGPAQ-EVTAFFHEETSIVTFSPLESELIREYTDSGEGWDKAGAYA IQ
 Human 121 VFTGVAIVHCS-SKDHQLDTRVSEFYEETKVKFSELSELLWEYVHSGEPMKAGGYGIQ
 Orangutan 121 VFTGVAIVHCS-SKDHQLDTRVSEFYEETKVKFSELSELLWEYVHSGEPMKAGGYGIQ
 Chimpanzee 105 VFTGVAIVHCS-SKDHQLDTRVSEFYEETKVKFSELSELLWEYVHSGEPMKAGGYGIQ
 Cow 121 VFTGVAIVHCY-TKDGQLDTGVSEFYEETKVKFSELSELLWEYVHSGEPMKAGGYGIQ
 Opossum 121 VFTGVAIVLCS-TKDKQLETEVFEFYEETKVKFSDLSELLWEYVHSGEPMKAGGYGIQ
 Frog 121 VFTGVSIIVLCNRQKDNQLEMDVDFEYETKVKFADLSELLWEYVHSGEPMKAGGYGIQ
 Chicken 121 VFTGVVLIHCS-SKDNQLETEITDFYEETKVKFSDLSELLWEYVHSGEPMKAGGYGIQ
 Platypus 309 VFTGVAIVHCS-SKDKELTTEVSOEHEETTKVKFSELSELLWDYVHSGEPMKAGGYGIQ

Mouse 179 ARGAMLVQDVAGDVLNVAVGFPFLNRFCELRARV--PPT-----
 Human 180 ALGGMLVESVHGDFLNVVGFPLNHFCQQLVKLYPPRPEDLRRSVKHDPIPAADTFEDLS
 Orangutan 180 ALGGMLVESVHGDFLNVVGFPLNHFCQQLVKLYPPRPEDLRRSVKHDPIPAADTFEDLS
 Chimpanzee 164 ALGGMLVESVHGDFLNVVGFPLNHFCQQLVKLYPPRPEDLRRSVKHDPIPAADTFEDLS
 Cow 180 ALGGMLVEYVVGDFLNVVGFPLNRFCKELAHLYHGPRAGAPRQVHDSIPAVDTFEDLS
 Opossum 180 SLGGMLVEYVHGDFLNVVGFPLNHFCQKLVLYPPPS-KDAIHHVKHDSVPSVETFEVLS
 Frog 181 SLGGMLVESVHGDFLNVVGFPLNHFCQKLAELYPPPSKQTNR-LKHDSIPVETFEVLS
 Chicken 180 ALGGMLVEYVHGDFLNVVGFPLNHFCQKLAELYCPPLKHTIQH-LKHDSIPVDTFESLS
 Platypus 369 ALGGMLVESVHGDFLNVVGFPLNRFCKQLAALYPAPRL-----PAPPGGTPETLIG

Mouse 214 --RTGSEEV---TSQTTGIDSK-----DVKX
 Human 240 DVEGGGSEP---TQRDAGSR--DEKA-----EA
 Orangutan 240 DVEGGGSEP---TQRDAGSR--DEKA-----EA
 Chimpanzee 224 DVEGGGSEP---AQRDAGSR--DEKA-----EA
 Cow 240 DAEGGSDP---ARAKEGL---EPC-----CV
 Opossum 239 DEESGSSNS---TQQNVTSMLKGE-SAFSCGDPGSLRKKEV
 Frog 240 DVEKDCCVKREAPDVKKGSQ--EKCNV-ALRNK----SSN
 Chicken 239 DGESESSSFKEHKGAIKLDS--PSGVI-CNSEN----SSG
 Platypus 429 REDGPSLPP---L-----AS-----SD