

Additional file 4. Alignment of TAS1R2 amino acid sequences of 35 catarrhine primates. Variant residues are marked with red.

	1	50	100
<i>Macaca arctoides</i>	MRPRATTICSLFFLLRVLAEPAKNSDFYLPGDYLLGGLFTLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Macaca fuscata</i>	MRPRATTICSLFFLLWVLAEPKNSDFYLPGDYLLGGLFTLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Macaca assamensis</i>	MRPRATTICSLFFLLRVLAEPAKNSDFYLPGDYLLGGLFTLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Cercocebus chrysogaster</i>	MRPRATTICSLFFLLQVLAEPKNSDFYLPGDYLLGGLFTLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Mandrillus sphinx</i>	MRPRATTICSLFFLLRVLAEPAKNSDFYLPGDYLLGGLFTLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Lophocebus aterrimus</i>	MRPRATTICSLFFLLRVLAEPAKNSDFYLPGDYLLGGLFTLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Papio hamadryas</i>	MRPRATTICSLFFLLRVLAEPAKNSDFYLPGDYLLGGLFTLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Theropithecus gelada</i>	MRPRATTICSLFFLLRVLAEPAKNSDFYLPGDYLLGGLFTLHANVKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Cercopithecus mitis</i>	MRPRATTICSLFFLLQVLAEPKNSDFYLPGDYLLGGLFTLHANVKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVRLGYEMVD
<i>Cercopithecus albogularis</i>	MRPRATTICSLFFLLQVLAEPKNSDFYLPGDYLLGGLFTLHANVKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVRLGYEMVD
<i>Erythrocebus patas</i>	MRPRATTICSLFFLLQVLAEPKNSDFYLPGDYLLGGLFTLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Chlorocebus sabaeus</i>	MRPRATTICSLFFLLQVLAEPKNSDFYLPGDYLLGGLFTLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Colobus polykomos</i>	MRPRATTICSLFFLLRVLAEPAKNSDFYLPGDYLLGGLFTLHANVKGIVHLDY	LQVPMCKEYETKVI	MGYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Presbytis melalophos</i>	MWPRATTICSLFFLLRVLAEPAKNSDFYLPGDYLLGGLFTLHANVKGIVHLDY	LQVPMCKEYETKVI	MGYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Trachypithecus francoisi</i>	MRPRATTICSLFFLLRVLAEPAKNSDFYLPGDYLLGGLFTLHANMKGIVHLDY	LQVPMCKEYETKVI	MGYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Semnopithecus vetulus</i>	MRPRATTICSLFFLLRVLAEPAKNSDFYLPGDYLLGGLFTLHANMKGIVHLDY	LQVPMCKEYETKVI	MGYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Pygathrix nigripes</i>	MRPRATTICSLFFLLRVLAEPAKNSDFYLPGDYLLGGLFTLHANMKGIVHLDY	LQVPMCKEYETKVI	MGYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Pygathrix nemaeus</i>	MRPRATTICSLFFLLRVLAEPAKNSDFYLPGDYLLGGLFTLHANMKGIVHLDY	LQVPMCKEYETKVI	MGYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Nasalis larvatus</i>	MRPRATTICSLFFLLRVLAEPAKNSDFYLPGDYLLGGLFTLHANMKGIVHLDY	LQVPMCKEYETKVI	MGYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Rhinopithecus bieti</i>	MRPRATTICSLFFLLRVLAEPAKNSDFYLPGDYLLGGLFTLHANMKGIVHLDY	LQVPMCKEYETKVI	MGYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Rhinopithecus brelichi</i>	MRPRATTICSLFFLLRVLAEPAKNSDFYLPGDYLLGGLFTLHANMKGIVHLDY	LQVPMCKEYETKVI	MGYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Rhinopithecus roxellana</i>	MRPRATTICSLFFLLRVLAEPAKNSDFYLPGDYLLGGLFTLHANMKGIVHLDY	LQVPMCKEYETKVI	MGYNLMQAMRFAVEEINNDSLLPDVLLGYEMVD
<i>Hoolock hoolock</i>	MGPRATTICSLFFLLRILSESAENSDFYLPGDYLLGGLFSLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEIVD
<i>Symphalangus syndactylus</i>	MGPRATTICSLFFLLRILSESAENSDFYLPGDYLLGGLFSLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEIVD
<i>Hylobates lar</i>	MGPRATTICSLFFLLRILSESAENSDFYLPGDYLLGGLFSLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEIVD
<i>Hylobates abbotti</i>	MGPRATTICSLFFLLRILSESAENSDFYLPGDYLLGGLFSLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEIVD
<i>Hylobates agilis</i>	MGPRATTICSLFFLLRILSESAENSDFYLPGDYLLGGLFSLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEIVD
<i>Hylobates pileatus</i>	MGPRATTICSLFFLLRILSESAENSDFYLPGDYLLGGLFSLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEIVD
<i>Nomascus leucogenys</i>	MGPRATTICSLFFLLRILSESAENSDFYLPGDYLLGGLFSLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEIVD
<i>Nomascus annamensis</i>	MGPRATTICSLFFLLRILSESAENSDFYLPGDYLLGGLFSLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEIVD
<i>Pan paniscus</i>	MGPRACTICSLFFLLWVLAEPANSDFYLPGDYLLGGLFSLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEIVD
<i>Pan troglodytes</i>	MGPRACTICSLFFLLWVLAEPANSDFYLPGDYLLGGLFSLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEIVD
<i>Homo sapiens</i>	MGPRACTICSLFFLLWVLAEPANSDFYLPGDYLLGGLFSLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEIVD
<i>Gorilla gorilla gorilla</i>	MGPRACTICSLFFLLWVLAEPANSDFYLPGDYLLGGLFSLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEIVD
<i>Pongo pygmaeus</i>	MGPRACTICSLFFLLWVLAEPANSDFYLPGDYLLGGLFSLHANMKGIVHLDY	LQVPMCKEYETKVI	GYNLMQAMRFAVEEINNDSLLPDVLLGYEIVD

<i>Macaca arctoides</i>	VCYVSNNVQPVLYFLAQEDDLLPIQENYSNYVPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDEL RD KVRFPALLRTAPSADHHIEAMVQLMLH
<i>Macaca fuscata</i>	VCYVSNNVQPVLYFLAQEDDLLPIQENYSNYVPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDEL RD KVRFPALLRTAPSADHHIEAMVQLMLH
<i>Macaca assamensis</i>	VCYVSNNVQPVLYFLAQEDDLLPIQENYSNYVPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDEL RD KVRFPALLRTAPSADHHIEAMVQLMLH
<i>Cercocebus chrysogaster</i>	VCYVSNNVQPVLYFLAQEDDLLPIQENYSNYVPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDEL RD KVRFPALLRTAPSADHHIEAMVQLMLH
<i>Mandrillus sphinx</i>	VCYVSNNVQPVLYFLAQEDDLLPIQENYSNYMPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDEL RD KVRFPALLRTAPSADHHIEAMVQLMLH
<i>Lophocebus aterrimus</i>	VCYVSNNVQPVLYFLAQEDDLLPIQENYSNYVPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDEL RD KVRFPALLRTAPSADHHIEAMVQLMLH
<i>Papio hamadryas</i>	VCYVSNNVQPVLYFLAQEDDLLPIQENYSNYVPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDEL RD KVRFPALLRTAPSADHHIEAMVQLMLH
<i>Theropithecus gelada</i>	VCYVSNNVQPVLYFLAQEDDLLPIQENYSNYVPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDEL RD KVRFPALLRTAPSADHHIEAMVQLMLH
<i>Cercopithecus mitis</i>	VCYISNNVQPVLYFLAQEDDLLPIQENYSNYVPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDEL RD KVRFPALLRTAPSADHHIEAMVQLMLY
<i>Cercopithecus albogularis</i>	VCYISNNVQPVLYFLAQEDDLLPIQENYSNYVPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDEL RD KVRFPALLRTAPSADHHIEAMVQLMLY
<i>Erythrocebus patas</i>	VCYVSNNVQPVLYFLAQEDDLLPIQENYSNYVPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDEL RD KVRFPALLRTAPSADHHIEAMVQLMLY
<i>Chlorocebus sabaeus</i>	VCYVSNNVQPVLYFLAQEDDLLPIQENYSNYVPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDEL RD KVRFPALLRTAPSADHHIEAMVQLMLH
<i>Colobus polykomos</i>	VCYISNNVQPVLYFLAQDNNLLPIQEDYSNYMPRVAVIGPDNSNAVMTVANFLSLFLLPQITYSAN SDEL RNKVRFPALLRTTPSADHHIEAMVQLMLH
<i>Presbytis melalophos</i>	VCYISNNVQPVLYFLAQDNDLLPIQEDYSNYMPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDEL RD KVRFPALLRTTPSADHHIEAMVQLMLH
<i>Trachypithecus francoisi</i>	VCYISNNVQPVLYFLAQDNDLLPIQEDYSNYMPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDEL RNKVRFPALLRTTPSADHHIEAMVQLMLH
<i>Semnopithecus vetulus</i>	VCYISNNVQPVLYFLAQDNDLLPIQEDYSNYMPRVAVIGPDNSDAVVTVANFLSLFLLPQITYSAN SDEL RNKVRFPALLRTTPSADHHIEAMVQLMLH
<i>Pygathrix nigripes</i>	VCYISNNVQPVLYFLAQDNNLLPIHEDYSNYMPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDGL RD KVRFPALLRTTPSADHHIEAMVQLMLH
<i>Pygathrix nemaeus</i>	VCYISNNVQPVLYFLAQDNNLLPIHEDYSNYMPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDGL RD KVRFPALLRTTPSADHHIEAMVQLMLH
<i>Nasalis larvatus</i>	VCYISNNVQPVLYFLAQDNDLLPIQEDYSNYMPRVAVIGPDNSDAVITVANFLSLFLLPQITYSAISDGL RD KVRFPALLRTIPSADHHIEAMVQLMLH
<i>Rhinopithecus bieti</i>	VCYISNNVQPVLYFLAQDNNLLPIHEDYSNYMPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDGL RD KVRFPALLRTTPSADHHIEAMVQLMLH
<i>Rhinopithecus brelichi</i>	VCYISNNVQPVLYFLAQDNNLLPIHEDYSNYMPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDGL RD KVRFPALLRTTPSADHHIEAMVQLMLH
<i>Rhinopithecus roxellana</i>	VCYISNNVQPVLYFLAQDNNLLPIHEDYSNYMPRVAVIGPDNSDAVMTVANFLSLFLLPQITYSAISDGL RD KVRFPALLRTTPSADHHIEAMVQLMLH
<i>Hoolock hoolock</i>	VCYISNNVQPVLYFLAHEDNLLPIQEDYSNYS SRVAVIGPDNSES VMTVANFLSLFLLPQITYSAISDEL RD KARFPALLRTTPSADHHIEAMVQLMLH
<i>Symphalangus syndactylus</i>	VCYISNNVQPVLYFLAHEDNLLPIQEDYSNYS SRVAVIGPDNSES VLTVANFLSLFLLPQITYSAISDEL RD KARFPALLRTTPSADHHIEAMVQLMLH
<i>Hylobates lar</i>	VCYISNNVQPVLYFLAHEDNLLPIQEDYSNYS SRVAVIGPDNSES VTTVANFLSLFLLPQITYSAISDEL RD KARFPALLRTTPSADHHIEAMVQLMLH
<i>Hylobates abbotti</i>	VCYISNNVQPVLYFLAHEDNLLPIQEDYSNYS SRVAVIGPDNSES VMTVANFLSLFLLPQITYSAIGDEL RD KARFPALLRTTPSADHHIEAMVQLMLH
<i>Hylobates agilis</i>	VCYISNNVQPVLYFLAHEDNLLPIQEDYSNYS SRVAVIGPDNSES VMTVANFLSLFLLPQITYSAIGDEL RD KARFPALLRTTPSADHHIEAMVQLMLH
<i>Hylobates pileatus</i>	VCYISNNVQPVLYFLAHEDNLLPIQEDYSNYS SRVAVIGPDNSES VTTVANFLSLFLLPQITYSAISDEL RD KARFPALLRTTPSADHHIEAMVQLMLH
<i>Nomascus leucogenys</i>	VCYISNNVQPVLYFLAHEDNLLPIQEDYSNYS SRVAVIGPDNSES VITVANFLSLFLLPQITYSAISDEL RD KVRFPALLRTTPSADHHIEAMVQLMLH
<i>Nomascus annamensis</i>	VCYISNNVQPVLYFLAHEDNLLPIQEDYSNYS SRVAVIGPDNSES VMTVANFLSLFLLPQITYSAISDEL RD KVRFPALLRTTPSADHHIEAMVQLMLH
<i>Pan paniscus</i>	VCYISNNVQPVLYFLAHEDNLLPIQEDYSNYS IRVAVIGPDNSES VMTVANFLSLFLLPQITYSAIGDEL RD KVRFPALLRTTPSADHHIEAMVQLMLH
<i>Pan troglodytes</i>	VCYISNNVQPVLYFLAHEDNLLPIQEDYSNYS IRVAVIGPDNSES VMTVANFLSLFLLPQITYSAIGDEL RD KVRFPALLRTTPSADHHIEAMVQLMLH
<i>Homo sapiens</i>	VCYISNNVQPVLYFLAHEDNLLPIQEDYSNYS IRVAVIGPDNSES VMTVANFLSLFLLPQITYSAISDEL RD KVRFPALLRTTPSADHHIEAMVQLMLH
<i>Gorilla gorilla gorilla</i>	VCYISNNVQPVLYFLAHEDNLLPIQEDYSNYS IRVAVIGPDNSES VMTVANFLSLFLLPQITYSAISDEL QD KVRFPALLRTTPSADHHIEAMVQLMLH
<i>Pongo pygmaeus</i>	VCYVSNNVQPVLYFLAHEDNLLPIQEDYS DYVS RVAVIGPDNSES VMTVANFLSLFLLPQITYSAISDEL RD KVRFPALLRTTPSADHHIEAMVQLMLH

Macaca arctoides
Macaca fuscata
Macaca assamensis
Cercocebus chrysogaster
Mandrillus sphinx
Lophocebus aterrimus
Papio hamadryas
Theropithecus gelada
Cercopithecus mitis
Cercopithecus albogularis
Erythrocebus patas
Chlorocebus sabaeus
Colobus polykomos
Presbytis melalophos
Trachypithecus francoisi
Semnopithecus vetulus
Pygathrix nigripes
Pygathrix nemaeus
Nasalis larvatus
Rhinopithecus bieti
Rhinopithecus brelichi
Rhinopithecus roxellana
Hoolock hoolock
Symphalangus syndactylus
Hylobates lar
Hylobates abbotti
Hylobates agilis
Hylobates pileatus
Nomascus leucogenys
Nomascus annamensis
Pan paniscus
Pan troglodytes
Homo sapiens
Gorilla gorilla gorilla
Pongo pygmaeus

FRWNWIIIVLVSGDITYGRDNGQLLGDRLARGDICI AFQETLPTVQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSGDITYGRDNGQLLGDRLARGDICI AFQETLPTVQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSGDITYGRDNGQLLGDRLARGDICI AFQETLPTVQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FHWNWIIIVLVSGDITYGRDNGQLLGDRLARGDICI AFQETLPTVQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSGDITYGRDNGQLLGDRLARGDICI AFQETLPTVQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSGDITYGRDNGQLLGDRLARGDICI AFQETLPTVQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSGDITYGRDNGQLLGDRLARGDICI AFQETLPTVQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FHWNWIIIVLVSGDITYGRDNGQLLGDRLARGDICI AFQETLPTVQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FHWNWIIIVLVSGDITYGRDNGQLLGDRLARGDICI AFQETLPTVQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSGDITYGRDNGQLLGDRLARGDICI AFQETLPTVQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSGDITYGRDNGQLLGDRLARGDICI AFQETLPTVQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGSRLARGDICI AFQETLPTVQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFSEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGNRLARGDICI AFQETLPTVQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGNRLARGDICI AFQETLPTVQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGNRLARGDICI AFQETLPTVQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFAPDLTLYNFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGNRLARGDICI AFQETLPTVQPNQNMTSEEHQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGNRLARGDICI AFQETLPTVQPNQNMTSEEHQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGNRLARGDICI AFQETLPTVQPNQNMTSEEHQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGNRLARGDICI AFQETLPTMQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGNRLARGDICI AFQETLPTMQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGNRLARGDICI AFQETLPTMQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYNFFNEVLRQNFTGAVWIA
FHWNWIIIVLVSSDITYGRDNGQLLGERLARRDICI AFQETLPTLQPNQNMTSDERQRLVTIVDKLQQSTARVVVVFSPDLTLYDFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGERLARRDICI AFQETLPTLQPNQNMTSDERQRLVTIVDKLQQSTARVVVVFSPDLTLYDFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGERLARRDICI AFQETLPTLQPNQNMTSDERQRLVTIVDKLQQSTARVVVVFSPDLTLYDFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGERLARRDICI AFQETLPTLQPNQNMTSDERQRLVTIVDKLQQSTARVVVVFSPDLTLYDFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGERLARRDICI AFQETLPTLQPNQNMTSDERQRLVTIVDKLQQSTARVVVVFSPDLTLYDFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGERLARRDICI AFQETLPTLQPNQNMTSDERQRLVTIVDKLQQSTARVVVVFSPDLTLYDFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGERLARRDICI AFQETLPTLQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLISLYDFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGERLARRDICI AFQETLPTLQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLISLYDFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGERVARRDICI AFQETLPTLQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYHFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGERLARRDICI AFQETLPTLQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLISLYDFFNEVLRQNFTGAVWIA
FRWNWIIIVLVSSDITYGRDNGQLLGERLARRDICI AFQETLPTLQPNQNMTSEERQRLVTIVDKLQQSTARVVVVFSPDLTLYDFFNEVLRQNFTGAVWIA

<i>Macaca arctoides</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFRV RD PQAGPPPLSRTSQRSTCNQECDSCLNGTLSFNNVLRLSGERVVYSVYSAVYAVAHALH
<i>Macaca fuscata</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFRV RD PQAGPPPLSRTSQRSTCNQECDSCLNGTLSFNNVLRLSGERVVYSVYSAVYAVAHALH
<i>Macaca assamensis</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFRV RD PQAGPPPLSRTSQRSTCNQECDSCLNGTLSFNNVLRLSGERVVYSVYSAVYAVAHALH
<i>Cercocebus chrysogaster</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFRV RD PQAGPPPLSRTSQRSTCNQECDSCLNGTLSFNNVLRLSGERVVYSVY AA VYAVAHALH
<i>Mandrillus sphinx</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFRV RD PQAGPPPLSRTSQRSTCNQECDSCLNGTLSFNNVLRLSGERVVYSVYSAVYAVAHALH
<i>Lophocebus aterrimus</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFRV RD PQAGPPPLSRTSQRSTCNQECDSCLNGTLSFNNVLRLSGERVVYSVYSAVYAVAHALH
<i>Papio hamadryas</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFRV RD PQAGPPPLSRTSQRSTCNQECDSCLNGTLSFNNVLRLSGERVVYSVYSAVYAVAHALH
<i>Theropithecus gelada</i>	SESWAIDPVLHNLTEL RH VG TFLGITIQSVPIPGFSEFRV RD PQAGPPPLSRTSQRSTCNQECDSCLNGTLSFNNVLRLSGERVVYSVYSAVYAVAHALH
<i>Cercopithecus mitis</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFRV RD PQAGPPPLSRTSQRSTCNQECDSCLNGTLSF DN VLRLSGERVVYSVYSAVYAVAHALH
<i>Cercopithecus albogularis</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFRV RD PQAGPPPLSRTSQRSTCNQECDSCLNGTLSF DN VLRLSGERVVYSVYSAVYAVAHALH
<i>Erythrocebus patas</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFRV RD PQAGPPPLSR SS QRSTCNQECDSCLNGTLSF DN VLRLSGERVVYSVYSAVYAVAHALH
<i>Chlorocebus sabaeus</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFRV RD PQAGPPPLSRTSQRSTCNQECDSCLNGTLSF DN VLRLSGERVVYSVYSAVYAVAHALH
<i>Colobus polykomos</i>	SESWAIDPVLHNLTEL RH IG TFLGITIQSVPIPGFSEFRV RG PQAGP S PLSRTSQRSTCNQECDNCLNGTLSFNTVLRLSGERVVYSVYSAVYAVAHALH
<i>Presbytis melalophos</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFRV RG PQAGP S PLSRTSQRSTCNQECDNCLNGTLSFNT IL RLSGERVVYSVYSAVYAVAHALH
<i>Trachypithecus francoisi</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFRV QG PQAGP S PLSRTSQRSTCNQECDNCLN DT LSFNTVLRLSGERVVYSVYSAVYAVAHALH
<i>Semnopithecus vetulus</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFRV QG PQAGP S PLSRTSQRSTCNQECDNCLN DT LSFNTVLRLSGERVVYSVYSAVYAVAHALH
<i>Pygathrix nigripes</i>	SESWAIDPVLHNLTEL RH VG TFLGITIQ N VPIPGFSEFRV RG PQAGP S PLSRTSQRSTCNQECDNCLNGTLSFNTVLRLSGERVVYSVYSAVYAVAHALH
<i>Pygathrix nemaeus</i>	SESWAIDPVLHNLTEL RH VG TFLGITIQ N VPIPGFSEFRV RG PQAGP S PLSRTSQRSTCNQECDNCLNGTLSFNTVLRLSGERVVYSVYSAVYAVAHALH
<i>Nasalis larvatus</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFRV RD PQAGP S PLSRTSQRSTCNQECDNCLNGTLSFNTVLRLSGERVVYSVYSAVYAVAHALH
<i>Rhinopithecus bieti</i>	SESWAIDPVLHNLTEL RH IG TFLGITIQSVPIPGFSEFRV RG PQAGP S PLSRTSQRSTCNQECDNCLNGTLSFNTVLRLSGERVVYSVYSAVYAVAHALH
<i>Rhinopithecus brelichi</i>	SESWAIDPVLHNLTEL RH IG TFLGITIQSVPIPGFSEFRV RG PQAGP S PLSRTSQRSTCNQECDNCLNGTLSFNTVLRLSGERVVYSVYSAVYAVAHALH
<i>Rhinopithecus roxellana</i>	SESWAIDPVLHNLTEL RH IG TFLGITIQSVPIPGFSEFRV RG PQAGP S PLSRTSQRSTCNQECDNCLNGTLSFNTVLRLSGERVVYSVYSAVYAVAHALH
<i>Hoolock hoolock</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFR ERG PQAGPPPLSR SS QRSTCNQECDNCLN AT LSFNTVLRLSGERVVYSVYSAVYAVAHALH
<i>Symphalangus syndactylus</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPI Q GFSEFR ERG PQAGPPPLSR SS QRSTCNQECDNCLN AT LSFNTVLRLSGERVVYSVYSAVYAVAHALH
<i>Hylobates lar</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFR ERG Q QAGPPPLSRTSQRSTCNQECDDCLN AT LSFNTVLRLSGERVVYSVYSAVYAVAHALH
<i>Hylobates abbotti</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFR ERG Q QAGPPPLSRTSQRSTCNQECDDCLN AT LSFNTVLRLSGERVVYSVYSAVYAVAHALH
<i>Hylobates agilis</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFR ERS Q QAGPPPLSRTSQRSTCNQECDDCLN AT LSFNTVLRLSGERVVYSVYSAVYAVAHALH
<i>Hylobates pileatus</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFR ERG Q QAGPPPLSRTSQRSTCNQECDDCLN AT LSFNTVLRLSGERVVYSVYSAVYAVAHALH
<i>Nomascus leucogenys</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFR ERG PQAGPPPLSR SS QRSTCNQECDNCLN AT LSFNTVLRLSGERVVYSVYSAVYAVAHALH
<i>Nomascus annamensis</i>	SESWAIDPVLHNLTEL RHMGTF LGITIQSVPIPGFSEFR ERG PQAGPPPLSR SS QRSTCNQECDNCLN AT LSFNTVLRLSGERVVYSVYSAVYAVAHALH
<i>Pan paniscus</i>	SESWAIDPVLHNLTEL RH LG TFLGITIQSVPIPGFSEFR EW GPQAGPPPLSRTS Q SY TCNQECDNCLN AT LSFNT IL RLSGERVVYSVYSAVYAVAHALH
<i>Pan troglodytes</i>	SESWAIDPVLHNLTEL RH LG TFLGITIQSVPIPGFSEFR EW GPQAGPPPLSRTS Q SY TCNQECDNCLN AT LSFNT IL RLSGERVVYSVYSAVYAVAHALH
<i>Homo sapiens</i>	SESWAIDPVLHNLTEL GH LG TFLGITIQSVPIPGFSEFR EW GPQAGPPPLSRTS Q SY TCNQECDNCLN AT LSFNT IL RLSGERVVYSVYSAVYAVAHALH
<i>Gorilla gorilla gorilla</i>	SESWAIDPVLHNLTEL RH LG TFLGITIQSVPIPGFSEFR EW S P QAGPPPLSRTS Q SY TCNQECDNCLN AT LSFNT IL RLSGERVVYSVYSAVYAVAHALH
<i>Pongo pygmaeus</i>	SESWAIDPVLHNLTEL RH IG TFLGITIQSVPIPGFSEFR ER D S Q AGPPPL GK TSQRSTCNQECDNCLN AT LSFNT IL RLSGERVVYSVYSAVYAVAHALH

<i>Macaca arctoides</i>	SLLGCDHGTCTKREVPWQLLEKEIWKVNFTLLDHESISFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKKIQDISWHTINNTIPVSMCSKRCQ
<i>Macaca fuscata</i>	SLLGCDHGTCTKREVPWQLLEKEIWKVNFTLLDHESISFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKKIQDISWHTINNTIPVSMCSKRCQ
<i>Macaca assamensis</i>	SLLGCDHGTCTKREVPWQLLEKEIWKVNFTLLDHESISFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKKIQDISWHTINNTIPVSMCSKRCQ
<i>Cercocebus chrysogaster</i>	SLLGCDHGTCTKTEVPWQQLLEKEIWKVNFTLLDHESISFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKTIQDISWHTINNTIPVSMCSKRCQ
<i>Mandrillus sphinx</i>	SLLGCDYGTCAKKEVPWQQLLEKEIWKVNFTLLDHESISFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKTIQDISWHTINNTIPVSMCSKRCQ
<i>Lophocebus aterrimus</i>	SLLGCDHGTCAKTEVPWQQLLEKEIWKVNFTLLDHQIAFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKTIQDISWHTINNTIPVSMCSKRCQ
<i>Papio hamadryas</i>	SLLGCDHGTCTKTEVPWQQLLEKEIWKVNFTLLDHQIAFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKTIQDISWHTINNTIPVSMCSKRCQ
<i>Theropithecus gelada</i>	SLLGCDHGTCTKTEVPWQQLLEKEIWKVNFTLLDHEISFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKKIQDISWHTINNTIPVSMCSKRCQ
<i>Cercopithecus mitis</i>	SLLGCDHGAACIKKEVPWKLLKEIWKVNFTLLDHQISFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKIIQDISWHTINNTIPVSMCSKRCQ
<i>Cercopithecus albogularis</i>	SLLGCDHGAACIKKEVPWKLLKEIWKVNFTLLDHQISFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKIIQDISWHTINNTIPVSMCSKRCQ
<i>Erythrocebus patas</i>	SLLGCDHGTCTKKEVPWQQLLEKEIWKVNFTLLDHQISFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKKIQDISWHTINNTIPVSMCSKRCQ
<i>Chlorocebus sabaeus</i>	SLLGCDHGTCTKKEVPWQQLLEKEIWKVNFTLLDHQISFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKKIQDISWHTINNTIPVSMCSKRCQ
<i>Colobus polykomos</i>	SLLGCDHGTCTKREVPWQQLLEKEIWKVNFTLLDHQLFFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKKIQDISWHTINNTIPVSMCSKRCQ
<i>Presbytis melalophos</i>	SLLGCDHGTCTKREVPWQQLLEKEIWKVNFTLLDHQLFFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKKIQDISWHTINNTIPVSMCSKRCQ
<i>Trachypithecus francoisi</i>	SLLGCDYGTCTKREVPWQQLLEKEIWKVNFTLLDHQLFFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKKIQDISWHTINNTIPVSMCSKRCQ
<i>Semnopithecus vetulus</i>	SLLGCDHGTCTKREVPWQQLLEKEIWKVNFTLLDHQLFFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKKIQDISWHTINNTIPVSMCSKRCQ
<i>Pygathrix nigripes</i>	SLLGCDRGCTCTKREVPWQQLLEKEIWKVNFTLLDHQLFFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKIIQDISWHTINNTIPVSMCSKRCQ
<i>Pygathrix nemaeus</i>	SLLGCDRGCTCTKREVPWQQLLEKEIWKVNFTLLDHQLFFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKIIQDISWHTINNTIPVSMCSKRCQ
<i>Nasalis larvatus</i>	SLLGCDHGTCTKREVPWQQLLEKEIWKVNFTLLDHQLFFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKTIQDISWHTINNTIPVSMCSKRCQ
<i>Rhinopithecus bieti</i>	SLLGCDHGTCTKREVPWQQLLEKEIWKVNFTLLDHQLFFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKTIQDISWHTINNTIPVSMCSKRCQ
<i>Rhinopithecus brelichi</i>	SLLGCDHGTCTKREVPWQQLLEKEIWKVNFTLLDHQLFFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKTIQDISWHTINNTIPVSMCSKRCQ
<i>Rhinopithecus roxellana</i>	SLLGCDHGTCTKREVPWQQLLEKEIWKVNFTLLDHQLFFDPQGDMALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKTIQDISWHTINNTIPVSMCSKRCQ
<i>Hoolock hoolock</i>	SLLGCDHSTCTKREVPWQQLLEEIVWKVNFTLLDHQIFFDSQGDIALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKNIQDISWHTINNTIPVSMCSKRCQ
<i>Symphalangus syndactylus</i>	SLLGCDHSTCTKREVPWQQLLEEIVWKVNFTLLDHQIFFDSQGDIALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKNIQDISWHTINNTIPVSMCSKRCQ
<i>Hylobates lar</i>	SLLDCDHSTCTKREVPWQQLLEEIVWKVNFTLLDHQIFFDSQGDIALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKNIQDISWHTINNTIPVSMCSKRCQ
<i>Hylobates abbotti</i>	SLLDCDHSTCTKREVPWQQLLEEIVWKVNFTLLDHQIFFDSQGDIALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKNIQDISWHTINNTIPVSMCSKRCQ
<i>Hylobates agilis</i>	SLLDCDHSTCTKREVPWQQLLEEIVWKVNFTLLDHQIFFDSQGDIALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKNIQDISWHTINNTIPVSMCSKRCQ
<i>Hylobates pileatus</i>	SLLDCDHSTCTKREVPWQQLLEEIVWKVNFTLLDHQIFFDSQGDIALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKNIQDISWHTINNTIPVSMCSKRCQ
<i>Nomascus leucogenys</i>	SLLNCDHSTCTKREVPWQQLLEEIVWKVNFTLLDHQIFFDSQGDIALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKNIQDISWHTINNTIPVSMCSKRCQ
<i>Nomascus annamensis</i>	SLLNCDHSTCTKREVPWQQLLEEIVWKVNFTLLDRQIFFDSQGDIALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKNIQDISWHTINNTIPVSMCSKRCQ
<i>Pan paniscus</i>	SLLGCDNSTCTKRVPYPWQQLLEEIVWKVNFTLLDHQIFFDPQGDIALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKNIQDISWHTINNTIPVSMCSKRCQ
<i>Pan troglodytes</i>	SLLGCDNSTCTKRVPYPWQQLLEEIVWKVNFTLLDHQIFFDPQGDIALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKNIQDISWHTINNTIPVSMCSKRCQ
<i>Homo sapiens</i>	SLLGCDKSTCTKRVPYPWQQLLEEIVWKVNFTLLDHQIFFDPQGDIALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKNIQDISWHTINNTIPVSMCSKRCQ
<i>Gorilla gorilla gorilla</i>	SLLGCDNSTCTKRVPYPWQQLLEEIVWKVNFTLLDHQIFFDPQGDIALHLEIVQWQWGLSQNPFFQSVASYYPQLQRQLKHIQDISWHTINNTIPVSMCSKRCQ
<i>Pongo pygmaeus</i>	SLLGCDHSTCTKRVPYPWQQLLEEIVWKVNFTLLDHQIFFDPQGDIALHLEIVQWQWGLSQNPFFQSVASYHPLQRQLKNIQDISWHTINNTIPVSMCSKRCQ

<i>Macaca arctoides</i>	SGQKKKPVGIIHCCFECIDCLPGTFLNQTEDE F ECQACPSNEWSHQSEASCFKR R LAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Macaca fuscata</i>	SGQKKKPVGIIHCCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQSEASCFKR R LAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Macaca assamensis</i>	SGQKKKPVGIIHCCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQSEASCFKR R LAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Cercocebus chrysogaster</i>	SGQKKKPVGIIHCCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQSEASCFKR R LAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Mandrillus sphinx</i>	SGQKKKPVGIIHCCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQSEASCFKR R LAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Lophocebus aterrimus</i>	SGQKKKPVGIIHCCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQSEASCFKR R LAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Papio hamadryas</i>	SGQKKKPVGIIHCCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQSEASCFKR R LAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Theropithecus gelada</i>	SGQKKKPVGIIHCCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQSEASCFKR R LAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Cercopithecus mitis</i>	SGQKKKPVGIIHCCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQSEASCFKR R LAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Cercopithecus albogularis</i>	SGQKKKPVGIIHCCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQSEASCFKR R LAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Erythrocebus patas</i>	SGQKKKPVGIIHCCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQSEASCFKR R LAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Chlorocebus sabaeus</i>	SGQKKKPVGIIHCCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQSEASCFKR R LAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Colobus polykomos</i>	L GQKKKPVGIIHCCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQ R EASCFKR R LAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Presbytis melalophos</i>	SGQKKKPVG V HICCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQ R EASCFKRQLAF P EWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Trachypithecus francoisi</i>	L GQKKKPVGIIHCCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQ R EASCFKRQLAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Semnopithecus vetulus</i>	L GQKKKPVGIIHCCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQ R EASCFKRQLAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Pygathrix nigripes</i>	SGQKKKPVG V HICCFECIDCLPGTFLNQTEDE A YECQACPSNEWSHQ R EASCFKRQLAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Pygathrix nemaeus</i>	SGQKKKPVG V HICCFECIDCLPGTFLNQTEDE A YECQACPSNEWSHQ R EASCFKRQLAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Nasalis larvatus</i>	SGQKKKPVGIIHCCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQ R EASCFKRQLAF P EWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Rhinopithecus bieti</i>	SGQKKKPVG V HICCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQ R EASCFKRQLAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Rhinopithecus brelichi</i>	SGQKKKPVG V HICCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQ R EASCFKRQLAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Rhinopithecus roxellana</i>	SGQKKKPVG V HICCFECIDCLPGTFLNQTEDEYECQACPSNEWSHQ R EASCFKRQLAFLEWHEAPTIVVALLAALGFLSTLAILVIFWRHFQTPMVR S AG
<i>Hoolock hoolock</i>	SGQKKKPVGII H VCCFECIDCLPGTFLN H TEDEYECQACPSNEWSHQSE T SCFKRQL V FLEWHEAPT I AVALLAALGFLSTLAILV V FWRHFQTPMVR S AG
<i>Symphalangus syndactylus</i>	SGQKKKPVGII H VCCFECIDCLPGTFLN H TEDEYECQACPSNEWSHQSE T SCFKRQL V FLEWHEAPT I AVALLAALGFLSTLAILV V FWRHFQTPMVR S AG
<i>Hylobates lar</i>	SGQKKKPVGII H VCCFECIDCLPGTFLN H TEDEYECQAC P NEWSHQSE T SCFKRQL V FLEWHEAPT I AVALLAALGFLSTLAILV V FWRHFQTPMVR S AG
<i>Hylobates abbotti</i>	SGQKKKPVGII H VCCFECIDCLPGTFLN H TEDEYECQAC P NEWSHQSE T SCFKRQL V FLEWHEAPT I AVALLAALGFLSTLAILV V FWRHFQTPMVR S AG
<i>Hylobates agilis</i>	SGQKKKPVGII H VCCFECIDCLPGTFLN H TEDEYECQAC P NEWSHQSE T SCFKRQL V FLEWHEAPT I AVALLAALGFLSTLAILV V FWRHFQTPMVR S AG
<i>Hylobates pileatus</i>	SGQKKKPVGII H VCCFECIDCLPGTFLN H TEDEYECQAC P NEWSHQSE T SCFKRQL V FLEWHEAPT I AVALLAALGFLSTLAILV V FWRHFQTPMVR S AG
<i>Nomascus leucogenys</i>	SGQKKKPVGII H VCCFECIDCLPGTFLN H TEDEYECQAC P NEWSHQSE T SCFKRQL V FLEWHEAPT I AVALLAALGFLSTLAILV V FWRHFQTPMVR S AG
<i>Nomascus annamensis</i>	SGQKKKPVGII H VCCFECIDCLPGTFLN H TEDEYECQAC P NEWSHQSE T SCFKRQL V FLEWHEAPT I AVALLAALGFLSTLAILV V FWRHFQTPMVR S AG
<i>Pan paniscus</i>	SGQKKKPVGII H VCCFECIDCLPGTFLN H TEDEYECQAC P NEWS Y QSE T SCFKRQL V FLEWHEAPT I AVALLAALGFLSTLAILVIFWRHFQTP I VR S AG
<i>Pan troglodytes</i>	SGQKKKPVGII H VCCFECIDCLPGTFLN H TEDEYECQAC P NEWS Y QSE T SCFKRQL V FLEWHEAPT I AVALLAALGFLSTLAILVIFWRHFQTP I VR S AG
<i>Homo sapiens</i>	SGQKKKPVGII H VCCFECIDCLPGTFLN H TEDEYECQAC P NEWS Y QSE T SCFKRQL V FLEWHEAPT I AVALLAALGFLSTLAILVIFWRHFQTP I VR S AG
<i>Gorilla gorilla gorilla</i>	SGQKKKPVGII H VCCFECIDCLPGTFLN H TEDEYECQAC P NEWS Y QSE T SCFKRQL V FLEWHEAPT I AVALLAALGFLSTLAILVIFWRHFQTP I VR S AG
<i>Pongo pygmaeus</i>	SGQKKKPVGII H VCCFECIDCLPGTFLN H TEDEYECQACPSNEWS Y QSE T SCFKRQLAFLEWHEAPT I AVALLAALGFLSTLAILVIFWRHFQTPMVR S AG

	601	650	700
<i>Macaca arctoides</i>	GPMCFLMLTLLLVA	YMVVPVYVGPPKVSTCFCRQALFPLCFTTICISCI	AVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Macaca fuscata</i>	GPMCFLMLTLLLVA	YMVVPVYVGPPKVSTCFCRQALFPLCFTTICISCI	AVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Macaca assamensis</i>	GPMCFLMLTLLLVA	YMVVPVYVGPPKVSTCFCRQALFPLCFTTICISCI	AVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Cercocebus chrysogaster</i>	GPMCFLMLTLLLVA	YMVVPVYVGPPKVSTCFCRQALFPLCFTTICISCI	AVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Mandrillus sphinx</i>	GPMCFLMLTLLLVA	YMVVPVYVGPPKVSTCFCRQALFPLCFTTICISCI	AVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Lophocebus aterrimus</i>	GPMCFLMLTLLLVA	YMVVPVYVGPPKVSTCFCRQALFPLCFTTICISCI	AVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Papio hamadryas</i>	GPMCFLMLTLLLVA	YMVVPVYVGPPKVSTCFCRQALFPLCFTTICISCI	AVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Theropithecus gelada</i>	GPMCFLMLTLLLVA	YMVVPVYVGPPKVSTCFCRQALFPLCFTTICISCI	AVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Cercopithecus mitis</i>	GPMCFLMLTLLLVA	YMVVPVYVGPPKVSTCFCRQALFPLCFTTICISCI	AVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Cercopithecus albogularis</i>	GPMCFLMLTLLLVA	YMVVPVYVGPPKVSTCFCRQALFPLCFTTICISCI	AVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Erythrocebus patas</i>	GPMCFLMLTLLLVA	YMVVPVYVGPPKVSTCFCRQALFPLCFTTICISCI	AVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Chlorocebus sabaeus</i>	GPMCFLMLTLLLVA	YMVVPVYVGPPKVSTCFCRQALFPLCFTTICISCI	AVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Colobus polykomos</i>	GPMCFLMLTLLLVA	YVVVPVYVGPPKVSTCLCRQVLFPLCFTTICISCI	TVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Presbytis melalophos</i>	GPMCFLMLTLLLVA	YVVVPVYVGPPKVSTCLCRQVLFPLCFTTICISCI	TVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Trachypithecus francoisi</i>	GPMCFLMLTLLLVA	YVVVPVYVGPPKVSTCLCRQVLFPLCFTTICISCI	TVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Semnopithecus vetulus</i>	GPMCFLMLTLLLVA	YVVVPVYVGPPKVSTCLCRQVLFPLCFTTICISCI	TVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Pygathrix nigripes</i>	GSMCFLMLTLLLVA	YVVVPVYVGPPKVSTCLCRQVLFPLCFTTICISCI	TVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Pygathrix nemaeus</i>	GSMCFLMLTLLLVA	YVVVPVYVGPPKVSTCLCRQVLFPLCFTTICISCI	TVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Nasalis larvatus</i>	GPMCFLMLTLLLVA	YVVVPVYVGPPKVSTCLCRQVLFPLCFTTICISCI	TVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Rhinopithecus bieti</i>	GPMCFLMLTLLLVA	YVVVPVYVGPPKVSTCLCRQVLFPLCFTTICISCI	TVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Rhinopithecus brelichi</i>	GPMCFLMLTLLLVA	YVVVPVYVGPPKVSTCLCRQVLFPLCFTTICISCI	TVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Rhinopithecus roxellana</i>	GPMCFLMLTLLLVA	YVVVPVYVGPPKVSTCLCRQVLFPLCFTTICISCI	TVRSFQIVCVFKMASRFPRAYSYWVRYQGPYVSM
<i>Hoolock hoolock</i>	GPMCFLMLTLLLVA	YMVVPVYMGPPKVSTCLCRQALFPLCFTTICISCI	AVRSFQIVCAFKMASRFPRAYSYWVRYQGPYVSM
<i>Symphalangus syndactylus</i>	GPMCFLMLTLLLVA	YMVVPVYMGPPKVSTCLCRQALFPLCFTTICISCI	AVRSFQIVCAFKMASRFPRAYSYWVRYQGPYVSM
<i>Hylobates lar</i>	GPMCFLMLTLLLVA	YMVVPVYMGPPKVSTCLCRQALFPLCFTTICISCI	AVRSFQIVCAFKMASRFPRAYSYWVRYQGPYVSM
<i>Hylobates abbotti</i>	GPMCFLMLTLLLVA	YMVVPVYMGPPKVSTCLCRQALFPLCFTTICISCI	AVRSFQIVCAFKMASRFPRAYSYWVRYQGPYVSM
<i>Hylobates agilis</i>	GPMCFLMLTLLLVA	YMVVPVYMGPPKVSTCLCRQALFPLCFTTICISCI	AVRSFQIVCAFKMASRFPRAYSYWVRYQGPYVSM
<i>Hylobates pileatus</i>	GPMCFLMLTLLLVA	YMVVPVYMGPPKVSTCLCRQALFPLCFTTICISCI	AVRSFQIVCAFKMASRFPRAYSYWVRYQGPYVSM
<i>Nomascus leucogenys</i>	GPMCFLMLTLLLVA	YMVVPVYMGPPKVSTCLCRQALFPLCFTTICISCI	AVRSFQIVCAFKMASRFPRAYSYWVRYQGPYVSM
<i>Nomascus annamensis</i>	GPMCFLMLTLLLVA	YMVVPVYMGPPKVSTCLCRQALFPLCFTTICISCI	AVRSFQIVCAFKMASRFPRAYSYWVRYQGPYVSM
<i>Pan paniscus</i>	GPMCFLMLTLLLVA	YMVVPVYVGPPKVSTCLCRQALFPLCFTTICISCI	AVRSFQIVCAFKMASRFPRAYSYWVRYQGPYVSM
<i>Pan troglodytes</i>	GPMCFLMLTLLLVA	YMVVPVYVGPPKVSTCLCRQALFPLCFTTICISCI	AVRSFQIVCAFKMASRFPRAYSYWVRYQGPYVSM
<i>Homo sapiens</i>	GPMCFLMLTLLLVA	YMVVPVYVGPPKVSTCLCRQALFPLCFTTICISCI	AVRSFQIVCAFKMASRFPRAYSYWVRYQGPYVSM
<i>Gorilla gorilla gorilla</i>	GPMCFLMLTLLLVA	YMVVPVYVGPPKVSTCLCRQALFPLCFTTICISCI	AVRSFQIVCAFKMASRFPRAYSYWVRYQGPYVSM
<i>Pongo pygmaeus</i>	GPMCFLMLTLLLVA	YMVVPVYVGPPKVSTCLCRQALFPLCFTTICISCI	AVRSFQIVCAFKMASRFPRAYSYWVRYQGPYVSM

[illegible]

<i>Macaca arctoides</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Macaca fuscata</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Macaca assamensis</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Cercocebus chrysogaster</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Mandrillus sphinx</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Lophocebus aterrimus</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Papio hamadryas</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Theropithecus gelada</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Cercopithecus mitis</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Cercopithecus albogularis</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Erythrocebus patas</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Chlorocebus sabaeus</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Colobus polykomos</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Presbytis melalophos</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Trachypithecus francoisi</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Semnopithecus vetulus</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Pygathrix nigripes</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Pygathrix nemaeus</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Nasalis larvatus</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Rhinopithecus bieti</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Rhinopithecus brelichi</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Rhinopithecus roxellana</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Hoolock hoolock</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Symphalangus syndactylus</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Hylobates lar</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Hylobates abbotti</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Hylobates agilis</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Hylobates pileatus</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Nomascus leucogenys</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Nomascus annamensis</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Pan paniscus</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Pan troglodytes</i>	LAISLGYFGPKCYMILFYPERNTSAYFNSMIQGYTMRRD
<i>Homo sapiens</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Gorilla gorilla gorilla</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSMIQGYTMRRD
<i>Pongo pygmaeus</i>	LAISLGYFGPKCYMILFYPERNTPAYFNSVIQGYTMTRD