

(A)

*FSHB*

<i>M. rufoniger</i>	RVPGCAHHADSXYMYPVATECHCGKCNRDSTDCTVQGLGPSYCSFSEIKE	129
<i>M. davidi</i>	RVPGCAHHADSVYTYPVATECHCGKCNRDSTDCTVQGLGPSYCSFSEIKE	
<i>M. brandtii</i>	RVPGCAHHADSIYTYPVATECHCGKCNRDSTDCTVQGLGPSYCSFSEIKE	
<i>M. lucifugus</i>	RVPGCAHHADSVYTYPVATECHCGKCNRDSTDCTVQGLGPSYCSFSEIKE	
<i>E. fuscus</i>	RVPGCAHQADSVYTYPVATECHCGKCNRDSTDCTVQGLGPSYCSFSEIKE	
<i>P. alecto</i>	KVPGCAHHANSLYAYPVATECHCGKCDSDNTDCTVRGLGPSYCSFSEMKE	
<i>P. vampyrus</i>	KVPGCAHHANSLYAYPVATECHCGKCDSDNTDCTVRGLGPSYCSFSEMKE	
<i>R. aegyptiacus</i>	KVPGCAHHANSLYAYPVATECHCGKCDSDNTDCTVRGLGPSYCSFSEMKE	
<i>B. taurus</i>	KVPGCAHHADSLYTYPVATECHCSKCDSDSTDCTVRGLGPSYCSFREIKE	
<i>E. caballus</i>	KVPGCAHHADSLYTYPVATAACHCGKNSDSTDCTVRGLGPSYCSFGDMKE	
<i>M. musculus</i>	RLPGCARHSDSLYTYPVATECHCGKCDSDSTDCTVRGLGPSYCSFSEMKE	
<i>H. glaber</i>	RVPGCAHHADSLYTYPVATKCHCGKCDSDSTDCTVRGLGPSYCSFSEMA-	
<i>H. sapiens</i>	RVPGCAHHADSLYTYPVATQCHCGKCDSDSTDCTVRGLGPSYCSFGEMKE	
<i>M. domestica</i>	SLPGCANQADSLYSYPVATAACHCGSCDTDSTDCTVRGLGPSYCSFNERKE	

(B)

*GHR*

<i>M. rufoniger</i>	QMSPVPCEEDFRFPWFLIIIFGMGLTVI-FLFMFSKQQRIKMLILPPVP	301
<i>M. davidi i</i>	QMSPVPCEEDFRFPWFLIVIFGMGLTVI-FLFMFSKQQRIKMLILPPVP	
<i>M. brandtii</i>	QMSPVPCEEDFRFPWFLIIIFGMGLTVI-FLFVFSKQQRIKMLLLPPVP	
<i>M. lucifugus</i>	YEILFSCVSDFRFPWFLIIIFGMGLTVI-FLFMFSKQQRIKMLLLPPVP	
<i>E. fuscus</i>	QMSPVPCEEDFQFPWFLIIIFGMGLTVI-FLFMFSKQQRIKMLILPPVP	
<i>P. alecto</i>	QMSPLACEEDFRFPWFLIIIFGIFGLTVILFLIFSKQQRIKMLILPPVP	
<i>P. vampyrus</i>	QMSPLACEEDFRFPWFLIIIVGIFGLTVILFLIFSKQQRIKMLILPPVP	
<i>R. aegyptiacus</i>	QMSPLACEEDFRFPWFLIIIFGIFGLTVILFLIFSKQQRIKMLILPPVP	
<i>B. taurus</i>	QMNP SACEEDFQFPWFLIIIFGILGLAVTLYLLIFSKQQRIKMLILPPVP	
<i>E. caballus</i>	QMSPLACEEDFQFPWFLIIILGIFGLTVILFLIFSKQQRIKMLILPPVP	
<i>M. musculus</i>	--ILEACEEDIQFPWFLIIIFGIFGVAVMLFVVIIFSKQQRIKMLILPPVP	
<i>H. glaber</i>	QLSSFTCEE FQFPWFLIMIFGIFGLVMVLLVVIFSKQQRIKMLILPPVP	
<i>H. sapiens</i>	QMSQFTCEEDFYFPWLLIIIFGIFGLTVMLFVFLFSKQQRIKMLILPPVP	
<i>M. domestica</i>	S-ECEEKINDFRFPWFLIIIFGILGLTVVLFVFILSKQQRIKLLILPPVP	

(C)

*IGF1R*

<i>M. rufoniger</i>	AAYDSHAHLVIALPIVIVLTVLGLALTLYI IHRKR- -NRMNGVLY	974
<i>M. davidii</i>	AAYDSHAHLVIALPIAIVLTVLGLALTLYI IHRKR- -NRMNGVLY	
<i>M. brandtii</i>	AAYDSHAHLVIALPIAIVLTVLGLALTLYI IHRKR- -NRMNGVLY	
<i>M. lucifugus</i>	AAFDSHAHLVIALPIAIVLTVLGLALTLYI IHRKR- -NRMNGVLY	
<i>E. fuscus</i>	AAMDNYAHLVIALPIAIVLIVCGLAVTLYI IHRKR- -NRMNGVLY	
<i>P. alecto</i>	TTYENFMHLI IALPIAILLIVGGLVIMLYVFHRKRNSNRLGNGVLY	
<i>P. vampyrus</i>	TTYENFMHLI IALPIAILLIVGGLVIMLYVFHRKRNSNRLGNGVLY	
<i>R. aegyptiacus</i>	ATYENFTHLVIALPVAILLIVAGLVIMLYVFHRKRNSNRLGNGVLY	
<i>B. taurus</i>	TTYENFIHLMIALPIAVLLIVGGLVIMLYVFHRKRNSSRLGNGVLY	
<i>E. caballus</i>	TTYENFIHLI IALPVAVLLIVGGLVIMLYVFHRKRNNSSRLGNGVLY	
<i>M. musculus</i>	TTYENFMHLI IALPVAVLLIVGGLVIMLYVFHRKRNNSSRLGNGVLY	
<i>H. glaber</i>	TTYENFIHLI IALPVAVLLIVGGLVIMLYVFHRKRNNSSRLGNGVLY	
<i>H. sapiens</i>	TGYENFIHLI IALPVAVLLIVGGLVIMLYVFHRKRNNSSRLGNGVLY	
<i>M. domestica</i>	QDYENFLHLMIALPIAGLFIVGGLIMWYVFNKKRNSDRLGNGVLY	

(D)

*TP53*

<i>M. rufoniger</i>	ALPTNTDSSPP-PKXPVDXEXFTLQIRGRERFETFRKLNE	378
<i>M. davidii</i>	ALPTNTDSSPP-PKKPADEEYFTLQIRGRERFETFRKLNE	
<i>M. brandtii</i>	ALPTNTDPSPP-PKKPADEEYFTLQIRGRERFETFRKLNE	
<i>M. lucifugus</i>	ALPTNTDPSPP-PKKPADEEYFTLQIRGRERFETFRKLNE	
<i>E. fuscus</i>	ALPTDTDSSPP-PKMPVDGEYFTLQIRGRARFEMFRELNE	
<i>P. alecto</i>	ALPTDTTSSSPSPKMLDEEYFTLQIRGRKNFEILRELNE	
<i>P. vampyrus</i>	ALPTDTTSSSPSPKMLDEEYFTLQIRGRKNFEILRELKE	
<i>R. aegyptiacus</i>	ALPTNTTSSSPSPKMLDEEYFTLQIRGRKNFEMLRELNE	
<i>B. taurus</i>	ALPTNTSSSPQPKKPLDGEYFTLQIRGFKRYEMFRELND	
<i>E. caballus</i>	VLSSNTSSSPQPKKPLDGEYFTLQIRGRERFEMFRELNE	
<i>M. musculus</i>	ALPTCTSASPPQPKKPLDGEYFTLKIRGRKRFEMFRELNE	
<i>H. glaber</i>	ALPTGTNSSPQPKKPLDGEYFTLKIRGRERFEMFRELNE	
<i>H. sapiens</i>	ALPNNTSSSPQPKKPLDGEYFTLQIRGRERFEMFRELNE	
<i>M. domestica</i>	ALPTTPGSTPKAKKKLVEGEYFTLQIRGRQRYELLREINE	

(E)

*MDM2*

<i>M. rufoniger</i>	ENSDELSGERQRKRHRSDSISFSFDES LALCVIREIRCER	210
<i>M. davidi</i>	ENSDELSGERQRKRHRSDSISFSFDES LALCVIREIRCER	
<i>M. brandtii</i>	ENSDELSGERQRKRHRSDSISFSFDES LALCVIREIRCER	
<i>M. lucifugus</i>	ENSDELSGERQRKRHRSDSISFSFDES LALCVIREIRCER	
<i>E. fuscus</i>	GNSDELSCERQRKRHRSDSISFSFDES LALCVIREIRCER	
<i>P. alecto</i>	DNSDELPGERQRKRHKSDSISFSFDES LALCVIREIRCER	
<i>P. vampyrus</i>	DNSDELPGERQRKRHKSDSISFSFDES LALCVIREIRCER	
<i>R. aegyptiacus</i>	DNSDELPGERQRKRHKSDSISFSFDENLALCVIREIRCER	
<i>B. taurus</i>	ENSDELPGERQRKRHKSDNISLSFDES LALCVIREICCER	
<i>E. caballus</i>	ENSDELPGERQRKRHKSDSVSLSFDEGLALCVIREICCDG	
<i>M. musculus</i>	ENTDELPGERHRKRRR----SLSFDPSLGLCELREMCSSGG	
<i>H. glaber</i>	ENSDELSGERQRKRHKSDSISLSFDES LALCVIREELCCER	
<i>H. sapiens</i>	ENSDELSGERQRKRHKSDSISLSFDES LALCVIREICCER	
<i>M. domestica</i>	ENLDELPGERHRKRHKSDSISLPFDESCALCVISEICCER	

(F)

*SLC45A2*

<i>M. rufoniger</i>	YRCLCI SHLIGWTAFLSNMLFFTDFMGRIVYHGNPYSAHNSTEFLI YERG	214
<i>M. davidii</i>	YRCLCI SHLIGWTAFLSNMLFFTDFMGRIVYHGNPYSAHNSTEFLI YERG	
<i>M. brandtii</i>	YRCLCI SHLIGWTAFLSNMLFFTDFMGRIVYHGNPYSAHNSTEFLI YERG	
<i>M. lucifugus</i>	YRCLCI SHLIGWTAFLSNMLFFTDFMGRIVYHGNPYSAHNSTEFLI YERG	
<i>E. fuscus</i>	YRCLCI SHLIGWTAFLSNMLFFTDFMGRIVYHGNPYSAHNSTEFLI YERG	
<i>P. alecto</i>	HRCLCI SHLIGWTAFLCNMLFFTDFMGQIVYHGDPYSAHNSTEFLI YERG	
<i>P. vampyrus</i>	YRYLCI SHLIGWTAFLCSMLFFTDFMGQIVYHGDPYSAHNSTEFLI YERG	
<i>R. aegyptiacus</i>	YRCLCI SHLIGWTAFLSNMLFFTDFMGQIVYHGDPYSAHNSTEFLI YERG	
<i>B. taurus</i>	YRCLCI SHLIGWTAFLSNMLFFTDFMGQIVYHGDPYGAHNSTEFLI YQRG	
<i>E. caballus</i>	YRYLCI SHLLGWTAFLSNMLFFTDFMGQIVYHGDPYSAHNSTEFLI YQRG	
<i>M. musculus</i>	YRCLCVSHLIGWTAFLSNMLFFTDFMGQIVYHGDPYGAHNSTEFLI YERG	
<i>H. glaber</i>	YRCLCI SHLIGWTAFLSNMLFFTDFMGQIVYRGDPYSAHNSTEFLI YERG	
<i>H. sapiens</i>	YRYLCI SHLIGWTAFLSNMLFFTDFMGQIVYRGDPYSAHNSTEFLI YERG	
<i>M. domestica</i>	YRYLCVSHLIGWTAFLSNMLFFTDFMGQIVYHGDPYAPHNSTSFLI YERG	

(G)

*RGS7BP*

<i>M. rufoniger</i>	TRTKGCEMARQAHQKLAAISGPEGGEIHPEICRLYIQLQCCLEMYTTEML	140
<i>M. davidii</i>	-----MISCLPPLYQHPLP	
<i>M. brandtii</i>	TRTKGCEMARQAHQKLAAISGPEGGEIHPEICRLYIQLQCCLEMYTTEML	
<i>M. lucifugus</i>	TRTKGCEMARQAHQKLAAISGPEGGEIHPEICRLYIQLQCCLEMYTTEML	
<i>E. fuscus</i>	TRTKGCEMARQAHQKLAAISGPEGGEIHPEICRLYIQLQCCLEMYTTEML	
<i>P. alecto</i>	TRTKGCEMARQAHQKLAAISGPEDGEIHPEICRLYIQLQCCLEMYTTEML	
<i>P. vampyrus</i>	TRTKGCEMARQAHQKLAAISGPEDGEIHPEICRLYIQLQCCLEMYTTEML	
<i>R. aegyptiacus</i>	TRTKGCEMARQAHQKLAAISGPEDGEIHPEICRLYIQLQCCLEMYTTEML	
<i>B. taurus</i>	TRTKGCEMARQAHQKLAAISGPEDGEIHPEICRLYIQLQCCLEMYTTEML	
<i>E. caballus</i>	TRTKGCEMARQAHQKLAAISGPEDGEIHPEICRLYIQLQCCLEMYATEML	
<i>M. musculus</i>	TRTKGCEMARQAHQKLAAISGPEDGEIHPEICRLYIQLQCCLEMYTTEML	
<i>H. glaber</i>	TRTKGCEMARQAHQKLAAISGPEDGEIHPEICRLYIQLQCCLEMYTTEML	
<i>H. sapiens</i>	TRTKGCEMARQAHQKLAAISGPEDGEIHPEICRLYIQLQCCLEMYTTEML	
<i>M. domestica</i>	TRTKGCEMARQAHQKLAAISGPEDGEIHPEICRLYIQLQCCLEMYTTEML	

(H)

*RHO*

<i>M. rufoniger</i>	PLNYILLNLAVANL <b>FMVFGGFTTLYTSMHGYFVFGATGCNLEGFFATLG</b>	120
<i>M. davidii</i>	PLNYILLNLAVANL <b>FMVFGGFTTLYTSMHGYFVFGATGCNLEGFFATLG</b>	
<i>M. brandtii</i>	PLNYILLNLAVANL <b>FMVFGGFTTLYTSMHGYFVFGATGCNLEGFFATLG</b>	
<i>M. lucifugus</i>	PLNYILLNLAVANL <b>FMVFGGFTTLYTSMHGYFVFGATGCNLEGFFATLG</b>	
<i>E. fuscus</i>	PLNYILLNLAVAN <b>LFMVFGGFTTLYTSMHGYFVFGATGCNLEGFFATLG</b>	
<i>P. alecto</i>	PLNYILLNLAVADLF <b>MVFGGFTTLYTSLHGYFVFGPTGCNLEGFFATLG</b>	
<i>P. vampyrus</i>	----- MRQGSNQSLADCLA	
<i>R. aegyptiacus</i>	PLNYILLNLAVADLF <b>MVFGGFTTLYTSLHGYFVFGPTGCNLEGFFATLG</b>	
<i>B. taurus</i>	PLNYILLNLAVADLF <b>MVFGGFTTLYTSLHGYFVFGPTGCNLEGFFATLG</b>	
<i>E. caballus</i>	PLNYILLNLAVADLF <b>MVFGGFTTLYTSLHGYFVFGPTGCNVEGFFATLG</b>	
<i>M. musculus</i>	PLNYILLNLAVADLF <b>MVFGGFTTLYTSLHGYFVFGPTGCNLEGFFATLG</b>	
<i>H. glaber</i>	PLNYILLNLAVADLF <b>MVICGFTTLYTSMHGYFVFGATGCNMEGFFATLG</b>	
<i>H. sapiens</i>	PLNYILLNLAVADLF <b>MVLGGFTSTLYTSLHGYFVFGPTGCNLEGFFATLG</b>	
<i>M. domestica</i>	PLNYILLNLIVADLF <b>MVFGGFTMTLYTSLHGYFVFGPTGCNLEGFFATLG</b>	
<i>M. rufoniger</i>	241 ATTQKA <b>EKEVTRMVI IMVVAFLICWL</b> PYASVAFYIFTHQG	280
<i>M. davidii</i>	ATTQKA <b>EKEVTRMVI IMVVAFLICWL</b> PYASVAFYIFTHQG	
<i>M. brandtii</i>	ATTQKA <b>EKEVTRMVI IMVVAFLICWL</b> PYASVAFYIFTHQG	
<i>M. lucifugus</i>	ATTQKA <b>EKEVTRMVI IMVVAFLICWL</b> PYASVAFYIFTHQG	
<i>E. fuscus</i>	ATTQKA <b>EKEVTRMVI IMVVAFLICWL</b> PYASVAFYIFTHQG	
<i>P. alecto</i>	ATTQKA <b>EKEVTRMVI IMVIAFLICWL</b> PYAGVAFYIFTHQG	
<i>P. vampyrus</i>	ATTQKA <b>EKEVTRMVI IMVIAFLICWL</b> PYAGVAFYIFTHQG	
<i>R. aegyptiacus</i>	ATTQKA <b>EKEVTRMVI IMVIAFLICWL</b> PYAGVAFYIFTHQG	
<i>B. taurus</i>	ATTQKA <b>EKEVTRMVI IMVIAFLICWL</b> PYAGVAFYIFTHQG	
<i>E. caballus</i>	ATTQKA <b>EKEVTRMVI IMVIAFLICWL</b> PYAGVAFYIFTHQG	
<i>M. musculus</i>	ATTQKA <b>EKEVTRMVI IMVIAFLICWL</b> PYAGVAFYIFTHQG	
<i>H. glaber</i>	ATTQKA <b>EKEVTRMVI IMVIAFLICWL</b> PYASVAMYIFTHQG	
<i>H. sapiens</i>	ATTQKA <b>EKEVTRMVI IMVIAFLICWL</b> PYASVAFYIFTHQG	
<i>M. domestica</i>	ATTQKA <b>EKEVTRMVI IMVIAFLICWL</b> PYAGVAFYIFTHQG	

(I)

*OPN1SW*

<i>M. rufoniger</i>	PWDGPQYHXAPVWAFHLQAAFMGFVFFAGTPLNATVLVATLRYKKLRQPL	70
<i>M. davidii</i>	PWDGPQYHIAPVWAFHLQAAFMGFVFFAGTPLNATVLVATLRYKKLRQPL	
<i>M. brandtii</i>	PWDGPQYHIAPVWAFHLQAAFMGFVFFAGTPLNATVLVATLRYKKLRQPL	
<i>M. lucifugus</i>	PWDGPQYHIAPVWAFHLQAAFMGFVFFAGTPLNATVLVATLRYKKLRQPL	
<i>E. fuscus</i>	PWDGPQYHIAPVWAFHLQAAFMGFVFFAGTPLNATVLVATLRYKKLRQPL	
<i>P. alecto</i>	PWDGPQHHIAPVWAFHLQAAFMGFVFFVGTPLNATVLVATLRYRKLRQPL	
<i>P. vampyrus</i>	PWDGPQHHIAPVWAFHLQAAFMGFVFFVGTPLNATVLVATLRYRKLRQPL	
<i>R. aegyptiacus</i>	PWDGPQYHVAPVWAFHLQAAFMGFVFFVGTPLNATVLVATLRYRKLRQLL	
<i>B. taurus</i>	PWDGPQYHLPAPVWAFHLQAVFMGFVFFVGTPLNATVLVATLRYRKLRQPL	
<i>E. caballus</i>	PWDGPQYHIAPVWAFRLQAAFLGIVFLVGMPLNSLVLVATLRYKKLRQPL	
<i>M. musculus</i>	PWDGPQYHLPAPVWAFRLQAAFMGFVFFVGTPLNAIVLVATLHYKKLRQPL	
<i>H. glaber</i>	PWDGSQYHI APIWAFHLQAAFMGLVFFVGTPLNAIVLVATLQYKKLRQPL	
<i>H. sapiens</i>	PWDGPQYHIAPVWAFYLQAAFMGTVFLIGFPLNAMEVLVATLRYKKLRQPL	
<i>M. domestica</i>	PWDGPQYHIAPAWFHFQTVFMGFVFCAGTPLNAVVLVATLRYKKLRQPL	
<i>M. rufoniger</i>	81 GFLFCIFS VFTVFIASCQGYFVFGRHVCALEAFLGSTAGL	120
<i>M. davidii</i>	GFLFCIFS VFTVFIASCQGYFVFGRHVCALEAFLGSTAGL	
<i>M. brandtii</i>	GFLFCIFS VFTVFIASCHGYFVFGRHVCALEAFLGSTAGL	
<i>M. lucifugus</i>	GFLFCIFS VFTVFIASCQGYFVFGRHVCALEAFLGSTAGL	
<i>E. fuscus</i>	GFLFCIFS VFTVFIASCQGYFIFGRHVCALEAFLGSTAGL	
<i>P. alecto</i>	GFLFCIFS VFTVFIASCQGYFVFGPHVCALEAFLGSTAGL	
<i>P. vampyrus</i>	GFLFCIFS VFTVFIASCQGYFVFGPHVCALEAFLGSTAG-	
<i>R. aegyptiacus</i>	GFLFCIFS VFTVFIISCGYFVFGRHVCALEAFLGSAAGL	
<i>B. taurus</i>	GFIYCIFS VFI VFITSCYGYFVFGRHVCALEAFLGCTAGL	
<i>E. caballus</i>	GFLVCIFS VLIVFINSCHGYFVFGRHVCALEAFLGTVAGL	
<i>M. musculus</i>	GFLFCIFS VFTVFIASCHGYFLFGRHVCALEAFLGSVAGL	
<i>H. glaber</i>	GFLFCIFS VFTVFIASCHGYFFFGRHVCALEAFLGSVAGL	
<i>H. sapiens</i>	GFLLCIFS VFPVFVASCNGYFVFGRHVCALEGFLGTVAGL	
<i>M. domestica</i>	GFI FCLFAVFTVFISSSQGYFIFGRHVCAMEAFLGSVAGL	

(J)

*CNGB3*

<i>M. rufoniger</i>	FFEFNHRLESIMNRAYIYRVARTAGCLLFALHVNA CIYYWASDHQGIGTT	430
<i>M. davidii</i>	FFEFNHHLESIMNRAYIYRVARTAGCLLFALHVNA CIYYWASDHQFGGST	
<i>M. brandtii</i>	FFEFNHCLESIMNRAYIYRVARTAGCLLFALHVNA CIYYWASDHQGIGTT	
<i>M. lucifugus</i>	FFEFNHRLESIMNRAYIYRVARTAGCLLFALHVNA CIYYWASNHQGIGTT	
<i>E. fuscus</i>	FFEFNHRLESIMDKAYIYRVARTAGCLLFALHVNA CIYYWASDHQGIGTT	
<i>P. alecto</i>	FFEFNHRLESAMDKAYVYRVFR TTGYLLFTLHINACIYYWASAYEGLGTT	
<i>P. vampyrus</i>	FFEFNHRLESAMDKAYVYRVFR TTGYLLFTLHINACIYYWASAYEGLGTT	
<i>R. aegyptiacus</i>	FFEFNHRLESVMDKAYIYRVLRTTGYLLFTLH INACIYYWASAYEGLGTT	
<i>B. taurus</i>	-----	
<i>E. caballus</i>	FFEFNHHLESIMDKAYIYRVIRTTGYLLFTLH INACIYYWASNYEGIGTT	
<i>M. musculus</i>	FFEFNHHLESIMDKAYVYRVIRTTGYLLFL LHINACVYYWASDYEGIGST	
<i>H. glaber</i>	FFEFNHHLESIMDKVYIYRVIRTTGYLLFIL HINACIYYWASNYEGIGTT	
<i>H. sapiens</i>	FFEFNHHLESIMDKAYIYRVIRTTGYLLFIL HINACVYYWASNYEGIGTT	
<i>M. domestica</i>	FFEFNDRLESRMDNAYIYRVIRTTGYLLFVL HVNA CIYSLASDYEGIGST	