

>TRPV1_Rattus_norvegicus

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VARKTDSLKQFVNASYTDSYYKGQTALHIAIERRNMTLVTLLEVENGADVQAAANGDF
FKKTKGRPGFYFGELPLSLAACTNQLAIVKFLQNSWQPADISARDSVGNLVLHALVE
VADNTVDNTKFTVSMYNEILILGAKLHPTLKLEEITNRKGLTPLALAASSGKIGVLAYIL
QREIHEPECRHLSRKFTWAYGPVHSSLYDLSCIDTCEKNSVLEVIAYSSSETPNRHDM
LLVEPLNRLQDKWDRFVKRIFYFNFFVYCLYMIIFTAAAYYRPVEGLPPYKLNKNTVG
DYFRVTGEILSVGGVYFFFRGIQYFLQRRPSLKSFLVDSYSEILFFVQSLFMLVSVVLYF
SQRKEYVASMVFLAMGWTNMLYYTRGFQQMGIYAVMIEKMILRDLCRFMFVYLVFL
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EFTENYDFKAVFIILLAYVILTYILLNMLIALMGETVNKIAQESKNIWKLQRAITILDT
EKSFLKCMRKAFRSGKLLQVGFTPDGKDDYRWCFRVDEVNWTWNTNVGIINEDPG
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KPEDAIEVFKDSMVPGEK-----

>TRPV1_Sus_scrofa

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RQTDSLKELVNASYTDSYYKGQTALHIAIERRNMALVTLLVENGADVQAAANGDFFK
KTKGRPGFYFGELPLSLAACTNQLGIVKFLQNSWHPADISARDSVGNLVLHALVEVA
DNTADNTKFTVSMYNEILILGARLHPTLKLEELTNKKGLTPLALAAKSGKIGVLAYILQ
REIQEPECRHLSRKFTWAYGPVHSSLYDLSCIDTCEKNSVLEVIAYSSSETPNRHDM
LVEPLNRLQDKWDRFVKRIFYFNFLVYCLYMIIFTAAAYYRPTEGLPPFKLNHTVGD
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HRKEYVASMVFLAMGWANMLYYTRGFQQMGIYAVMIEKMILRDLCRFMFVYLVFL
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FTENYDFKAVFIILLAYVILTYILLNMLIALMGETVNKISQESKNIWKLQRAITILDT
KSFLKCMRKVFRSGKLLQVGYTPDGKDDYRWCFRVDEVNWTWNTNVGIINEDPGN
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>TRPV1_Bos_taurus

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YILQREIQEPECRHLSRKFTWAYGPVHSSLYDLSCIDTCEKNSVLEVIAYSSSETPNRH
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LYFCHRKEYVASMVFLAMGWTNMLYYTRGFQQMGIYAVMIEKMILRDLCRFMFVYL
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>TRPV1_Canis_familiaris

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>TRPV1_Cavia_porcellus

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GDFKKTGKRPGFYFGELPLSLAACTNQLAIVKFLQNSWQPADISARDSVGNTVLHA
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>TRPV1_Desmondus_rotundus

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>TRPV1_Equus_caballus

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VADNTADNTKFVTSMYNEILILGAKLHPTLKLEELTNKKGLTPLALAAGSGKIGVLAYI
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>TRPV1_Heterocephalus_glaber

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>TRPV1_Scapanus_oratius

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>TRPV1_Homo_sapiens

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>TRPV1_Putorius_furo

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>TRPV1_Loxodonta_africana

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>TRPV1_Macaca_mulatta

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>TRPV1_Ornithorhynchus_anatinus

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>TRPV1_Oryctolagus_cuniculus

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TVVLYFSHCKEYVATMVFLALGWINMLYYTRGFQQMGIYAVMIEKMILRDLCRFMF
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AITILDEKGFLLKMRKAFRSGKLLQVGYPDGKDDCRWCFRVDEVNWTWNTNVG
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>TRPV1_Otolemur_garnettii

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FTIGMGDLEFTENYDFKAVFIILLLAYVILTYILLNMLIALMGETVNKIAQESKNIWKL
QRAITILDTEKSFLKCMRKAFRSGKLLQVGYPDGKDDYRWCFRVDEVNWTWNTN
VGIINEDPGNCEGVKRTLSFSLRPGRASGRNWKNFALVPLLRDASTRDRNPAHPEEVH
LRQFSGSLKPDAEVFKNPTASGEK-----

>TRPV1_Myotis_lucifugus

MKKWGSDDSGEPEDLPQEDSHPKPLEGDPNSRPAPAKPSIFPTAKRSRFLFGKCDSEE
ASPMDCSYEEGQPASCPAIVSPVVVVQKTGDGPTCARQSSQDSVPAGTERKLKLYDR
RKIFEAVAQNNCEELESLLLFLQKSKHLMDFKDPETGKTCLLKAMLNLDHGHNS
TIPLLEIARQTDSTELVNASYTDSSYKQGTALHIAIERRNMALVTLLVENGADVQAA
ANGDFFKKTGRPGFYFGELPLSLAACTNQLGIVKFLQNSWQPADISARDSVGNVTL
HALVEVADNTADNTKFVTSMYNEILILGAKLHPTLKLEELTNKKGLTPLALAASSGKIG
VLAYILQREIQEPECRHLSRKFTWAYGVPVHSSLYDLSCIDTCEKNSVLEVIAYSSSETP
NRHDMLLVEPLNRLQLQDKWDRFVKRIFYFNFFVYCLYMIIFTTAAAYRVPDGLPPFKL
RYTVGDYFRVTGEILSVGGVYFFFRGIQYFLQRRPSLKSFLVDSYSEILFFVQSLFMLGT
VVLYFCRRKEYVASMVFLAMGWTNMLYYTRGFQQMGIYAVMIEKQVLLACRIATFW
LSFFFFFKAVVTLIEDGKNDSVAETTSRWRGPGCRPPDSSYNSLYSTCLELFKFTIG
MGDLEFTENYDFKAVFIILLLAYVILTYILLNMLIALMGETVNKIAQESKNIWKLQRAI
TILDTEKSFLKCMRKAFRSGKLLQVGYPDGKDDYRWCFRVDEVNWTWNTNVGII
NERPNCEASKRTLSFSPALGQKIVSGRHWKNFALVPLLRDASTRERQPAQHEEVHLR
HFAGSLKPDAEVFKDPAVFGEK-----

>TRPV1_Normascus_leucogenys

MKKWSSTDSGAAADPLQQDTCPDPLDGDPSRPPPAKPQLSMAKSRTLFGKGDSEE
AFPVDCPHEEGELDSCPTITVSPVIIIQRPGDGPTGARLLSQDSVAASTEKTLRLYDRRSI
FEAVAQNNCQDLESLLLFLQKSKHLLTDNEFKDPETGKTCLLKAMLNLDHGDQNDTIP
LLLDIARQTDSLKEFVNASYTDSSYKQGTALHIAIERRNMALVTLLVENGADVQAAAH
GDFFKKTGRPGFYFGELPLSLAACTNQLGIVKFLQNSWQPADISARDSVGNVTLHA
LVEVADNTADNTKFVTSMYNEILILGAKLHPTLKLEELTNKKGMTPLALAAGTGKIGV
LAYILQREIQEPECRHLSRKFTWAYGVPVHSSLYDLSCIDTCEKNSVLEVIAYSSSDTPN
RHDMLLVEPLNRLQLQDKWDRFVKRIFYFNFLIYCLYMIIFTMAAYRVPDGLPPFKME
KTEDYFRVTGEILSVLGGVYFFFRGIQYFLQRRPSMKTFLVDSYSEMLFFLQSLFMLAT
VVLYFSLKQYVASMVFLALGWTNMLYYTRGFQQMGIYAVMIEKMILRDLRCRFMFV
YVFLFGFSTAVVTLIEDGKNDSLPESTSHRWRGPGCRPPDSSYNSLYSTCLELFKFTI
GMGDLEFTENYDFKAVFIILLLAYVILTYILLNMLIALMGETVNKIAQESKNIWKLQR
AITIVPRKKSFKCMRKAFRSGKLLQVGYPDGKDDYRWCFRVDEVNWTWNTNVG
IINEDPGNCEGVKRTLSFSLRSSRVSGRHWKNFALVPLLRASARDRHSAPQEEVHLR
QFSGSLKPDAEVFKSPAASGEE-----

>TRPV1_Mus_musculus

MEKWASLDSDESEPPAQENSCPDPPDRDPNSKPPPAKPHIFATRSRTRLFGKGDSEEA
SPMDCPYEEGGLASCPIITVSSVVTLQRSVDGPTCLRQTSQDSVSTGVETPPRLYDRRSI
FDAVAQSNQCQELESLLSFLQKSKKRLTDFEFKDPETGKTCLLKAMLNHLHNGQNDTIAL
LLDIARKTDSLKQFVNASYTDSYYKGQTALHIAIERRNMALVTLLVENGADVQAAANG
DFFKKTGRPGFYFGELPLSLAACTNQLAIVKFLQNSWQPADISARDSVGNLTVLHAL
VEVADNTADNTKFTVNTMYNEILILGAKLHPTLKLEELTNKKGLTPLALAASSGKIGVL
AYILQREIHEPECRHLSRKFTWAYGPVHSSLYDLSCIDTCEKNSVLEVIAYSSSETPNR
HDMLLVEPLNRLQDKWDRFVKRIFYFNFFVYCLYMIIFTTAAAYRPEVGLPPYKLN
TVGDYFRVTGEILSVSGGVYFFFRGIQYFLQRRPSLKSFLVDSYSEILFFVQSLFMLVSVV
LYFSHRKEYVASMVFLAMGWTNMLYYTRGFQMGYAVMIEKMILRDLRCRFMFVYL
VFLFGFSTAVVTLIEDGKNNSLPVEPPHKCRGSACRPGNSYNSLYSTCLELFKFTIGMG
DLEFTENYDFKAVFIILLAYVILTYILLNMLIALMGETVNKIAQESKNIWKLQRAITIL
DTEKSFLKCMRKAFRSGKLLQVGFTPDGKDDFRWCFRVDEVNWTWNTNVGIINED
PGNCEGVKRTLSFSLRSGRVSGRNWKNFALVPLLRDASTRDRHSTQPEEVQLKHYTG
SLKPEDA EVFKDSMAPGEK-----

>TRPV1_Oligodon_lacroixi_fragment

SFYHMEQLDTNPIIKFSFRLERGRCGNHCPKLLSTASIGVCAGKAFKIYDRRSLFDAVA
QGDPSQLDDLLIYLLESKILNTDAEFKEPDTGKTCLLKAMLNHLHNGRNDTIPLLEIAE
KTENLEEFVNAGYTDGYKQGTALHIAIERRNMYLVNLLVKNGADVHARAHGEFFQK
IKGKPGFYFGELPLSLAACTNRLNIVKFLLENPYQPANIAAQSMSGSTVLHALVEIADD
TDDNTKFTVTKMYNDVLILGASINPTLRLEELTNRRGLTPLTLAAKTGKIQVFAYILRRE
MKEPECRHLSRKFTWAYGPVHSSLYDLSSIDTCEKNSVLEIIAYSSETPNRHEMLLVE
PLNQLLQDKWDRFVKHLFYFNFFIYTAHILITVAAYRPTKKEGMPPTFFHSSGEY
FRVTGEILRVLGGAYFFFRGIKYFQRRPSLKAIFTECYSELLFFAHSVLLLGSVLYFSK
QEVYVVMVLFALALGWSNLIYYTRGFQMGYISVMLEKMMLRDLGRFIMVYMLFHLG
FSTAVVTLIEEDNEGRPEIPPQQDSCPLVRARPSYNNLYTTCLELFKFTIGMGDLEFT
ENYRFKSVFIILLLVYVVLTYILLNMLIALMGETVNKIAQESKSIWKLQRTITILNIEKSY
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>TRPV1_Ovophis_monticola_fragment

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TENLKEFVNTGYTDSYRGQTALHIAIERRNMYLVNLLVKNGADVHARAHGEFFQKI
KGKPGFYFGELPLSLAACTNQLNIVKYLLENPYQQANIAEQDSMGNTVLHALVEIADN
TADNTKFTVTRMYNDMLILGARINPTLRLEEVANRRGLTPLTLAAKMGKIQVFAYILRR
EMKEPECRHLSRKFTWAYGPVHSSLYDLSSIDTCEKNSVLEIIAYSSETPNRHEMLLV
EPLNQLLQDKWDRFVKHLFYFNFFTYTVHILITVAAYRPTKKEGTPPTFRHTRGE
YFRVTGEILSVLGGAYFFFRGIKYFQRRPPLKAIFTECYSELLFFVHSLLLLGSVLYFS
RQEVYVVMVLFALALGWSNLIYYTRGFQMGYISVMLEKMMLRDLGRFIMVYLLFHL
GFSTAVVTLIEEDNEGRPETAQPLDVCPCPVRRARPSYNNLYTTCLELFKFTIGMGDLEF

TENYHFKSIFIILLLIYVVLTYIILLNMLIALMGETVNKIAQESKSIWKLQRTITILNIENS
YWNCIINSFRSGKRVLVGTTPDGKDDYRWCFRVDEVNWSTWNTNLS-----

>TRPV1_Plagiopholis_blakewayi_fragment

SFYHMEQLDSNPIIKFSFRLERGRCGNHCPKLLSTASIGVCAGKAFKIYDRRSLFDAVAQ
GDPSQLDDLLIYLLESKLTLD AEFKEPDTGKTCLLKAMLNHLHNGRNDTIPLLEIAEK
TESLQEFVNAGYTDGYKQGTALHIAIEGRNMYLVNLLVKNGADVHARAHGEFFQKIE
GKPGFYFGELPLSLAACTNQLNIVKFLENPYQPANIAEQDSMGNTILHALVEIADDDTD
DNTKRVTKMYNDVLLGASTNPTLRLEELTNRRGLTPLTLAAKTGKIQVFAYILRREM
KEPECRHLSRKFTWAYGVPVHSSLYDLSSIDTCEKNSVLEIIAYSSETPNRHEMLLVEP
LNQLLQDKWDRFVKHLFYFNFFIYTVHILITVAAYYRPTKKEGTPPFTFHRRDEYF
RVTGEILSVGGAYFFFRGIKYFQQRPSLKAIFTECYSELLFFVHVVLLGSAVLYFSKQ
EVYVVLVMFALALGWSNLIYYTRGFQQMGIYSVMLEKMMLRDLGRFIMVYLLFHLGF
STAVVTLIEEDNEGRPEIPQPQACPCPVKARPSYNNLYTTCLELFKFTIGMGDLEFTE
YRFKSVFIILLLIYVVLTYIILLNMLIALMGETVNKIAQESKSIWKLQRTITILNIENSY
WNCIINSFRSGKRVLVGTTPDGKEDYRWCFRVDEVNWSTWNTNLS-----

>TRPV1_Protobothrops_jerdonii_fragment

SFYHMEQLASNPIIKFSLSLERGRCGDHCPKLLSTASIGVCAGKAFKLYDRRSLFDAVA
QGDPQLDDLLIFLLESKILTDAEFKEPDTGKTCLLKAMLNHLHNGRNDTIPLVLEIAE
KTENLKEFVNTGYTDSYRQGTALHIAIERNMYLVNLLVKNGADVHARAHGEFFQK
IKGKPGFYFGELPLSLAACTNQLNIVKYLENPYQPANIAEQDSMGNTVLHALVEIADN
TADNTKRVTRMYNDMLILGARINPTLRLEEVANRRGLTPLTLAAKMGKIQVFAYILRR
EMKESECRHLSRKFTWAYGVPVHSSLYDLSSIDTCEKNSVLEIIAYSSETPDRHEMLLV
EPLNQLLQDKWDRFVKHLFYFNFFTYTVHILITVAAYYRPTKKEGTPPFTFRHTRGE
YFRVTGEILSVLGGAYFFFRGIKYFQQRPSLKAIFTECYSELLFFVHSLLLGSAVLYFS
RQEVYVVLVMFALALGWSNLLYYTRGFQQMGIYSVMLEKMMLRDLGRFIMVYLLFHL
GFSTAVVTLIEEDNEGRPETAQPAGVCPCPVRRARPSYNNLYTTCLELFKFTIGMGDLEF
TENYHFKSIFIILLLIYVVLTYIILLNMLIALMGETVNKIAQESKSIWKLQRTITILNIENS
YWNCIVNSFRSGKRVLVGTTPDGKDDYRWCFRVDEVNWSTWNTNLS-----

>TRPV1_Pseudoxenodon_macrops_fragment

SFYHMEQLDSNPIIKFSFRLERGRCGNHCPKLLSTASIGVCAGKAFKIYDRRSLFDAVAQ
GDPSQLDDLLIYLLESKLTLD AEFKEPDTGKTCLLKAMLNHLHNGRNDTIPLLEIAEK
TESLQEFVNAGYTDGYKQGTALHIAIERNMYLVNLLVKNGADVHARAHGEFFQKIE
GKPGFYFGELPLSLAACTNQLNIVKFLENPYQPANIAEQDSMGNTILHALVEIADDDTD
DNTKRVTKMYNDVLLGASINPTLRLEELTNRRGLTPLTLAAKTGKIQVFAYILRREM
K

EPECRHLSRKFTWAYGVPVHSSLYDLSSIDTCEKNSVLEIIAYSSETPNRHMLLVEPL
NQLLQDKWDRFVKHLFYFNFFIYTVHTLILTVAAYYRPTKKEGTPPFTFHRRGEYFR
VTGEILSVLGGAYFFFRGIKYFQRRPSLKAIFTECYSELLFFVHSVLLLGSVLYFSKQE
VYVLMVFALALGWSNLIYYTRGFQQMGIYSVMLEKMMLRDLGRFIMVYLLFHLGFS
TAVVTLIEEDNEGRPETPPPQVCPCPVKARPSYNNLYTTCLELFKFTIGMGDLEFTENY
RFKSVFIILLIYVVLTYILLNMLIALMGETVNKIAQESKSIWKLQRTITILNIENSYWN
CIINSFRSGKRVLVGTTPDGKEDYRWCFRVDEVNWSWTWNTNLS-----

>TRPV1_Xenopus_laevis

MKKMGSSDIDETEETCASIETDESHSDDTNRSAQENRKKLKFCQAKYSIFSSPKPKGR
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RTFKLYDQRRIFDAAAYGDCCEEDLLVYLLRTHKRLTNEEFKEKETGKTCLLKAMLN
LDKGMNHTILLFLEIAEKTDNLKEFINSAYRDNYRGTALHIAIERRNMDLVQLLQ
HGADVHARADGEFFRKAKGKAGFYFGELPLSLAACTNQTAVRYLLQNQHSPANIAAR
DSFGNTVLHALVDIADNTQENTAFVTKMYNEILVLGAQIKPSLKIEEIANKKGLTPLSL
AAKTGKIGVFAYILRREIKNLECRHLSRKFTWAYGVPVHSSLYDLGVDTYEKNSVLEII
AYSSETPNRHDMMLLVEPLNKLQDKWDHFVKRIFYFNFFAYIIVIIFTIAAYYRPVDGS
PPFPVQYGSYLRTSGELITVIGGIYFFFRAIQYFTQRRPSLKALLADSYCEFLFFSQSVELL
LSTVLYFCGRNEYVAFLVICLAMSWANVLYYTRGFQLMGIYSVMIEKLILSDMVRFLFV
YLLFLFGFAAALVTLIEDGEGRDVTNNTCGRRCKPEPASYNLYTTCQELFKFAIGMG
DLEFTDNYKYKPVFIFLLITYVILTYILLNMLIALMGETVSKVAQESKSIWKLQRAITIL
DIEKSFLNSFRDTRSGKSVLVGITPDGKEDYRWCFRVDEVNWNKWNNSNLGIIKEDPG
NCHGFKSTLSASFRPRGRRWRSVPHIKEINLGNENETVPEEVPLQIQPALSQTVKKE
DQEVTSKAE-----

>TRPV1_Xenopus_tropicalis

MKKMGSSDIDETEETCASVETDESHSDDTNRSTQENRKKLKFCQAKYSIFSSPKPKG
RRFGKAETDRNIAPMDSVYQIESKVMSPTIKQFNLEKGGKLCNQLVRQSSSLESTTSCK
DRTFKLYDQRRIFDAAAYGDCDELDDLLVYLLRTHKRLTNEEFKEKETGKTCLLKAM
LNLENGMNSTIPLFLEIAEKTDNIKEFINSAYRDNYRGTALHIAIERRNMDLVELL
QHADVHARADGEFFRKAKGKAGFYFGELPLSLAACTNQTAMVQYLLQNQYSPANM
AAKDTFGNTVLHALVDIADNTQENTTFVTKMYNEILVLGAQIRPSLKLEEIMNKKGLT
PLSLAAKTGKIGVFAYILRREIKNFECRHLRSRKFTWAYGVPVHSSLYDLGVDTYEKNS
VLEIIAYSSETPNRHMLLVEPLNKLQDKWDRFVKRIFYFNFLAYITYVIIFTVAAYYR
PVDGSPFPVQPNLYRTCGELITVIGGIYFFFRIQYFTQRRPSLKALIADSYEFLFFA
QSIFLLLSTMLYFCGRNEYVAFLVICLAMSWANVLYYTRGFQLMGIYSVMIEKLILSDM
VRFMFVYLLFLFGFAAALVTLIEDGEGRDNLSTCGRRCKPEPASYNLYTTCQELFK
FAIGMGDLEFTDNYKYKPVFIFLLITYVILTYILLNMLIALMGETVSKVAQESKSIWKL
QRAITILDIEKSFLNSFRDTRSGKSVLVGFTPDGKEDYRWCFRVDEVNWNKWNNSNL
GIIKEDPGNCHGLKSTLSASFRPRGKRWKSVPVHVKETNVKIDNETVPEEIPLQKPTL
ADQTVPEEDQEVTSKAE-----

>TRPV1_Zebra_finch

RLLSTDSITGCSEKAFRFYDRRRIFDAVAQGNTKDLSDLLLYLNRTFKHLTDEEFKFTE
PETGKTCLLKAMLNLHDGKNDTIPLLLDIARKTGTLKEFVNAEYTDNYKQGTALHIA
IERRNMYLVKLLVQNGADVHARACGEFFRKIKGKSGFYFGELPLSLAACTNQLCIVKFL
LENPYQAANITAEDSMGNMVLHTLVEIADNTKDNTKFVTKMYNNILILGAKINPILKL
EELTNKKGLTPLTLAAKTGKIGIFAYILRREIKDPECRHLSRKFTWAYGPVHSSLYDLS
CIDTCEKNSVLEILAYSSETPNRHEMLLVEPLNRLQDKWDRFVKHLFYFNFFVYTMH
ITILTAAYYRPVQKNEKPPFTFGYSPGEYFRVAGEILSVLGGLYFFFRGVRYVHYSQHQ
WGIFRVTGEILSVLGGLYFFFRGIQYFVQRRPSLRTLIVDGYSEVLFVHSSLLSSVLY
FCGQELYVASMVFLALGWTNMLYYTRGFQQMGIYSVMIKMLRDLCRFMFVYLVF
LLGFSTAVVTLIEDDNEGQDTNISDYARCCQVKRGRSYNSLYTTCLELFKFTIGMGDL
EFTENYRFKSVFVILLVLYVILTYILLNMLIALMGETVNKIAQESKSIWKLQRAITILDI
ENSYLNCLRHSFRSGKQVLVGITPDGQDDYRWCFRVDEVNWSTWNTNLGIINEDPGY
SGDLRRNLSFSIKPGRVSGKNWKTLPVLLKDGKRRREPHKPPPEVKLKP-----

>TRPV1_Bungarus_multicinctus_fragment

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KGKPGFYFGELPLSLAACTNQLNIVKFLLENPYQPANIAAQDSMGNTVLHALVGIADD
TDDNTKFVTKMYNDVLILGARINPTLRLEEIANRRGLTPLTLAAKTGKIQVFAYILRRE
MKEPECRHLSRKFTWAYGPVHSSLYDLSSIDTCEKNSVLEIIAYSSETPNRHEMLLVE
PLNQLLQDKWDRFVKHLFYFNFFIYTAHILITVAAYYRPTKREGTPPFIFHHTRGEYF
RVTGEILSVLGGAYFFFRGIKYFQRRPSLKATFTECYSELLFFFHVSLLLGAAVLYVSR
QEVYVVMVAFALGWSNLIYYTRGFQQMGIYSVMLEKMMLRDLGRFIMVYLLFHLG
FSTAVVTLIEEDNEGRAETTQQQLEACPCPVKPRPSYNNLYTTCLELFKFTIGMGDLEF
TENYRFKSVFIILLVYVVLTYILLNMLIALMGETVNKIAQESKSIWKLQRTITILNIEN
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>TRPV1_Amphiesma_sp_fragment

SFYHMEQLDSNPIIKFSFRLERGRCGNHCPKLLSTASNGVCAAKAFKIYDRRSLFDAVA
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KTENLKEFVNAGYTDGYYKQGTALHIAIERRNMYLVNLLVKNGADVHARAHGEFFQK
IKGKPGFYFGELPLSLAACTNQLNIVKFLLENPYQPANIAEQDSIGNTVLHALVEIADD
DENTKFVTKMYNDVLILGASINPTLRLEELANRRGLTPLTLAAKTGKIQVFAYILRREM
KEPECRHLSRKFTWAYGPVHSSLYDLSSIDTCEKNSVLEIIAYSSETPNRHEMLLVEP
LNQLLQDKWDRFVKHLFYFNFFIYTAHILITVAAYYRPTKKEGTPPFAFHHTSSEYFR
VTGEILSVLGGAYFFFRGIKYFQQRHPSLKAIFTECYSELLFFVHVSLLLGSVLYFSKQE
VYVVMVAFALGWSNLIYYTRGFQQMGIYSVMLEKMMLRDLGRFIMVYLLFHLGFS
TAVVTLIEEDGRPETPPPEGCPCPVKARPSYNNLYTTCLELFKFTIGMGDLEFTENY
RFKSVFIILLVYVVLTYILLNMLIALMGETVNKIAQESKSIWKLQRTITILNIENSYWN

CIINSFRSGKCVLVGTTPDGKEDYRWCFRVDEVNWSTWNTNLS-----

>TRPV1_Carollia_brevicauda

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KIFEAVAQNNCEELESLLLFLQRSKKHLMDFKDPETGKTCLLKAMLNLHNGQNNTI
PLLEIARQTDSLKELVNASYIDSYYKQTALHIAIERRNMALVTLLENGADVQAAAN
GDFFKTKGRPGFYFGELPLSLAACTNQLGIVKFLQNSWQPADISARDSVGNTVLHA
LVEVADNTADNTKFVTSMYNEILILGAKLHPTLKLEELINKKGLTPLALAASSGKIGVL
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HDMLLVEPLNRLQDKWDRFVKRIFYFNFFVYCLYMIIFTTVAYYRPEGLPPYKVKH
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VLYFCQCKEYVASMVFLAMGWTNMLYYTRGFQQMGIYAVMIEKMILRDLCRFMFVY
LIFLFGFSTAVVTLIEDGKNDSVSTETTPHRWRGPCYRSPDSSYNSLYSTCLELFKFTIG
MGDLEFTENYDFKAVFIILLAYVILTYILLNMLIALMGETVNKIAQESKNIWKLQRAI
TILDTEKSFLKCMRKAFRSGKLLQVGYTPDGKDDYRWCFRVDEVNWTTWNTNVGII
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SGSLKPEDA EVFKDPAALG-----

>TRPV1_Crotalus_atrox

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GDTSQLDDLLIFLLESVKNLTD AEFKEPDTGKTCLLKAMLNLHNGRNDTIPLLEIAEK
TENLKEFVNTGYTDSYRGQTALHIAIERRNMYLVNLLVKNGADVHARAHGEFFQKI
KGKPGFYFGELPLSLAACTNQLNIVKYLLNENPYQANIAEQDSMGNTVLHALVEIADN
TVDNTKFVTRMYNDMLILGARINPALRLEEVTNRRGLTPLTLAAKMGKIQVFAYILRR
EMKEPECRHLSRKFTWAYGPHSSLYDLSSIDTCEKNSVLEIIAYSSETPNRHEMLLV
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YCRVTGEILTVLGGAYFFFRGIKYFQRRPSLKAIFTECYSELLFFVHSLLLLSAVLYFS
GQEVYVLMVLFALALGWSNLLYYTRGFQQMGIYSVMLEKMMLRDLGRFIMVYLLFHL
GFSTAVVTLIEEDNEGRPETAQPLDVCPCPVRARPSYNNLYTTCLELFKFTIGMGDLEF
TENYHFKSIFIILLIYVVLTYILLNMLIALMGETVNKIAQESKSIWKLQRTITILNIENS
YWNCCIINSFRSGKRVLVGTTPDGKDDYRWCFRVDEVNWSTWNTNLSIINEDPGGHTE
ELKRNLFSFKSRVSGKNWKTLPILRDGKREGSLKPISEDYADSDEQDVRKKS LPN
PVL-----

>TRPV1_Daboia_siamensis_fragment

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TENLTFVNAGY TDSYRGQTALHIAIERRNMYLVNLLVKNGADVHARAHGEFFQKI
KGKPGFYFGELPLSLAACTNQLNIVKYLLNENPYQAANIAEQDSMGNTVLHALVEIADN

TADNTK FVTRMYNDMLILGARINPTLRLEE VANRRGLTPLTLAAKMGKIQVFAYILRR
EMKEPECRHLSRKFTWAYGPVHSSLYDLSSIDTCEKNSVLEIIAYSSETPNRHEMLLV
EPLNQLLQDKWDRFVKHLFYFNFFTYAVHILITVAAYRPTKKEGTPPFTFRHTRGE
YFRVTGEILSVLGGAYFFFRGIKYFQRRPSLKAIFTECYSELLFFVHVSLLLGSVLYFS
RQEVYVLMVFALALGWSNLLYYTRGFQQMGIYSVMLEKMMLRDLGRFIMVYLLFHL
GFSTAVVTLIEEDNEGRPEMAQPLDVCPCPVKARPSYNNLYTTCLELFKFTIGMGDLE
FTENYHFKSIFILLIYVVLTYILLNMLIALMGETVNKIAQESKSIWRLQRTITILNIEN
SYWNCIINSFRSGKRVLVGTTPDGKDDYRWC FRVDEVNWSTWNTNLS-----

>TRPV1_Danio_rerio

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NGKTALLKALLNLRQGENDTIEQLLDIAEKMGDLKNFINAAYTDSYKQGTALHVAIE
RRSMKFVQMLVKKGADVHAKACGKFFQPNQKMC FYFGELPLSLAACTNQQDIVDFL
MENPHQAVDVRERDCHGNTVLHALVSVADNSPENTEFVIAMYDHILIKADQLHPKTK
LEEIENNEGLTPITLAAKKGKLG LFKHIVQRELMGCRHLSRKITEWAYGPVCSLYDLS
SLDTYEKNSALEIVVYGSEIPNRLEMLQIEPLNRLIEEKWDQFAHRMFLFNFIYVYILF
IFTASAFYHEEGKDYANQPPYLYAKSREGYLLLTGHIISITGAFYFFIRGLIDMVRKRPRF
QSLIIDGYTDQLFFVQGLLFLASVVLYCYGQYEYLAFLVLCLALSWINLLYFSRGSKNLGI
YNVMIQKMVLGEIRRFVVMVFLIGFSAALVTLDDQESIDSGSTRDFRLSEDIPSLNPT
PDSSNPQSRMTHHQPTTARDGRGRFGLTTDNQYEVCKKPSYKNIYFTTLELFKFTIGM
GDLEFTDHYKYKEVFYVLLIVYIVMTYILMLNMLIALMNQSVEMMSVESTSIWKLQRA
ITTLDMEWILPKCLQGKLRSGEEKDLGGGQEPDRRWCF SVEEVNWTQWNRNMGIIN
EDPGKCTQDPSANVQREPSRGVLQTF SRRRRRTQRAQTREGHELSP LAEASSSV-----

>TRPV1_Eryx_tataricus_fragment

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GDPSMLDDLLVYLLES LKNLTDEEFKEPDTGKTCLLKAMLNLHHGRNDTIPLLEIAE
KTQNLKEFVNAGYTD SYKQGTALHIAIERRNLYLVNLLVKN GADVHARAHGEFFQKI
KGKPGFYFGELPLSLAACTNQLNIVKYLLENPYQPAHIAEQDSMGNTILHALVEIADDT
EDNTK FVTKMYNDVLILGARINPTLRLEE IANRRGLTPLTLAAKTGKIQVFAYILRREM
KEPECRHLSRKFTWAYGPVHSSLYDLSSIDTCEKNSVLEIIAYSSETPNRHEMLLVEP
LNQLLQDKWDRFVKHLFYLNFFIYTAHILITVAAYRPTKKGTPPFTFHHTSSEYLR
STGELLSVTGGAYFFFRGIKYFQRRPSLKAIFTESYSELLFFVHVSLLLGSVVLVYFSRQE
TYVLMVFALALGWANLLYYTRGFQQMGIYSVMLEKMMLRDLRCRFIMVYLLFHLGFS
TAVVTLIEEDNEGRPEISQTPNVCPCPVKPRPSYNNLYTTCLELFKFTIGMGDLEFTEN
YHFKSVFIILLIYVVLTYILLNMLIALMGETVNKIAQESKSIWKLQRAITILNIENSYW
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>TRPV1_Meleagris_gallopavo

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RFVMGSDSDKDMAPMDSFYQMDHLMAPSVIKFHANMERGKHLKLLSTDSITGCSEKA
FKFYDRRRIFDAVAQGN TKDLDDLLLYLNRTLKHLTDDEFKEPETGKTCLLKAMLNL
HDGKNDTIPLLLDIAKKTGTLKEFVNAEYTDNYKQGTALHIAIERRNMYLVKLLVQN
GADVHARACGEFFRKIKGKPGFYFGELPLSLAACTNQLCIVKFLENPYQAADIAAEDS
MGNMVLHTLVEIADNTKDNTKFVTKMYNNILGAKINPILKLEERTNKKGLTPLTLA
AKTGKIGIFAYILRREIKDPECRHLSRKFTWAYGPVHSSLYDLSCIDTCEKNSVLEIAY
SSETPNRHEMLLVEPLNRLQDKWDRFVKHLFYFNFFVYAIHISILTTAAYRVPVQKG
ENPPFTFGHSTGEYFRVTGEILSVLGGLYFFFRGIQYFVQRRPSLKTIVDSYSEVLFFVH
SLLLLSSVVLYFCGQELYVASMVFLALGWANMLYYTRGFQQMGIYSVMIAMILRDL
CRFMFVYLVFLGFASTAVVTLIEDDNEGQDTNSSECARCSHTKRGRSNTSYNSLYYTCLL
FKFTIGMGDLEFTENYRFKSVFVILLVLYVILTYILLNMLIALMGETVSKIAQESKSIW
KLQRAITILDIENSYLNCLRRSFRSGKQVLVGITPDGQDDYRWCFRVDEVNWSTWNT
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PILEPYEPEDCETLKESLPKSV-----

>TRPV2_Rattus_norvegicus

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GKTCLMKAVLNLQDGVNACIMPLLQIDKDSGNPKLLVNAQCTDEFYQGHSAHIAIEK
RSLQCVKLLVENGADVHLRACGRFFQKHQGTFCFYFGELPLSLAACTKQWDVVTYLLE
NPHQPASLEATDSLGN TVLHALVMIADNSPENSALVIHMYDGLLQMGARLCPTVQLE
EISNHQGLTPLKLAKEGKIEIFRHILQREFSGPYQPLSRKFTEWCYGPVRSVLYDLSSV
DSWEKNSVLEIIAFHCKSPNRHRMVVLEPLNKLQEKWDRLVSRFFNFACYLVYMFIF
FTVVAYHQPSLDQPAIPSSKATFGESMLLLGHILILLGGIYLLGQLWYFWRRRLFVWIS
FMDSYFEILFLLQALLTVLSQVLRFMETEWYLPVLLVSLVGLWLNLLYYTRGFQHTGIY
SVMIQKVLRLDLLRFLVYLVFLFGFAVALVLSREARSPKAPEDNNSTVTEQPTVGQE
EEPAPYRSILDASLELFKFTIGMGELAFQEQLRFRGVVLLLLLAYVLLTYVLLNMLIAL
MSETVNHVADNSWSIWKLQKAISVLEMENGYWWCRRKKHREGRLKVGTRGDGTP
DERWCFRVEEVNWAWEKTLPTLSEDPSPGITGNKKNPTSKPGKNSASEEDHLPLQ
VLQSP-----

>TRPV2_Ailuropoda_melanoleuca

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CLMKAVLNLRDGANACILPLLQIDRDSGNPQPLVNAQCTDEYYRGHSAHIAIEKRSQ
CVKLLVENGANVHARACGHFFQKKSQGTFCFYFGELPLSLAACTKQWDVVTYLLENPH
QPASLQAADSLGN TVLHALVMIADNSAENSALVIRMYDGLLRTGARLCPTVQLEDIPN
LQGLTPLKLAKEGKIEIFRHILQREFSGPCQSLSRKFTEWCYGPVRSVLYDLASVDSW
EENSVLEIIAFHCRSPHRHRMVVLEPLNKLQAKWDLIPKFFNFCLYTYMLLFTAV
AYHQPALEKPPFPKVTAGDSMLLLGHILILLGGVYLLVGLWYFWRRRLFVWISFVDS
YFELLFLAQALLMVLSQALCFLAVEWYLPVLLVSSLVGLWLNLLYYTRGLQHTGIYSVMI

QKVILRDLLRFLLVYLVFLFGFAVALVSLRSREARAPGVPTGPNVTEAVQPGAGQTDEEG
SAPPYGSILDASLELFKFTIGMGELAFQDQLRFRGVVLLLLLAYVLLTYILLNMLIALM
SETVNSVATDSWSIWKLQKAISVLEMENGYWWCRRKKQPAGVKLTIGTRPDGSPDER
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LKSQ-----

>TRPV2_Bos_taurus

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KTCLMKALLNLRDGANACIEPLLQIDRDSGNPHPLVNAQCMDEYYRGHSALHIAIEKR
SLVCVKLLVENGADVHARACGQFFQKRREETCFYFGELPLSLAACTQQWDVVITYLLK
NTHQPASLQATDSLGNLTVLHALVMIADNSPENSMLVTHMYDRLLQVGGGLQLEDMTN
LQGLTPLKLAAKEGKIEIFRHILQRELPEPYQSLSRKFTEWSYGPVRSVLYDLASVDSW
EENSVEIIAFHSRSPRHRMVVLEPLNKLKAKSNLLIPRFLNFCYLYMLIFTAVT
YYQPALEKDFLPLEVTAGNTMLLLGHVLLLLGGVNLLMGQLWYFWRRRLFVWISFMD
SYFEILFLVQALLTVLSQVLRFLAVKGYLPLLVCSLVLGWLNLLYYMRGFQYTGIVSVM
QKVILRDLLRFLGVYLVFLFGFAVALVSLRSREPQDTGAPAGSNTTEVAGKEDKEAPYRG
ILDTSLELFKFTIGMGELAFQDQLHFRGVVLLLLLAYVLLTYVLLNMLIALMSETVNS
VATDSWSIWKLQKAISVLEMEKGYWWCRRKQQRAGVKLTVGSRPDGSPDERWCFR
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>TRPV2_Callithrix_jaccus

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GKTCLMKAVLNLKDGVNACILPLLQIDQHSGNPQPLVSAQCKDDYYRGHSALHIAIEK
RSLQCVKLLVENGADVHARACGRFFQKQGTCTFYFGELPLSLAACTKQWDVVSYLLE
NPHQPASLQATDSQGNLTVLHALVMISDNSAENITLVTSMYDGLLQAGARLCPTVQLE
DIPNLQGLTPLKLAAKEGKIRIFSHILQREFSGPSQRLSRKFTEWCYGPVRSVLYDLASV
DSWEENSVEIIAFHCKSPHRHRMVVLEPLNKLKQEKWDLLIPRFFLNFLCNLIYMLIF
TTVAYHQPALKKQADSHLKAEVGNSMLLAGHIIILLGGLYILVGQLWYFWRRHLFVWI
WFIDSYFEILFLLQALLTVLSQVLCFLAIEWYLPLLVSAVLGWLNLLYYTRGFQHTGIY
SVMIQKVILRDLLRFLLVYLVFLFGFAVALVSLSQEAWRPEAPTGSNATESLQPVGQK
DKENTSPYGNILEASLELFKFTIGMGELAFEEQLHFRGMVLLLLLAYVLLTYILLNMLI
ALMNETVNSVATDSWSIWKLQKAISVLEMENGNWWYRKKQRRAGVMLTVGTKADD
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DHVSLQQLQSS-----

>TRPV2_Canis_familiaris

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SLQCVKLLVENGANVHAQACGQFFQKKSQGTCFYFGELPLSLAACTKQWDVVTYLLE
NPHQPASLQAADSLGNTALHALVMIADNSAENSALVIRMYDALLRAGARLCPKVQLE
DIPNLQGLTPLKLAKEGKIEIFRHILQREFSGPCQSLSRKFTEWCYGPVRSVLYDLASV
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FTAVAYHQPALGKAFLPPTVTTGDSMLLLGHILILLGGVYLLVGQLWYFWRRRLFIWI
SFVDSYFELLFLVQALLTVLSQGLCFLAVEWYLPLLSSLVLGWLNLLYYTRGLQHTGI
YSVMIQKVILRDLLRFLVYLVFLFGFAVALVSLSREARDSGVPTGPNVTEAAQSGAGQ
GDEEGSSSPYGGILDASLELFKFTIGMGELAFQDQLRFRGVVLLLLLAYVLLTYILLNM
LIALMSETVNSVASDSWSIWKLQKAISVLEMENGYWWCRRKKQRAGVKLTVGTRPD
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QLPLQLLKS-----

>TRPV2_Cricetulus_griseus

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MKAVLNLDQGVNACILPLLQIDKDSGNPQPLVNAQCTDEFYRGHSALHIAIEKRSLQC
VKLLVENGANVHIRACGRFFQKHPGTCFYFGELPLSLAACTKQWDVVTYLLENPHQP
ASLEATDSLGNLTVLHALVMIADNSPENSALVIHMYDGILQVGARLCPTVQLEDICNNQ
GLTPLKLAKEGKIEIFRHILQREFSGLYQPLSRKFTEWCYGPVRSVLYDLSSVDNWEM
NSVLEIIAFHCRSPHRHRMVVLEPLNKLQEKWQRLIPRFFNFACYLAYMLIFTIVAY
HQPSLEKPAVPSSKATFGESMLLLGHILILLGGIYLLLGQLWYFWRRRLFIWISFMSY
FEILFLVQALLTVLSQVLRFMETEWYLPLLSSLVLGWLNLLYYTRGFQHTGIYSVMIQ
KVILRDLLRFLVYLVFLFGFAVALVSLSREAQSPKAPADNNTTVTEQPMLGQEEEEAA
PYGGILDASLELFKFTIGMGELAFQEQLRFRGVVLLLLLAYVLLTYVLLLNMLIALMSET
VNSVATDSWSIWKLQKAISVLEMENGYWWCRRRKHRSRLLKVGTRWDGVPDERW
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>TRPV2_Dipodomys_ordii

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MKAMLNLQGVNACILPLLQIDRDSGNPQPLVNAQCTDEYYRGHSALHIAIEKRSLQCV
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SLQAADSLGNTALHALVMIADNSPENSALVIRMYDGLLQLGARLCPTVQLEDIHNLQG
LTPLKLAKEGKIEIFRHILQREFSGLCQPLSRKFTEWCYGPVRSVLYDLASVDSWEEN
SVLEIIAFHCRSPHRHRMVVLEPLNKLQAKWDLLIPRFFLNFLCYLVYMLIFTIVAYH
QPALDKQALSPMKATAGNSMLLFGHVLILLGGIYLLLGQTWYFWRRRLFIWISFMSY
FEILFLVQALLTVLSQVLCFVNNEWYLPLLSSLVLGWLNLLYYTRGFQHTGIYSVMIQ
KVILRDLLRFLVYLVFLFGFAVALVSLSREAQITGVPTGDNATEAAQLSAGQEKEETP
YRGILDASLELFKFTIGMGELAFQEQLRFRGVVLLLLLAYVLLTYVLLLNMLIALMSETV

NSVATDSWSIWKLQKAISVLEMENGYWWCRRKKQRAGVMLTVGTRPDGSPDQRWC
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QSH-----

>TRPV2_Tursiops_truncatus

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SLPCVKLLVENGADVHARACGQFFQKKSQETCFYFGEMPLSLAACTKQWDVVTYLLE
NPHQPASLQAADSLGNTALHALVMIADDAENSTEMVTRMYDGLLQAGARLCPTVRL
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RMVVLEPLNKLQVKWNLLIPRFLFNFLCYLTYMSIFTAVTYHQPALDKARQGGAH
GEASWKQSWYFWRRLFIWISFMDSYFEILLVQALLTVLSQVLCFLAIEWYLPLLVC
SLALGWLNLLYYTRGLQHTGIYSVMIQKVILRDLRFLLVYLVFLFGFAVALVSL
SQEARS PKAPQAQLRFRGVALLLLLTHVLLTYVLLLNMLVALMSETVSNVASDS
WSIWKLQKAI SVLEMENGYWWCRRKKQRAGVRLTVGTRPDGLPDERWCFRVEE
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>TRPV2_Spermophilus_tridecemlineatus

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KTC LMKAVLNLDQGVNACILPLLQIDRDSGNPQPLVNAQCTDEYYRGHSALHIAIEKR
SLQ CVKLLVENGADVHARACGHFFQKRQGTCTFYFGELPLSLAACTKQWDVV
TYLLENPHQ RASLQAADSLGNTALHALVMIADNSKENSALVIHMYDDLLQAGAR
LCPTVQLEDICNL EGLTPLKLAKEGKIEIFRHILQREFSGLCQPLSRKFTWCYGP
VRVSLYDLASVDSWE ENSVLEIIAFHCKSPHRHRMVVLEPLNKLQAKWDM
LIPRFFNFLSYLIYMLVFTAV AYHQPAALEKQAFPLKATGGNSMLLLGHILIL
LGGIYLLGGQLWYFWRRLFIWISFVD SYFEILFLLQALLTVLSQVLCFMAI
EWYLPLLVSSLVLGWLNLLYYTRGFQHTGIYSVMI QKVILRDLRFLLVYLV
FLFGFAVALVSLREARDSGTPAGNNATEVAQPGEQENEA TPYRGILDASLE
LFKFTIGMGELAFQEQLRFRGVVLLLLLAYVLLTYVLLLNMLIALMSE TV
NNVATDSWSIWKLQKAICVLEMENGYWWCRRKKQRAGVLLKVGTRPDGTP
DER WCFRVEEVN WASWEQTLSTVREEPSSEGNAPGSMKNPILASQPGEDH
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>TRPV2_Equus_caballus

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GSTGKTCLMKAVLNLRDGANACILPLLQIDKDSGNPRPLVNAQCSDEYYRGHS
ALHIAIEKRSLQCVKLLVENGADVHARACGHFFQKKSQGTCTFYFGELPLSL
AACTKQWDVVTYLL

ENPHQPANLQAADSLGNTALHALVMIADNSEENSALVIWMYDGLLRAGARLCPAVQL
EDIPNLQGLTPLKLAAKEGKIEIFRHILQREFSGPCQPLSRKFTEWCYGPVRSVLYDLAS
VDSWEENSVLEIIAFHCRSPHRHRMVVLEPLNKLQAKWDLIPRFFNFVFCYLIYMFIF
TAVAYHQPALEKQAFSPMKVTAGNSMLLLGHILILLGGVYLLVGQLWYFWRRLFIWI
SFMDSYFEILLVQALLTVLSQVLCFLAVEWYLPVSSLVLGWLNLLYYTRGLQHTGIY
SVMIQKVLRLDLLRFLLVFLVFLGFAVALVSLVSLREAWVPQVPTGPNVTEAVQSGAGQ
HDEEGSTAPYRGILDASLELFKFTIGMGELAFQDQLRFRGVVLLLLLAYVLLTYILLLN
MLIALMSETVNSVATDSWSIWKLQKAISVLEMEKGYWWCRRKKQRAGVLLTVGTRP
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GDQLPLQLLESH-----

>TRPV2_Homo_sapiens

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SLQCVKLLVENGANVHARACGRFFQKGQGTCTFYFGEPLSLAACTKQWDVVSYLEN
PHQPASLQATDSQGNLTVLHALVMISDNSENALVTSMYDGLLQAGARLCPVQLEDI
RNLQDLTPLKLAAKEGKIEIFRHILQREFSGLSHLSRKFTEWCYGPVRSVLYDLASVDS
CEENSVLEIIAFHCKSPHRHRMVVLEPLNKLQAKWDLIPKFFLNFLCNLIYMFIFTA
VAYHQPTLKKQAAPHLKAEVGNMMLTGHILILLGGIYLLVGQLWYFWRRHVFIWISFI
DSYFEILFLFQALLTVVSQVLCFLAIEWYLPVLSALVLGWLNLLYYTRGFQHTGIYSV
MIQKVLRLDLLRFLLIYLVFLGFAVALVSLVSLQEAWRPEAPTGPNATESVQPMEGQEDE
GNGAQYRGILEASLELFKFTIGMGELAFQEQLHFRGMVLLLLLAYVLLTYILLNMLIAL
MSETVNSVATDSWSIWKLQKAISVLEMENGYWWCRRKKQRAGVMLTVGTPDGSPD
ERWCFRVEEVNWAWEQTLPTLCEPDSGAGVPRLENPVLASPPKEDEDGASEENYV
PVQLLQSN-----

>TRPV2_Ictidomys_tridecemlineatus

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AYHQPALEKQAFPLKATGGNSMLLLGHILILLGGIYLLVGQLWYFWRRLFIWISFVD
SYFEILFLLQALLTVLSQVLCFMAIEWYLPVSSLVLGWLNLLYYTRGFQHTGIYSVMI
QKVLRLDLLRFLLVFLVFLGFAVALVSLVSLREARSDGTPAGNNATEVAQPGTEQENEA
TPYRGILDASLELFKFTIGMGELAFQEQLRFRGVVLLLLLAYVLLTYVLLNMLIALMSE
TVNNVATDSWSIWKLQKAICVLEMENGYWWCRRKKQRAGVLLKVGTRPDGTPDER
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VLQSH-----

>TRPV2_Echinops_telfairi_fragment

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KTCLMKALLNLQDGTNACILPLLRIDKDSGNPWALVNAQCTDDYYRGHSALHIAIEKR
SLPCVKLLVENGADV HARACGHFFQKKSQGACFYFGELPLSLAACIKQWDVVVTYLLEN
PHQPASLQATDSLGN TVLHALVMIADNSAENSALVIRMYDALLRTSTRLCPTVRLEDI
PNRQGLTPLSWSAKEGKIELNKLLQPKWELLTPKFYINLLSYLVYMIIFTAVAYHQPAL
EKVRPGWHPLKPTAGNSMLLLGHILILLGGLYLLFGQLWYFWRRRFIWFISFMDSYFEV
LLLQALLTVLSQVLCCLAIEWYLPLLVSSLV LGWLNLLYYTRGFQHTGIYSIMIQQKAI
SVLEMENGYWWYRQKKQRAGVMLKVGTQLD GSPDERWCFWVVEEVNWDSEWKTLP
TVCEEPAGA QVLGTTKNPTRSSQHEEDHASEEDHLPLQLQ-----

>TRPV2_Loxodonta_africana

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LIYRKGSGACQPDRDRDRDLFN VVS RGAMEELAGLPEYLSWTSKYLTDSEYTEGST
GKTCLMKAMNLQEGTNACILPLLQIDRDSGNPRPLVNAQCTDEYYRGHSALHIAIEK
RSLPCVKLLVENGADV HARACGHFFQKQSQGACFYFGELPLSLAACTKQWDVVVTYLL
ENPHQPASLQAADSLGN TVLHALVMIADNSAENSALVIRMYDALLRAGARLCPSVNLE
DIPNLQGLTPLKLAAKEGKIEIFRHILQREFEGQCQPLSRKFTEWSYGPVRSVSLYDLASV
DSWEENS VLEIIAFHCRSPHRHRMVVLEPLNKLLQRKWELLAPKFYFNFLCYLVYMI
FTTVAYHQPALEKQAFPPLKATAGNSVLLLGHVLILLGGLYLLLGLWYFWRRRLFIV
LSFMDSYFEILYLFQALLTVLSQVLCCLAIEWYLPLLVSSLV LGWLNLLYYTRGFQHTG
MYSVMIQKVILRDLLRFLLVYFVFLFGFAVALVSLRETQGPKAHTGLNATEAAHDGA
APYGGILDASLELFKFTIGMGE LAFQEQLRFRGVVLLLLLAYVLLTYILLNMLIALMSE
TVNSVATDSWSIWKLQKAISVLEMEGGYWWCRPKKQRVGVMLTVGTRPDGSPDER
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PLGPH-----

>TRPV2_Sus_scrofa

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GKTCLMKAVLNLRDGANACIQPLLQIDRDSGNPQPLVNAQCTDAYYRGHSALHIAIEK
RSLPCVKLLVENGADV HARACGQFFQKKSQDPCFYFGELPLSLAVCTKQWDVVVTYLLE
NPHQSASPQAADSLGN TALHALVAIADNSVKNTLVTLMYDKLLQAVARLYPTVRLE
DIPNLQGLTPLQLAAKEGKIEIFRHILQREFPGPCQSLSRKFTEWSYGPVRSVSLYDLASV
DSWEENS VLEIIAFHCRSSDRHRMVVLEPLNKLLQEKWNLLTPRFLINFLCYLIYVSVL
TATYHQPALEKCLSKQDLLTLGNSTLLLGHILILLTGAYLLMGQLWYFWRRRLFIVTS

FVDSYFEILFLVQALLAVLSQVLCFLAVKWYLP LLVSSLVLGWLNL LYYTRGLQHTGIY
SVMIQKVILRDLLRFLLVFLVFLFGFAVALVSL SREAQALGAPLGSNATEAAGEGDKEG
SEALYKILDASLELFKFTIGMGELAFQEQLRFRGVVLVLL LAYVLLTYVLLLNMLIAL
MSETVNSVAHDSWSIWKLQKAICVLEMEKGYWWCRRKKQRAGVKLTVGTRPDGSP
DERWCFRVEEVNWA AWEQTLPTVCEEPSGPPGSSGDTNEPLASQPSQDSVTEEDNV
PLQPLESR-----

>TRPV2_Monodelphis_domestica

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STGKTCLMKAVLNLKDG MNGCILPLLQIDHATRNPQPLINAVCIG EYYKGHSALHIAIE
KRSLQCVKVLVENGADLHAKASGSFFGKENRGVCFYFGELPLSLAACTRQWDIVSYLL
ENPDPDRRACIEAVDTWGNTVLHALVMIADDSVENSAQVNSMYDYILQIGARLWPSL
KLENLTNLQGLTPLKLA AKEGKIQVFKHILQREISGEYRHLSRKFT EWTYGPVQVSLYD
LSSVDSCEDNSVLEIIAFGCKAPNRHKMVTLEPLNKLLQEKWESLAARFRFN LISYFLY
MLIFTAVTYHQPV LGKNFIPLKATVGNM LLMGHIFILFGGVYLFFGQLQYFWRRRLF I
WTSFIDSYFEILILIQALFSVLAQVLCFLELSWYLPFLV FSLVLGWINVLYYTRGFQQTGI
YSVMIQKVILRDLLRFLLVYFVFLFGFAIALVSLTREGPLPAVFNQTAAA AVAEEEEAK
VPYSGFVEASLELFKFTIGMGELEFHKELQFKGFVMFLL LAYVLLTYILLNMLIALMSE
TVNSVATDSWSIWKLQRAISVLEMERGYWWCKRKKERSGILLTVGTTLDQK PDERW
CFRVEEVNWATWEKELQTLKEEPEGTSEP GKGP TGESAPRPTTSLE-----

>TRPV2_Normascus_leucogenys

MTSPSSSSVFRLETLDGGQEDGSEVDSRKPDFGSGLP PMESLFQGEDRKFAPQIKVNL
NYQKGTGVSQPDPNRFDRDLFNAVSRGVPEDLAGLPEYLSKTSKYLTDSEYTEGSTA
KTCLMKAVLNLKDG V NACILPLLQIDRDSGNPQPLVNAQCTDDYYRGHSALHIAIEKR
SLQCVKLLVENGANVHARACGRFFQKGQGTCFYFGELPLSLAACTKQWDVVS YLLEN
PHQPASLQATDSQGN TVLHALVMISDNSAENVALV TSMYDGLLQAGARLCPTVQLEDI
RNLQDLTPLKLA AKEGKIEIFRHILQREFSGLSHLSRKFT EWWCYGPVRVSLYDLASVDS
CEENSVLEIIAFHCKSPHRHRMVVLEPLNKLLQAKW D LLIPRFFLNFLCNLIYMFIFTA
VAYNQPTPKKQAAPHLKAEVGNM LLAGHIFILLGGIYLLMSQLWYFWRRHLFIWISF
IDSYFEILFLFQALLTVVSQVLFFLAIEWYLP LLVSALVLGWLNL LYYTRGFQHTGIYSV
MIQKVILRDLLRFLLIYLVFLFGFAVALVSLSQEAWRPEAPTGP NATELVQPAEGQEDE
GNGVQYRGILEACLELFKFTIGMGELAFQEQLHFRGMV LLLL LAYVLLTYILLNMLIA
LMSETVNSVATDSWSIWKLQKAISVLEMENGYWWCRKKQRAGVMLTVGTKPDGSP
DERWCFRVEEVN WASWEQTLPTLCEDPGAVVPRTLENPVLASPPKEDEDGASEEN
DVPSKLLQSN-----

>TRPV2_Ornithorhynchus_anatinus

MPEPARPTVFMLETTDSSPEERANASARPEGKGRKNELPPMESAFQKENSDFTPSIRV
NVNYHPSSPPPGLPILNQDPNRFDRDLFGAVARGDPEELEGLKEYLQRTGKFLTN
SEYKVGSEGRAWNMNMVSSLVEGVFLMPTEYVLEESHVTVIIIITLGSASPFVSLGHSAL
HIAIEKRSLTWVKVLVENGANVHAKADGQFFQKSKGICFYFGELPLSLAACTKQWDVV
EFLLENPHQPARLEEGDSQGN TVLHALVMIADNSKENTSLVSAMYDDILRAGARICPS
MKLEDIPNNQGLTPLKLAAKEGKIEIFKHILQREMSGEYQHLSRRFTEWSYGPVQAAL
YDLSSVDSSSEDNSVLDIIVFGCRAPNRHKMVVLEPLNKLLQEKWESLAIRFYFNFACYV
IYMMIFTAVAYHQPVLGKTFPLKATAGNSMLLMGHILILFGGFYLLFFGQLRYFWKRH
RFLWITFVDSYFEILILVQSLTTVVAQVLCFMELEWYLPVLVFSLVVGVVNTLYYTRGF
EPTGIYSVMIQKVILRDLLRFLLIYFVFLFGFAVALVSLTREALPLPPLNTSLTHPEVGGG
NDDDGTKSYSSMFAASLELFKFTIGMGELEFQEHLRFKGFVMFLLL VYVLLTYILLNM
LIALMSETVNSVSTDSKSIWKLQRAIAVLEMEMGYWWCRRKKKRSRGTFLT VGVTPDQ
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DSTPEEDQPLRP-----

>TRPV2_Oryctolagus_cuniculus

MTSPSSPPAFRLETS DGGQDGA EVDKAQLGYGAGPPPMESRFQDED RNFPPQIKVNL
NYRKGAGASQPDLNRFDRDLFNVVARGNPEDLAGLLEYLRRTSKYLT DSEYTEGSTG
KTCLMKAVLNLQDGVNACIQP LLEIDRDSGNPQPLVNAQCTDEYYRGHSALHIAIEKR
SLQCVKLLVENGANVHAKACGHFFQKNQDTCFYFGELPLSLAACTKQWDVVNYLLEN
PHQPASLQAQDSLGN TVLHALVMIADDSAENSALVVRMYDGLLQAGARLCPNVQLEG
IPNLEGLTPLKLAAKEGKIEIFKHILQREFSAPCQSLSRKFTEWCYGPVRSYLDLASVD
SWEENSVLEIIAFHSRSPHRHRMVVLEPLNKLLQAKWDR LIPRFCFNFLCYLVYMLIFT
AVAYHQPALEKQGFPPLKATAGNSMLLLGHILILLGGVYLLLGQLWYFWRRLFIWIS
FMDSYFEILFLLQALLTVLSQVLCFLAIEWYLP LLVSSLVLGWLNNLLYYTRGFQHTGIYS
VMIQKVILRDLLRFLLVYLVFLFGFAVALVSLSREAQNSRTPAGPNATEVGGQPGAGQED
EAPPYRSILDASLELFKFTIGMGELAFQEQLRFRGVVLLLLL LAYVLLTYVLLLNMLIALM
SETVNSVATDSWSIWKLQKAISVLEMENGYWWCRRKKQRAGVMLTVGTRPDGSPDE
RWCFRVGMNWATWEQTL PRTLCEEPSGAAAPGVMKNPTPASQRGEDSASEEDHL
PLQLLSR-----

>TRPV2_Sarcophilus_harrisii

MPEPAQGPAFRLETTEGDQGGGSAAAAAGERGSRDQLPPMESEFQKESTDFSPQIKV
NLNYRKGMGPSPTDPNRFDRDLFNAVVGGNPESLDGLLGYLLLTSKYLT DSEFTDAS
TGKTCLMKAVLNLREGMNACILPLLQIDLATRN PQPLINAVCTGDYYKGHSAHIAIEK
RSLECVKVLVENGADLHARARGSFFGKERQGICFYFGEW TGLSLD TTGQSWGWMVPY
FLNKG NPSNGHPKEAIDVLCFSVNFYELFQSTLFPRESLVIKKREKSVQLLFQPCDWR
PLRSM AVVPWRVTDPHSWPEVFKHILQREISGEYRHLSRK FTEW TYGPVQVSLYDLS
SVDSCEDNSVLEIIAFGCKAPNRHKMVTLEPLNKLLQEKWESLVTRFRFN LISYFLYMV
IFTIVTYHQPV LGKNFIPMKATVGN SMLLMGHIFILFGGVYLLFFGQLQYFWRRLFIWT
SFIDSYFEILILS QALTSVVAQVLCFLELSVYLPVLVFSLV LGWINLLYARGFQQTGIYSV
MIQKVILRDLLRFLLVYFVFLFGFAIALVSLSREAPLPTFSNQSLAGADKPPYGGLEAS
LELFKFTIGMGELEFHKELQFE GFIMFLLLAYVLLTYILLNMLIALMSETVNSVATDS

WSIWKLQRAISVLEMERGYWWCKRKKERSGILLTVGTTDPKKPDERWCFRVEEVNW
ATWEKELQTLKEEPESTLEMGKTLPVLLRDGKGIRAQEQHPPPHLKTLLTH-----

>TRPV2_Pan_troglodites

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NYRKGTGASQDPNRFDRDLFNAVSRGVPEDLAGLPEYLSKTSKYLTDSEYTEGSTG
KTCLMKAVLNLKDGVNACILPLLQIDRDSGNPQPLVNAQCTDDYYRGHSALHIAIEKR
SLQCVKLLVENGANVHARACGRFFQKGQGTCTFYFGELPLSLAACTKQWDVVSYLEN
PHQPASLQATDSQGNLTVLHALVMISDNSEAENIALVTSMYDGLLQAGARLCPTVQLEDI
CNLQDLTPLKLAKEGKIEIFRHILQREFSGLSHLSRKFTIEWCYGPVRSVLYDLASVDS
CEENSVLEIIAFHCKSPHRHRMVVLEPLNKLQAKWDLIPKFFLNFLCNLIYMFIFTA
VAYHQPTLKKQAAPHLKAEVGNMMLLTGHILILLGGIYLLVGQLWYFWRRHVFIWISFI
DSYFEILFLFQALLTVVSQVLCFLAIEWYLLVLSALVLGWLNLNLLYYTRGFQHTGIYSV
MIQKVILRDLLRFLLIYLVFLFGFAVALVLSQEAWRPEAPTGNATESVQPLEGQEDE
GNGAQYRGILDASLELSKITIGRGELDFQEQLHFRGMVLLLLLAYVLLTYILLNMLIAL
MSETVNSVATDSWSIWKLQKAISVLEMENGYWWCRKKQRAGVMLTVGTPDGSPD
ERWCFRVEEVNWASWEQTLPTLCEDPGAGVPRTLENPVLASPPKEDEDGASEENYV
PVQLLQSS-----

>TRPV2_Pongo_abelii

MTSPSSSPVFRLETLDGGQEDGSEADRGKLDGSGLPPMESQFQGEDRKFAPQITVNL
NYRKGAGASQDPNRFDRDLFNAVSRGVPEDLAGLPEYLSKTSKYLTDSEYTEGSTG
KTCLMKAVLNLKDGVNACILPLLQIDRDSGNPQPLVNAQCTDDYYRGHSALHIAIEKR
NLQCVKLLVENGANVHARACGRFFQKGQGTCTFYFGELPLSLAACTKQWDVVSYLEN
PHQPASLQATDSQGNLTVLHALVMISDNSEAENIALVTSMYDGLLQAGARLCPTVQLEDI
RNLQDLTPLKLAKEGKIEIFRHILQREFSGLSHLSRKFTIEWCYGPVRSVLYDLASVDS
CEENSVLEIIAFHCKSPHRHRMVILEPLNKLQAKWDLIPKFFLNFLCNLIYMFIFTAV
AYHQPTLKKQAAPHLKAEVGNMMLLTGHILILLGGIYLLVGQLWYFWRRHVFIWISFI
DSYFEILFLFQALLTVVSQVLCFLAIEWYLLVLSALVLGWLNLNLLYYTRGFQHTGIYSV
MIQKVILRDLLRFLLIYLVFLFGFAVALVLSQEAWRPEAPTGNATESVQVEGQEDE
GNGAQYRGILEASLELFKFTIGMGELAFQEQLHFRGMVLLLLLAYVLLTYILLNMLIAL
MSETVNSVATDSWSIWKLQKAISVLEMENGYWWCRKKQRAGVMLTVGTPDGSPD
ERWCFRVEEVNWASWEQTLPTLCEDPGAGVPRTLENPVRASPPKEDEDGASEENY
VPLQLLQSN-----

>TRPV2_Otolemur_garnettii

MTSPSSPPVFRLETSDGDREDGAEVDKKGKPGFGSGPPMESPFQGEDRNFPHQIKVNL
NYRKKAGASQDPNRFDRDLFSVVSARGVAEDLAGLREYLRRTSKYLTDSEYTEGSTG
KTCLMKAVLNLQDGVNACILPLLQIDRDSGNPRPLVNAQCTDEYYQGHSAHIAIEKR
SLQCVKLLVENGADVHARACGQFFQKGQGTCTFYFGELPLSLAACTKQWDVVSYLDDN

EHQRASLQATDSLGN TVLHALVMIADNSKENS DLVTHMYDKLLKAAADTDHTVQLE
DIRNLQGLTPLKLA AKEGKIEIFRHILQREFPGPYQALS RKFTWCYGPVRSVLYDLAS
VDSWEENS VLEIIAFHCRSPHRHRMVVLEPLNKLLQEKWDLLIPRFFNF LCYLTYML
VFTAVAYHQ PALNKALLPLKATAGNSMLLLGHILLLGGICLLL GQLWYFWRRLFIWI
SFMDSYFEILFLVQALLTVLSQVLCFLAISWYLPLL VSSLVLGWLNL LYYTRGFQHTGM
YSVMIQKVILRDLLRFLLVYL VFLFGFAVALVSL SREALDPRPTVGP RPTVGPNTTEAA
GQPGAGQEDEEGVEVPYRGILDASLELFKFTIGM GELAFQEQLRFRGVV LLLLLL LAYVLL
TYVLLLNMLIALMSETVNRVTNDSWSIWKLQKAISVLEMENGYWWCRRRKQRAGVR
LTVGTRPDGSPDERWCFRVEEVNWA AWEQTLRTVCEEPSGTGAPGTTKDLTLASRP
QEAGALEEDH LPLQLLQSH-----

>TRPV2_Mus_musculus

MTSASNPPAFRLETS DGDEEGSAEVNKGKNEPPPMESPFQGEDRNFSPQIKVNLNYR
KGLGPSQQDPNRFDRDRLFSVVS RGVPEELTGLLEYLRRTSKYLTD SAYTEGSTGKTCL
MKAVLNLQDGVNACILPLLQIDRDSGNPQPLVNAQCTDEFYRGHSALHIAIEKRSLWC
VKLLVENGANVHIRACGRFFQKHQGT CFYFGELPLSLAACTKQWDVV TYLLENPHQP
ASLEATDSLGN TVLHALVMIADNSPENSA LVIHMYDSLLQMGARLCPTVQLEDICNHQ
GLTPLKLA AKEGKIEIFRHILQREFSGLYQPLSRKFTEWCYGPVRSVLYDLSSVDSWEK
NSVLEIIAFHCKSPHRHRMVVLEPLNKLLQEKWDRLIPRFFNFACYL VYMIIFTIVAY
HQPSLEQPAIPSSKATFGDSMLLLGHILLLGGIYLLL GQLWYFWRRLFIWISFMDSYF
EILFLVQALLTVLSQVLRVETEWYLP LLVSSLVLGWLNL LYYTRGFQHTGIYSVMIQK
VILRDLLRFLLVYL VFLFGFAVALVSL SREARSPKAPEDSNTTVTEKPTLGQEEEPVYQ
GILDASLELFKFTIGM GELAFQEQLRFRGVV LLLLLL LAYVLLTYVLLNMLIALMSETVNS
VATDSWSIWKLQKAISVLEMENGYWWCRRKRHRAGRLLKVGTKGDGIPDERWCFRV
EEVNWAAWEKTLPTLSEDPGAGITGYKKNPTSKPGKNSASEEDH LPLQLVLSH-----

>TRPV2_Oryzias_latipes_fragment

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GDVQKLEGLDYLR LNMKNLSDSLCKYQSYGKTPLIKALMHLKDGK NKTVEIFINTAK
NIGDLEKFNAAHTSNYYKGQTALHVAIERRSLPYVQLLVN SHADVHAKVSGKFFQPH
DGPCFYFGELPLSLAACTNQPEMVDYLLKNEIQRADPEQRDSHGNTV LHALVAVADN
SKENTEFINSMYDRILKITAKLHPKKKLEDIKNNKGLSPLLMAAKTGKIGVFSHILKRE
FHESDIKHL SRKFTEWVYGPVHC SLYDLASV DSCENNSLLEILYIGSDIPNRHEMLQTE
PLSQMLQAKWKKFAGGMFLINFLVYSLYLTIFTFVAHYIRGTA EYREFPFPLKSYDDYL
FATGLLLTLLANLFLFIAGITDMWRKRPNM MTVLIDGYEILFCVQGLFYLCFAVLYVA
GLKEYVCFVLVCLALS WVNVL YFSRGYQHMG IYSVMIQKII VCDILRFLFVYVFLFGFS
AAVVTLLIVPPEKPRNATKGRSFFTQAPGEDCFIPTYKNFSFTVLELFKFTIGMDME
FSQAFQYTEIFYFL LIGYIILTYILLNMLIALMNRVTENITKESTCIWKLQRAVTILDME
KRLPYCLRKRLRCGVEKKLCTALGNDQRWCFRVEEVNWNKWNTDIGKIDEDP-----

>TRPV2_Salmo_salar

MSKSKGPEYPSFSLETDDRTDDERAQSRQVKKPDRLVSALGLGSSGGPKTPMDSYQ
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LHQSMKKLSNTEYQSYGKNVLLKALLNLRKGRNNTIEYLLDISEKMGDIKEFVNAAYT
DSYYKGQTALHIAIERRSIYFVELLIKKGANVHAKACGKFFQAHDGPSFYFGELPLSLAA
CTNQPEVVDFFLENDYQRVDVRESDSLGNMVLHALVVLADNTPENTDFITSMYDHIL
TTTARLHPEWRLEDIENNQGLTTIKLAAKTGKIGLFGKHMHHREFQERETRHLRSRFT
EWWYGPVHSSLYDLASLDSYEKNSVMEIIVYSSDIPNRHEMLQIEPLNRLLEEKWDF
AARMFFLNFLVYLVYLSVFTAVAYNRKKGTPPFTLEHTRQEYLRLAGQLFITVGACYFF
IRGILDLKRKRPSLDTLLIDGYSEILFFLQAIFFLASLVLYCCGREEYLGFLVLCALSWV
NLLYFSRGRHMGIIYSVMIQMILSDILRFLVYVTFVFLGFSAAVVTLLMEPELPASNT
AQPINSTDGKGRFTLPTEDSCIKPTFRNISHTIMELFKFTIGMGDLEFTEGYQYKEVFY
MLLSYIVLTYILLNMLIALMSRTVEKMSLESTSIWKLQRAITILDRLSLPRCLRRRLR
SGVDKDLGTRAGEKDRRWCFRVEEVNWNKWNNTNLGIINEDPGSGDTARLSPSHSSR
TLGKERSWRGFLGNVSRQHTQPQHQQVESTEMSSLSPLSHV-----

>TRPV2_Gasterosteus_aculeatus

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KPQIRFNLNFDKGIRGEQRNKKDSSTFTIDRLF EAAASGDVKGLENLHQYLRQNTKKL
SDSLYRSYGKTALMKALLHLRNGKNETVELLIDISEKMGDIKEFVNAAYTNYYKQGT
ALHVAIERRNISYVKLLVSKGADVHAKAWGLFFQPHDGNFYFGELPLSLAACTNQPA
VVDFLMENEYQRADAKMTDSHGNTVLHALVTVAASSKDQDKDNTEFITKMYDRILK
TSAKLHPNLKLEGIENNKGLTPLKMAAKTGKIGLFTHILKREFHESHTKHLRSRKFTEW
VYGPVQSSLYDLASVDSYEDCSVVEILVYGS DIPNRHAMLQMEPLSQLLEEKWNKFAG
RMFFLNFLVYLVYLSIFTLVAYNKKVGQLPYPIEHTTKGYLYVSGQVVTAVANCYFFFI
GILDMKRKRPKLQTLIDGYEFLFFVQGVFLITAVLYLCGKKQYLSFLVLCALSWV
NMLYFSRGRHMGIIYSIMIQMILSDILRFLVYIVFLGFSAAVVTLLIEPEVKNSTLSQ
PSKGRIFGPLDPGEECVKPSFTSISYTTLQLFKFTIGMGDMEFTQEHEENTE VFYLLLIGY
IILTYILLNMLIALMNRTEKTTEESTSIWKLQRAITILEMEKRLSCCLRRRFRGVEK
NLRTALGDDRRRCFRVEEVNWNKWNINLGKINEDP-----

>TRPV2_Xenopus_tropicalis

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LTNTEFKDPDTGKTCLLKAMWNLKDG MNDTIPILLEAAEKGGYLKELVDAAYTNDYY
RGQTALHIAIEKRNMLHVQLLIKSGADLRAMAEGDFFQKKKKGISFYFGELPLSLAACT
NQLNIVNYLLDKKADLAARDSHGNTVLHALV FVSDNTEENTEIVTKMYDEILKKS VKT
DPTLKIEEITNWEGLTPLKLA AKTGKIELFKHILRREVTEPEYKHLRSRKFTEW TYGPV
HTSLYDLSSVDTHEADSVLETIVFKSNASNRHNMVVLEPINTLLEEKWENFAGKIFYIK
FLLYILYMIIFTVTAYHRPLQGQP PPLEGTAKGNLRVIGEIMMFGAIYILICQIYFWKR
RPSLQILMMDGYFEILFFLQALILLCSGATYLAGSEVYVALMVFSLVIGWVDMLYYTRG
FQQTGIYSVMIQKTILRDMTLNGEAPQEAANGTEQSESGSSYGGLYITSLELKFFTIGMG

DLEFNENLKFKHFFMFNMLIALMWKLQRAATILDIERFIPRFIRKCLKIGQWLTVGKS
PDGNPDKRWCFRVEEMVWGSWEKDLANINEEPGDTEKGLSSSKKTPGKGNLEHKY
FLTIMFFLNSY-----

>TRPV2_Danio_rerio

MSKSMDSVSSFSLETDDQTEEERTKAKQMKKVSKDKRPMDSNYVDDVVEPSSTIKF
NLHFDRGIRNLKEEPAQQDNDRFITIKRLFEAVSSGDVSKMQGLHEYLHKNMKRLTDS
QYKSNGKTALLKALLNLRQGENDTIEQLLDIAEKMGDLKNFINAAAYTDSYKQGTALH
VAIERRSMKFVQMLVKKGADVHAKACGKFFQPNQKMCIFYGELPLSLAACTNQDIV
DFLMENPHQAVDVRERDCHGNTVLHALVSVADNSPENEFVIAMYDHILIKADQLHP
KTKLEEIENNEGLTPITLAACKGKLGFLFKHIVQRELMGCRHLSRKITEWAYGPVCSLY
DLSSLDTYEKNSALEIVVYGSEIPNRLEMLQIEPLNRLIEEKWDQFAHRMFLFNFIVYVI
YLFIFTASAFYHEEGKDYANQTKPPYLYAKSREGYLLTGHIISITGAFYFFIRGLDMVR
KRPRFQSLIIDGYTDQLFFVQGLLFLASVVLYCYGQYEYLAFLVLCLALSWINLLYFSRG
SKNLGIYNVMIQKMLVGEIRRFLVVYMVFLIGFSAALVTLDDQESIDSGSTRDFRLESDI
PSLNPTPDSSNPQSRMTHHQPTTARDGRGRFGLTTDNQYEVCKKPSYKNIYFTTLELF
KFTIGMGDLEFTDHYKYKEVFYVLLIVYIVMTYILMLNMLIALMNQSVEMMSVESTSI
WKLQRAITTLDMEWILPKCLQGKLRSGEEKDLGGGQEPDRRWCFVVEEVNWTQWN
RNMGIINEDPGKCTQDPSPANVQREPSRGVLQTFSSRRRTQRAQTREGHELSPLEA
SSSV-----

>TRPV2_Gallus_gallus

MDNFTNDQSGPCQRNRLVGLLETDDSIQEDKPTSSTKEERSGQYGGKGEPRPLESPYQ
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KFLTNSYTDKGTCLMKALLNLKNGRNDTIPVLEIDQKTQNPRLVNVACSDCY
YRGQTALHIAIEKRSLDLVKVLVEHGADVHARAHGFEFFRKKKEGVCFYFGELPLSLAA
CTNQFEVVEYLLNPHQKARLQEQDTQGNTVLHALVMIADDTEENTKVFSTVYVEIL
KAGVKTDPVTKLEEIVNYDGLNPLQLAAKTGKVEIFRHIIQREIKDPVYRHLRKFTEW
TYGPIHVSLEYDLSSLDSEENSVLEILAYSSDTPNRYKMVVLEPLNKLQKQWETFASK
RFYFSFISYLSFMIIFTAIAYYQPLRVKPSFPVEFTAGGFLWVSGLIILLGGVYLIFAQSLY
LRRRRQSLKTMCSDCVEILIFIQAFSLLSAVLYGASSENIVAVMVFSLLLGWVNMPLY
YTRGFQRIGIYSVMIQKTILRDLLRFLVYIIFLFGFAAALVTLMGDAPSLSQNKVAQM
ENAGSHAMYGGLLSVCLELFKITIGMGDLDFHEHARFRYFVMLLLLLFVILTYILLNM
LIALMSETVTDISGYSKSVWKLQRAIAIEIAKAWLWRQGGKRRSGCLMSVGLNKKDE
RWCFRVEEIKWTSWAKEVGVLKEEPPGNTNDLEINPEETRSRKQVPQKQLRSVSEEQ
SLLQPELSATEMMPLKGQTRNL-----

>TRPV2_Meleagris_gallopavo

MDNFTNDQSGPCQRNRLVGLLETDDSIQEDKPASSSTKEERSGQYGGKGEPRPLESPYQ
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KFLTNSYTDKGTCLMKALLNLKNGRNDTIPVLEIDQKTQNPRLVNVACSDCY

YRQQTALHIAIEKRSLDIVKVLVENGADVHARAHGEFFRKKNEGVCIFYFGELPLSLAAC
TNQFEVVEYLLNPHQKARLQEQDTQGNTVLHALVMIADDTEENTKFVSTVYVEILK
AGVKTDPTVKLEEIVNYDGLNPLQLAAKTGKVEIFKHIIQREIKDPVYRHLRSRKFTWWT
YGPIHVSLYDLSSLDSEENSVEILAYSSDTPNRYKMVVLEPLNKLLQKQWETFASKR
FYFSFISYLSFMIIFTAIYYQPLRVKPSFPVEFTAGGFLWVSGLIILLGGVYLIFAQSLYL
RRRRQSLKTMCSDESCVEILIFIQAFSLLLSAVLYGASSENIVAVMVFSLLLGWVNMPLY
TRGFQRIGIYSVMIQKTILRDLLRFLLVYIIFLFGFAAALVTLMGDAPSLSQNKSVQAQME
SAGSHAMYGGLLSVSLELFKITIGMGDLDFHEHARFRYFVMLLLLLFVILTYILLNMLI
ALMSETVTDISGYSRSVWKLQRAIAILEIEKAWLWRQGGKRRSGCLMSVGLNKKDER
WCFRVEEIKWTSWAKEVGVLKEEPGNTSDLEINPEASC-----

>TRPV2_Taeniopygia_guttata_fragment

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TIPVLEIDQKTQNPRLVNVSCSDCFYRGEGLIFRHIIQREIKDYRHLRSRKFTWWTY
PIHVSLYDLSSLDSEENSVEILAYSSDTPRYKMVVLEPLNKLLQKQWETFASKFYFSF
VSYLSFMIIFTAIYYQPQAFSLLLSAVLYGASSENIVAVMVFSLLLGWVNTLYYTRGFQ
RTGIYSVMIQKIMRDLLRFLLVYMIFLFGFAESSGSHAMYGGLLSVSLELFKITIGMGDL
DFQEHTFRYFVTLLLLLFVILTYILLNMLIALMSETVTDISGYSKSVWKLQRAITILDI
ENSYLNCRHSFRSGKQVLVGITPDGQDDYRWCFRVDEVNWSTWNTNLGIINEDPGYS
G-----

>TRPV2_Melopsittacus_undulatus_fragment

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VQCLMETGVRRLGSGSALARNEVLRQEVERVFPFPVYVYKDVDAAMGAAMFISLNK
VPAEMEYGCLLIMSSILGKMKKFGSSDMEESEATDEHTDGEDSTLETSDSLQSTLNTK
VHPPKSNIFARRGRFVMGSDSDKMAPMDSLYQMDHLLAPSVIKFHANLERGKFKHKRI
FDAVAQGNTRDLDLDDLLYLNRTLKHLTDDEFKGTGKTCLLKAMLNLHDGKNDTIPLL
LDIAKKTGTLKEFVNAEYTDNYYKQQTALHIAIERRNMYLVKLLVQNGADVHARACG
EFFRKIKGKPGFYFGRGELPLSLAACTNQLCIVKFLENPYQAANIAAEDSMGNMVLH
TLMYNNILILGAKINPILKLEELTNKKGLTPLTLAAKTGKIGVAVVTLIEDDNEGQDTNI
SEYSRCCHVKRGRTSYNSLYTCLFLFKFTIGMGDLEFTENYRFKSVFVILLVLYVILTYI
LLNMLIALMGETVSKIAQESKSIWKLQVHWFCEAVIQERGVDEVNWSTWNTNLGII
NEDPGCSGDLKRNPSYSIKPGRVHLYLIYIKYMSRDICLFLWMGNVFAHKLLCILKVLG
QTALNIAIERRQYEITQSLIEKGADVNAHAQGIFFNPKHKHEGFYFGWGSANPEVAEL
QKAANGSEEKSPRAKVWNRNEYTPLSNMKDSRPESGIIRKFNLSNSVKTVQQNP
PNNRILLHNSIKKEKILVSLNPDFLTSKEVQLSTSDGKAEQNISKLALTWELCYVPT
QGSPQGADSPLTGSTRQQSDDGQQRATEGQGTATCTQHGTCLKEYGGCQQAQKQH
EGTSVPVLWQPHQDLSFHGKFHETLLALVAGTYCRYRWNS

>TRPV2_Analis_carolinensis_fragment

RLSSASIGVRAEKAFKIYSRRRLFDVAQGDPSDLDLFLYLMETMKNLTDDEFKEP
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IERNYYLVELLLKNGADVHARAHGEFFQNIKGRPGFYFGELPLSLAACTNQLNIAKYL
LENPFQPADIAAQDSMGNTVLHALVEIADNTEDNTKFTNVYNEILVLGARINPTLKL
EIPNRRGLTPLTLAAKAGKIQVFAYILRREMKAPECRHLSRKFTEWAYGPVHSSLYD
LSSIDTCEKNSVLEIIAYSSETPNRHEMLLVEPLNQLLQDKWDRFVKHLFYFNFFTYTA
HILILTVAAYFRPTKKDGVPPFPLRHTTSEYFRVAGEILSILGGVYFFFRGLKYFKHRRP
SLKAVFTDSYSELLLYVHTIYYIISIAQY-----

>TRPV2_Chrysemys_picta_bellii_fragment

MYDEILKAGTKINPAEKLEEVNQAAGLTPLKLAACKGKVEIFRHILQREIKDPEYRHLS
RKFTEWTYGPVHVSlyDLSSVDSYEKNSVLEILAESSDTPILRDLLRFLMVYVIFLFGF
AAALVTLTG DAPPASQNTSVTPEDGDKGHVVYSGLLSTSELEFKFTIGMGDLEFQEHV
YDQNVLSPLIVYWLGMKIVLFSDFRVEEINWANWEKELGVIKEDPGNSRDLEIESLA
VTPLSSFNIDTRKKWITPPTAPLSWPKVLQHS DGRKTW-----

>TRPV3_Rattus_norvegicus

MNAHSKEMVPLMGKRRTAPGGNPAVLTEKRPADLTPTKKS AHFFLEIEGFEPNPTVT
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KKRLKCCIFA AVSEGCVRELRELLQDLQELCRRRRGLDASDFLMHKLTASDTGKTCLM
KALLNINPNTKEIVRILLAF AEENDILDRFINAEYTEEAYEGQTALNIAIERRQGDITAV
LIAAGADVNAHAKGVFFNP KYQHEGFYFGETPLALAACTNQPEIVQLLMENEQTDITS
QDSRGNILHALVTVAEDFKTQND FVKRMYDMILLRSGNWELETMRNNDGLTPLQL
AAKMGKAEILKYILGREIKEKPLRSLSRKFTDWAYGPVSSSLYDLTNVDTTTTDNSVLEII
VYNTNIDNRHEMLTLEPLHTLLHMKWKKFAKYMFFLSFCFYFFYNITLTLVSYRPRE
DEALPHPLAL THKMSWLQLLGRMFVLIWAMCISVKEGIAIFLLRPSDLQSILSDAWFH
FVFFVQAVLVILSVFLYLFAYKEYLACLVLAMALGWANMLY YTRGFQSMGMYSVMIQ
KVILHDVLKFLFVYILFLLGFGVALASLIEKCSKDKDCSSYGSFSDAVLELFKLTIGLD
LNIQQNSTYPILFLLITYVILTFVLLL NMLIALMGETVENVSKESERIWRLQRARTILE
FEKMLPEWLR SRFRMGELCKVAEDEFRLCLRINEVKWTEWKTHVSFLNEDPGPIRR
TADSNKIQDSSRSNSKTTLYAFDELDEF PETS-----

>TRPV3_Homo_sapiens

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RRLKKRIFA AVSEGCVEELVELLVELQELCRRRHDEDVPDFLMHKLTASDTGKTCLMK
ALLNINPNTKEIVRILLAF AEENDILGRFINAEYTEEAYEGQTALNIAIERRQGDIAALLI
AAGADVNAHAKGAFFNPKYQHEGFYFGETPLALAACTNQPEIVQLLMEHEQTDITSR
DSRGNNILHALVTVAEDFKTQND FVKRMYDMILLRSGNWELETTRNNDGLTPLQLA
AKMGKAEILKYILSREIKEKRLRSLSRKFTDWAYGPVSSSLYDLTNVDTTTTDNSVLEIT
VYNTNIDNRHEMLTLEPLHTLLHMKWKKFAKHMFFLSFCFYFFYNITLTLVSYRPR
EEEAIHPHALTHKMGWLQLLGRMFVLIWAMCISVKEGIAIFLLRPSDLQSILSDAWF
HFVFFIQAVLVILSVFLYLFAYKEYLACLVLAMALGWANMLYYTRGFQSMGMYSVMIQ
KVILHDV LKFLFVYIVFLLGFGVALASLIEKCPKDNKDCSSYGSFSDAVLELFLKTIGLGD
LNIQQNSKYPIFLFLITYVILTFVLLL NMLIALMGETVENVSKESEIRIWR LQRARTILE
FEKMLPEWLR SRFRMGELCKVAEDDFRLCLRINEVKWTEWKTHVSFLNEDPGPVR
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>TRPV3_Sarcophilus_harrisii

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NRRLKKRIFA AAAAEGSVEELSVLLTELWELARRRRTMDPMDYLMHKLTASDTGKT
LMKALLNINPNT EEVVRTLLTFAEENGILEQFINAEYTEEAYRGQTALNIAIERRQVAI
TKTLIDNGADVNAHAKGLFFNPKHKHEGFYFGETPLALAACTNQPEIVQLLMDNEKT
DIASQDSQGNILHALVTVAEDCRTQND FVKEMYDMILLRSEDPELETAQNNDGLTP
LQLAAKTGKSEILKYILSREIKEKPHRSLSRKFTDWAYGPVSSSLYDLTDVDTTTTNSV
LEIIVYNTNIDNRHEMLTLEPLHTLLRMKWKKFAKYMFFTSFCFYFFYNITLTLVSYR
PREEEALPHPLALTHKMGWLQLIGRMFVLIWATCISVKEGIAIFLLRPSDLQSILSDAW
FHFAFFIQAVLVILSVFLYLFAYKAYLACLVLAMALGWANMLYYTRGFQSMGMYSVMI
QKVILHDV LKFLFVYIVFLLGFGVALASLIEKCPDSKGECSYGSFSDAVLELFLKTIGL
DLNIQQNSKYPIFLFLITYVILTFVLLL NMLIALMGETVENISKESERIWR LQRARTIL
EFEKLLPEWLRCKFRMGELCKVAQEDFRLCLRINEVKWTEWKTHVSFISEDPGPGRS
LDLSKAQDSSRYNSKTTLNAFDELDDVPETSV-----

>TRPV3_Tursiops_truncatus_fragment

MDAHPKEMVPLMGRIATMPSGNAAILQEKRLAEITPTKKS AHFFLEIEGFEPSTTVTKT
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KRLKKHIFA AVSEGC VQQLLELLMELQELCEQRHSLEVPDFLMRNLTALDTGKTCLM
KALLNINPSTKEIVRILLAF AEENDILDRFINAKYTEEAFEGQTALNIAIERRQGDIAAVL
IEAGADVNAHAKGVFFNPKYQHEGFYFGETPLALAACTNQPEIVELLMGNEQTDITSQ
DSRGNNILHALVTVAEDFKTQND FVKHMYDMILLRSGNWELETMRNNNGLTPLQLA
AKMGKAEILKYILSREIKEKRLRSLSRKFTDWAYGPVSSSLYDLTNVDTMTDNSVLKII
VYNTNIDNRHEMLTLEPLHTLLHMKWKKFAKYMFFLSFCSYFFYNITLTIISYYHTRG

EEALKHPLANKMGWLQLLGRMFVLIWAMCISVKEGIAIFLLRPSDMQSILSDAWFHF
VFFVQALLVILSVLLYLFAKEYLTCLVLAMALGWANMLYYTRGFQSMGMYSVMIQK
VILHDVLKFLFVYIVFLFGFVALASLIEKCSKDNEDCTSYGSFSDTVLELFKLTIGLGD
KIQQNSKYPILSLILLITYVTLTFVLLNMLIALMGETVENISKESEIRIWRQRARTILEF
EKMLPEWLKSRFQMGELCKVAEQDFRLCLRINEVKWTEWKTHVSFLNEDPGPGRRS

>TRPV3_Ornithorhynchus_anatinus

MNKTQKELIPLMGKKTNPSSASAGLLEKKPSEVTPTKSSHFFLEIEGFEPNPAVSKP
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KKCIFAAVSEGNVEELNSLLVELKELSKRRRNMDIQDYLMHKFTASDTGKTCLMKALL
NINPNTKEIVRHLLSFAEENGILERFINAEYTEEAYKGQTALNIAIERRQCEITETLIEKG
ADVNVQAKGLFFNPKYKHEGFYFGETPLALAACTNQPEIVQMLMDNNDKTDIASQDSR
GNTILHALVTVAEDFKTQNDVFKQMYDRILLRSKNMALETMQNNDGLTPLQLAAKM
GKSEILKYILSREIKEKPKRSLSRKFTDWAYGPVSSSLYDLTKVDTTTTDNSVLEIIVYNT
NIDNRHEMLTLEPLHTLLRMKWKKFAKYMFFMSFCLYFFYNITLTLVSYRPREEEA
LPHPLALTHKMGWLQLLGRMFVMIWATCITVKEGIAIFLLRPSDLQSILSDAWFHF
FIQAVLVILSVFLYLFAKEYLAQLVLAMALGWANMLYYTRGFQSMGMYSVMIQKVIL
HDVLKFLFVYIVFLFGFVALASLIEKCPQNDSECSYGSFSDAVLELFKLTIGLGDLD
IQQNSKYPILFLFLITYVILTFVLLNMLIALMGETVENISKESEIRIWRQRARTILEFE
KLLPEWLRSKFRGELCKVADNDFRLCLRINEVKWTEWKTHVSFISEDPPGGRHSEG
FNKIQDVSRSNSKTTLNAFDEIEDFPETSV-----

>TRPV3_Bos_taurus

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KRLKKRIFTAVSEGCVEELLELLGELQELCKRRHSLDVPDFLMHKLTALDTGKTCLMK
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DSRGNNILHALVTVAEDFKTQNDVFKRMYDMILLRSRTWELETTRNNDGLTPLQLAA
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NTNIDNRHEMLTLEPLHTLLHMKWKKFAKYMFFLSFCFYFFYNITLTLVSYRPREEE
ALPHPLALTHKMGWLQLLGRMFVLIWAMFISVKEQIAIFLLRPSDLQSILSDAWFHF
VFFAQAVLVILSVFLYLFAKEYLAQLVLAMALGWANMLYYTRGFQSMGMYSVMIQK
VILHDVLKFLFVYIVFLFGFVALASLIEKCPKSHENCSSYGSFSDAVLELFKLTIGLGD
NIQQNSKYPILFLFLITYVILTFVLLNMLIALMGETVENVSKESERIWRQRARTILEF
EKILPEWLRSRFRMGELCKVAEDDFRLCLRINEVKWTEWKTHVSFLNEDPPGGRRTA
DSNKIQDSSRSNSKTTLNAFEEIDEFPETSV-----

>TRPV3_Canis_familiaris

MNAHPKEMVPLMGRRAAVPSGNPAILQEKRP AEITPTKKS AHFFLEIEGFDPNPTVSK
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KRLKKRIFA AVSEGC VGE LLE LLE LVELQELCKRRRGLDVADFLMHKLTASDTGKTCLMK
ALLNINTKTK EIVRILLAFAEENDILDRFVNAAYTEEAYEGQTALNIAIERRQGDLTALL
IAAGADVNAHARGVFFNPKYQHEGFYFGETPLALAACTNQPEIVQLLMENEQTDITSQ
DSRGNNILHALVTVAEDFKTQND FVKRMYDMILLRSGTWELETMHNNDGLTPLQLA
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YNTNIDNRHEMLTLEPLHTLLHMKWKKFAKYMFFLSFCLYFFYNITLTLVSYRPREE
EALPHPLALTHKMGWLQLLGRMFVLIWAMCISVKEGIAIFLLRPSDLQSILSDAWFHF
VFFVQAVLVVLSVFLYLFAYKEYLACLVLAMALGWANMLYYTRGFQSMGMYSVMIQK
VILHDV LKFLFVYIVFLLGFGVALASLIEKCPSDNKDCSSYGSFSDAVLELFKLTIGLGD
NIQQNSKYPILFLLITYVILTFVLLLNMLIALMGETVENVSKESERIWRLQRARTILEF
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>TRPV3_Ailuropoda_melanoleuca

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RKRRLKKRIFA AVSEGC GEEL LLE LLE LLE LLE LQELCKRRRGLDVADFLMHKLTASDTGKTCL
MKALLNINPNTKEIVR VLLAFAEDNDILDRFVNAAYTEEAYEGQTALNIAIERRQGDIA
ALLIAAGADVNAHARGVFFNPKYLHEGFYFGETPLALAACTNQPEIVQLLMENEQTDI
TSQDSRGNNILHALVTVAEDFKTQND FVKRMYDTILLRSGTWELETMQNNDGLTPLQ
LAAKMGKAEILKYILGREIKEKPLRSLSRKFTDWAYGPVSSSLYDLTNVDTTTTDNSVLE
IIVYNTNIDNRHEMLTLEPLHTLLHMKWTRFAKYMFFLSFCFYFFYNITLTLVSYRPR
EEEALPHPLALTHKMGWLQLLGRMFVLIWATCISVKEGIAIFLLRPSDLQSILSDAWF
HFVFFVQAVLVILSVFLYLFAYKEYLACLVLAMALGWANMLYYTRGFQSMGMYSVMI
QKVILHDV LKFLFVYIVFLLGFGVALASLIEKCPSDNKDCSSYGSFSDAVLELFKLTIGL
DLNIQQNSKYPILFLLITYVILTFVLLLNMLIALMGETVENVSKESERIWRLQRARTI
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>TRPV3_Loxodonta_africana

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KKRLKKRIFA AVSEGC VDEL VELLVELREL CRRRSDLDVPGQLLMHKLTSDTGKTS LM
KALLNINPTKEIVRTLLFAEENDILDRFINAEYTEEAYEGQTALNIAIERRQGDIAAVLIA
AGADVNAHAKGVFFNPKYQHEGFYFGETPLALAACTNQPEIVELLMENEQTDIASQDS
RGNNILHALVTVAEDFKTQND FVKRMYDMILLRSRNWELETTRNNEGLTPLQLAAK
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LHDV LKFLFVYILFLLGFGVALASLIEKSKDNSNCSSYGSFGDAVLELFKLTIGLGD LNI

QQNSKYPILFLFLITYVILTFVLLLNLIALMGETVENVSKESERIWRLQRARTILEFE
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>TRPV3_Sus_scrofa

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LIHAGADVNAHAKGVFFNPKYQHEGFYFGETPLALAACTNQPEIVQLLMEHEQTDITS
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VFFVQAVLVILSVFLYLFAYKEYLACLVLAMALGWANMLYYTRGFQSMGMYSVMIQK
VILHDVLKFLFVYIVFLLGFGVALASLIEKCSKDNKDCSYGSFSDAVLELFKLTIGLGD
LNIQQNSKYPILFLFLITYVILTFVLLLNLIALMGETVEDVSKESERIWRLQRARTILEF
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>TRPV3_Myotis_lucifugus

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KCLFAAVSEGCVEDLVQLLVELQELCKRRRNLDVPDFLMHKLTASDTGKTCLMKALL
NINPNTKEIVRILLAFANENDILDRFINAEYTEEAYEGQTALNIAIERRQRDITALLIAAG
ADVNAHAKGVFFNPKYQHEGFYFGETPLALAACTNQPEIVQLLMENQQT DITSQDSR
GNNILHALVTVAEDFKTQNDFVKRMYDMILLRSGNWELETMRNNDGLTPLQLA AKM
GKAEILKYILSREIKEKRLRSLSRKFTDWAYGPVSSSLYDLTNVDTTT DNSVLEIIVYNT
NIDNRHEMLTLEPLHTLLRIKWKKFAKYMFFLSFFFYFFYNITLTLISYYRPREEEALP
HPLALTHKMGWLQLLGRMFVLIWAMCISVKEGIAIFLLRPSDLQSILSDAWFHFVFFV
QAVLVILSVFLYLFAYKEYLACLVLAMALGWANMLYYTRGFQSMGMYSVMIQKVILH
DVLKFLFVYIVFLLGFGGALASLIEKCPKDHKDCSSYGSFSDAVLELFKLTIGLGD LNIQQ
NSKYPILFLFLITYVILTFVLLLNLIALMGETVENVSKESERIWRLQRARTILEFEKM
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KIQDSSRSNSKTTLNAFEEIDFETS-----

>TRPV3_Gorilla_gorilla

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KTCLMKALLNISPNTKEIVRILLAF AEENDILGRFINAEYTEEAYEGQTALNIAIERRQG
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VLEITVYNTNIDNRHEMLTLEPLHTLLHMKWKKFAKHMFFLSFCFYFFYNITLTLVSY
YRPREEEAVPHPLALTHKMGWLQLLGRMFVLIWAMCISVKEGIAIFLLRPSDLQSILSD
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VMIQKVLHDVLKFLFVYIVFLLGFGVALASLIEKCPKDNKDCSSYGSFSDAVLELFKLT
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>TRPV3_Dipodomys_ordii_fragment

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YNTNIDNRHEMLTLEPLHTLLHMKWKKFAKYMFFLSFCFYFFYNITLTLVSYRPREE
EALPHPLALTHKMGWLQLLGRMFVLIWATCISVKEGIAIFLLRPSDLQSILSDAWFHF
VFFVQAVLVILSVFLYLFAYKEYLACLVLAMALGWANMLYYTRGFQSMGMYSVMIQK
LASLIEKCSKDKTDCSSYGSFSDAVLELFKLTIGLGLDLNIQQNSTYPILFLFLITYVILTF
VLLLNMLIALMGETVENVSKESERIWRLQARARTILEFEKMLPEWLRSRFRMGELCKV
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EIDEFPETSV-----

>TRPV3_Otolemur_garnettii

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VYNTNIDNRHEMLTLEPLHTLLHMKWKKFAKYMFFLSFCFYFFYNITLTLVSYRPREE
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FVFFIQAVLVILSVFLYLFAYKEYLACLVLAMALGWANMLYYTRGFQSMGMYSVMIQK
VILHDVLKFLFVYIVFLLGFGVALASLIEKCPNDNKDCSSYGSFSEAVLELFKLTIGLGLD
NIQQNSKYPVFLFLITYVILTFVLLLNMLIALMGETVENVSKESERIWRLQARARTILE
FEKMLPEWLRSRFRMGELCKVAEEDFRLCLRINEVKWTEWKTHVSFLNEDPGPVR
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>TRPV3_Oryctolagus_cuniculus

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KHRLKKRIFTAVSEGCVQELVGLLLELQELCRRHRGLDVSDFLMHKLTASDTGKTCLM
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IAAGADVNAHAKGVFFNPKYQHEGFYFGGCDGDRVSCPLALRLVPLWESKTRDAPGR
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MGKAEILKYILGREIKEKPLRGLSRKFTDWAYGPVSSSLYDLTNVDTTTTDNSVLEIIVY
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FFVQAVLVILSVFLYLFAYKEYLACLVLAMALGWANMLYYTRGFQSMGMYSVMIQKVI
LHDVVKFLFVYIVFLLGFGVALASLIEEVLRRATRSGSSYGSFGTAVLSSQAQQSGLGDL
NIQAEPSTPSCFCSWLINVISLRLPTSNAHRLMGENVENVSKETKRICCWKLGRART
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>TRPV3_Macaca_fascicularis

MNAHPKETVPLMGKRVAAPSGNPAVLPEKRAAEITPTKKS AHFFLEIEGFEPNPVAAK
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RRLKKRIFA AVSEGCVEELVELLVELQELCRRRHDEDVPDFLMHKLTASDTGKTCLMK
ALLNINPNTKEIVRVLLFAEENDILGRFINAEYTEEAYEGQTALNIAVERRQGDIAAAL
IAAGADVNAHAKGAFFNPKYQHEGFYFGETPLALAACTNQPEIVQLLMDHEQTDITSQ
DSRGNNILHALVTVAEDFKTQNDVFVKRMYDMILLRSGNWELETTRNNDGLTPLQLA
AKMGKAEILKYILSREIKEKRLRSLSRKFTDWAYGPVSSSLYDLTNVDTTTTDNSVLEIT
VYNTNIDNRHEMLTLEPLHTLLRMKWKKFAKYMFFLSFCFYFFYNITLTLVSYRPRE
EEALPHPLALTHKMGWLQLLGRMFVLIWATCISVKEGIAIFLLRPSDLQSILSDAWFHF
VFFIQAVLVILSVFLYLFAYKEYLACLVLAMALGWANMLYYTRGFQSMGMYSVMIQKV
ILHDVVKFLFVYIVFLLGFGVALASLIEKCPKDNKDCSSYGSFSDAVLELFKLTIGLGD LN
IQQNSKYPILFLFLITYVILTFVLLLNM LIALMGETVENVSKESERIWRLQRARTILEFE
KMLPEWLRSRFRMGELCRVAEEDFRLCLRINEVKWTEWKTHVSFLNEDPGPVRRTA
DFNKIQDFSRNNSKTTLNAFEIEIDFPETSV-----

>TRPV3_Cavia_porcellus

MNAHPKEMVPLMGRKANVSCGNPAVLTEKRPAEVTPTKKS AHFFLEIEGFEPNPVT
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DRESRARRIFSAVSEGLELCRRRRGLDVSDFLMHKLTASDTGKTCLMKALLNINPNTK
EIVHILLTFADENDILDQFVNAEYTEEAYEGQTALNIAIERRQRDIAAVLIAAGADVNA
HAKGVFFNPKYQHEGFYFGETPLALAACTNQPEIVQLLMENEQTDITSQDSRGNNILH
ALVTVAEDFKTQNDVFVKRMYDMILLKSGNWELETMHNNDGLTPLQLAAKMGKAEIL

KYILSREIKEKPLRSLSRKFTDWAYGPVSSSLYDLTNVDTTTDNSVLEIIVYNTNIDNRH
EMLTLEPLHTLLRMKWKKFAKYMFFLSFFFYFFYNITLTLVSYRPREKEDLPHPLAL
SHKMGWLQLLGRMFVLIWATCISVKEGIAIFLLRPSDLQSILSDAWFHVFFIQAVLVIL
SVFLYLFAFKEYLAFLVLAMALGWANMLYYTRGFQSMGMYSVMIQKVILHDVLKFLF
VYIVFLLGFGVALASLIEKCSGDKDCSSYGSFSDAVLELFKLTIGLGDLEKIQQNSTYPIL
FLFLLNMLIALMGETVENVSKESEIRIWRQLRARTILEFEKMLPEWLRSRFRMGELCK
VAEDDFRLCLRINEVKWTEWKTHVSFLNEDPGPIRRTVDFNKIQDSSRSNSKTTLNAF
EEIDFEPETSV-----

>TRPV3_Spermophilus_tridecemlineatus

MHAHPKEMVPLVGRRTTGPSGNPVVLEKRP AEVTPTKKSAHFFLEIEGFEPNPTVA
KTSPPIFSKPMDSNIRQCISGNCDDMDSPQSPQDDVTETPSNPNSPSANLAKEEQRRK
KKRLKKRIFA AVSEGCV EELVELLAELQELCKRRRGMDVPDFLMHKLTASDTGKTCL
MKALLNINPNTKEIVRILLAF AEENDILDRFINAEYTEEAYEGQTALNIAIERRQGDITA
VLIAAGADVNAHAKGVFFNP KYQHEGFYFGETPLALAACTNQPEIVQLLMENEQTDIT
SQDSRGNNILHALVTVAEDFKTQND FVKRMYDMILLRSGTWELETTRNNDGLTPLQL
AAKMGKAEILKYILSREIKEKPLRSLSRKFTDWAYGPVSSSLYDLTNVDTTTDNSVLEI
TVYNTNIDNRHEMLTLEPLHTLLHMKWKKFAKYMFFLSFCFYFFYNITLTLVSYRPR
EVEALPHPLALTHKMGWLQLLGRMFVLIWATCISVKEGIAIFLLRPSDLQSILSDAWF
HFVFFIQAVLVILSVFLYLFAFKEYLAFLVLAMALGWANMLYYTRGFQSMGMYSVMI
QKVILHDVLKFLFVYIVFLLGFGVALASLIEKCSGDKDCSSYGSFSDAVLELFKLTIGLGD
DLNIQQNSTYPILFLFLLITYVILTFVLLNMLIALMGETVENVSKESEIRIWRQLRARTI
LEFEKMLPEWLRSRFRMGELCKVAEGDFRLCLRINEVKWTEWKTHVSFLNEDPGPIK
RTADINKMQDSSRNNSKTTLNAFDEMDEFETSV-----

>TRPV3_Equus_caballus

MNAHPKEMMPLMGRRATIPGAHPAILQEKRP AELTPTKSAHFFLEIEGFEPNPTVT
KTSPPVFSKPMDSNIRQCISGNCDDMDSPQSPQDDVTETPSNPNSPSANLAKEERRR
KKRRLKKRIFGAVSEGCV EELLELLAELEICKRRRSVDVPDFLMHKLTASDTGKTCL
MKALLNINPNTKEIVRILLAF AEENDILDRFINAAYTEEAYEGQTALNIAIERRQGDITA
ALIAAGADVNAHAKGVFFNP KYQHEGFYFGETPLALAACTNQPEIVQLLMENEQTDIT
SQDSQGNNILHALVTVAEDFKTQND FVKRMYDMILLRSGNWELETTRNKDGLTPPQL
AAKLGKAEILKYILSREIREKPLRSLSRKFTDWAYGPVSSSLYDLTNVDTTTDNSVLEI
VYNTTIDNRHEMLTLEPLHTLLHMKWKKFAKYMFFLSFCFYFFYNITLTLVSYRPRE
EEALPHPLALTHKMGWLQLLGRMFVLIWAMCISVKEGIAIFLLRPSDLQSILSDAWFH
FVFFVQAVLVILSVFLYLFAFKEYLAFLVLAMALGWANMLYYTRGFQSMGMYSVMIQ
KVILHDVLKFLFVYIVFLLGFGVALASLIEKCSGDKDCSSYGSFSDAVLELFKLTIGLGD
LNIQQNSKYPILFLFLLITYVILTFVLLNMLIALMGETVENISKESERIRIWRQLRARTILE
FEKMLPEWLRSRFRMGELCKVAEEDFRLCLRINEVKWTEWKTHVSFLNEDPGPGRR
TDFNKIQDSSRSNSKTTLNAFDEIEEFETSV-----

>TRPV3_Mus_musculus

MNAHSKEMAPLMGKRRTTAPGGNPVVLTEKRPADLTPTKKS AHFFLEIEGFEPNPTVT
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KKRLKKRIFA AVSEGCV EELRELLQDLQDL CRRRRGLDVPDFLMHKLTASDTGKTCL
MKALLNINPNTKEIVRILLAF AEENDILDRFINAEYTEEAYEGQTALNIAIERRQGDITA
VLIAAGADVNAHAKGVFFNPKYQHEGFYFGETPLALAACTNQPEIVQLLMENEQTDIT
SQDSRGNNILHALVTVAEDFKTQND FVKRMYDMILLRSGNWELETMRNNDGLTPLQ
LAAKMGKAEILKYILSREIKEKPLRSLSRKFTDWAYGPVSSSLYDLTNVDTTT DNSVLE
IIVYNTNIDNRHEMLTLEPLHTLLHTKWK KFAKYMFFLSFCFYFFYNITLTLVSYRPR
EDEDLPHPLALTHKMSWLQLLGRMFVLIWATCISVKEGIAIFLLRPSDLQSILSDAWF
HFVFFVQAVLVILSVFLYL FAYKEYLACLVLAMALGWANMLYYTRGFQSMGMYSVMI
QKVILHDVLKFLFVYILFLLGFGVALASLIEKCSKDKKDCSSYGSFSDAVLELFKLTIGLG
DLNIQQNSTYPILFLLITYVILTFVLLL NMLIALMGETVENVSKESERIWRLQRARTI
LEFEKMLPEWLRSRFRMGELCKVAEDEFRLCLRINEVKWTEWKTHVSFLNEDPGPIR
RTADLNKIQDSSRSNSKTTLYAFDELDEF PETS-----

>TRPV3_Gallus_gallus

MIKDNKEVVPLMGKKTNPPGAPPSNQEQKPT ESTPTKKS SHFFLEIEGFESNATPNN
TSPPVFSKPMDSNIRPCASANGEDMDS PQSLQDDVTEYSPNVDSCGANIAQGPEQTGA
RKKLKKYIFRAVSEGNVEELQGLLAELKERSNVCTNMTVPDYL MKKFTASDTGKTCL
MKALLNINNNTNQIVNMLLSFAEENGILERFINAA YTEEAYRGQTALNIAIERRQFEIT
QTLIEKGADVNAHAQGIFFNPKHKHEGFYFGETALALAACTNQPDIIELLM DNTRTNI
AAQDSRGNNILHALVTVAEDFKTQND FVIRMYDMILLKSKDRNLEKVKNKEGLTPLQ
LAAKTGKLEVLKYILSREIRDKPNRSLSRKFTDWAYGPVQSSLYDLTELDTTADNSVLE
IIVYNTNIGNRHEMLTLEPLNSLLRMKWKRFARHMLFMSCCFYFLYNVTLTLVSYHRP
NENEAPPYPLALTRGVGWLQLSGQVMVMLGAI FLAIKESVAIFLLRPSDLQSILSDAWF
HFAFFIQAMLVIFSVFLYLSSYKEHLVCLVLAMALGWANMLYFTRGFQSMGIYSVMIQ
KVILNDVIKFLVYIVFLLGFGVALAAL IETCQNGGECLSNSSLGPVLMDFKLTGLGD
LEIQNSKYPVFLLLLITYVVLT FVLLL NMLIALMGETVEDISKESEHIWKLQRARTIL
EFEKFLPKSLRKKFQLGERCKVAENDTRVCLRINEVRWTEWKTHVSFINEDPGPTVH
FLADPSKVQDNSRTNSKNTLNTFEETDDL PETS-----

>TRPV3_Xenopus_tropicalis

MINKHPGEMSPLISRERLAPGTPPRSPRHTENGLKRNDTTDFSRSNPLWLSTQMDTN
NYSNEKKNEDTDTPQTTQTAFSPCYGWQGRKPALTRNTRKPTKLLFKAVSEG DTE
MLTDLLSEAKSSSRVYSVTQAKEFFMHKLT SKDTGKTCLMKALLNINEKTPEVVRSL
TFAEENDILETFINA EYTEENYKGQTALNIAIERRQVELVKYLIEKGAKIDVRAQGRFFN
PKNKYEGFYFGETPLALAACTNQPEIVQLIMDKSPTIGTIQDSLGN TVLHALVNVADNS
EAQNDFIIGMYDTILRNCKNKSLEQIPNNEGLTSMQLAAKLGKTEILHYILSREIKEKEN
MVLRSKFTDWAYGPVSSSLYDLTSIDTCWPNSVLEIVVYNTDIDNRHELLTLEPLHTL
LQMKWKKFARYMFFLSFLLSFTYNIALTLVSYRPRGEQDVYPLNLSYENGWLQLVG
QMFIIVCATYLMVKEAVVMFLVKQSDLKSVLSDAWFHILFFIQAVLVIVSVFCYLFVGD

FYLVFLVLAMALGWMNLLYYTRGFQSLGIYSVMIQKVILNDVLKFLFVYILFLLGFGVA
LASLLENCEDGEECQSLSTAILELFELTIGLRGLEMDKDPKYPVFLFLLITFVILTFVLL
LNMLIALMGETVEKISQESEHIWRLQRARTILEFEKSLPAWLQARFQLGESCTVSKGD
NNRICLRINEVKWTEWNNHVTCIKEEPGLTFFPDTKDTNTASEDELDSFEKFAGISISV
GDLEDQAMETTV-----

>TRPV3_Anolis_carolinensis_fragment

PYPLAMTDNLGWLQLTGQVVVMLGAIFIAIKESVAIFLLRPSDLQSILSDAWFHFAFFI
QAVLVIFSVCYLLSYKEHLVCLVLAMSSGWANMLYFTRGLQSMGIYSVMIQQVILNDV
IKFMAVYIVFLLGFGVALAALIETCPEDSKCSNYSTLGSVEVELFRLTLGLGDLINENA
KYPILFLLLLISYVVLTFVLLLNLMLIALMGETVEDISKESEHIWRLQRARTIVETEKLLP
KFLRKKFQLGEWCKVADNDTRLCLRINEVKWTEWKTHVSFINEDPGPTVKIRFLSDY
NRVQESSRSNSKTTLNAYEEVYDLPETSV-----

>TRPV3_Meleagris_gallopavo_fragment

SSHFFLEIEGFEGNATPNNTSPPVFSKPMDSNIRPCASANGEDMDSQPQLQDDVTEYS
PNVDSCCANIAQGPEQTRAPKKLKKYLFRAVSEGNIEELQGLLAELKERSNVCNRNTTV
PDYLMKKFTASDTGKTCLMKALLNINNTNEIVNILLSFAEENGILERFINAAYTEEAY
KGQTALNIAIERRQFEITQTLIEKGADVNAHAQGIFFNPKYKHEGFYFGETALALAACT
NQPDHIELLMDNTRTNIASQDSRGNILHALVTVAEDFKTQNDFVIRMYDMILLKSKD
RNLEKVKNKEGLTPLQLAAKTGKLEVLKYILSREIRDKPNRSLSRKFTDWAYGPVQSS
LYDLTELDTTADNSVLEIIVYNTNIGNRHEMLTLEPLNSLLRMKWKRFAHMLFMSC
CFYFLYNVTLTLVSYHRPNENEAPPYPLALTRGVGWLQLSGQVMVMLGAIFLAIKESV
AIFLLRPSDLQSILSDAWFHFAFFIQAMLVIFSVCYLLSYKEHLVCLVLAMALWANML
YFTRGFQSMGIYSVMIQKVILNDVIKFLVVYIVFLLGFGVALAALIETCQNGGECHSNSS
LGPVLMDFKLTGLGDLQNSKYPVFLLLLITYVVLTFVLLLNLMLIALMGETVEDI
SKESEHIWKLQRARTILEFEKFLPKSLRKKFQLGERCKVAENDTRVCLRINEVRWTEW
KTHVSFINEDPGPTVHFLADPSKVQDNSRTNSKNTLNTFEEMDDLPELPSL-----

>TRPV3_Pelodiscus_sinensis_fragment

KDKKENIPLMGKRTNTLGPPTNNQEKKPAESTPTKSSQFFLEIEGFESNSSLRQTSP
PVFSKPMDSNIRPCASRNGEDMDSQPQLQDDITEYATNVDSYCTHMLQGDHQNAPK
KLKKYMFRAVSEGNTEELQHLLMEVKERSNRCRNMVQDYLMKKLTDSDTGKTCLM
KALLNINQNTNEIVKMLLSFGEEENSFLERLINAKYTEEAYKGQTALNIAIERRQYVIAH
TLIEKGADVNAHAQGVFFNPKRKHDFYFGETPLALAACTNQPDIVQLLMDNRRTDI
TSQDSRGNILHALVTVAEDFKTQNDFVIRMYDMILLKSKNRTLETMKNKDGLTPLQ

LAASKGKLEILKYILSREIRDKPNRSLSRKFTDWAYGPVQSSLYDLTELDTTADNSLLEI
IVYNTNIGNRHEMLALEPLHSLLRMKWKKFARHMFFMSFCFYFIYNILLTLVSYYRPW
RGEAPPYPLALTHNLGWLQLLGQVLIIEAIFLAIKESVAIFLLRPSDLQSILSDAWFHFA
FFIQAVLVIFSVFLYLFSYKEHLMCLVLAMALGWVNMLYFTRGFQSMGIYSVMIQKVL
HDVLKFLVVYIVFLLGFSVALAALIEECPNDNKCHSYSSLGTVLMELFKLTIGLDLEM
QQKSKYPVLFLLLLITYVLLAFVLLLNMLIALMGETVENISKESEHIWRLQRAKTILEFE
KILPKYLKKKFLLGEMCKVAENDTRVCLRINEVKWTEWKTHVSVFINEDPGPTGYQAE
TGYNRIQDTSRSNSKNTLNTFDEMDYLIETTV-----

>TRPV3_Procavia_capensis_fragment

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XXXXXXXXSRIFAAVSEGCVEELVELLRELQELCRRRGLDMPDFLIHKL TASDTGKTCLM
KALLNINPNTKEIVRILLTFAEENNILDRFINAEYTEEAYEGQTALNIAIERRQGDVTAE
LIAAGANVNAHAKGVFFNPKYQHEGFYFGETPLALAACTNQPEIVQLLMENEQTDITS
QDSRGNNILHALVTVAEDFKTQNDFVKHMYDMILLKSR SWELETMRNNDSLTPLQL
AAKMGKAEILKYILSREIKEKPLRSLSRKFTDWAYGPVSSSLYDLTDVDTTENS VLEII
VYNTNIDNRHEMLTLEPLHTLLHMKWKKFAKYMFFLSFCFYFFYNITLTLVSYYRPRE
EALPHPLALTHQMGWLQLLGRMFVLIWAMCISVKE-----

>TRPV3_Taeniopygia_guttata

MIKDNNEIVPLMGKKTNLPGNPPANQEQKVTETGPTTKKSSHFFLEIDGFESNASPNN
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RKKLKRNLFRVSEGNAAELQRLLAELRERSGACTSLPMPDYLMKKFTASDTGKTCL
MKALLNINQNTNEIVNMLLSFAEENGILERFINAAYTEEAYKGQTALNIAIERRQYEIT
QSLIEKGADVNAHAQGIFFNPKHKHEGFYFGETALALAACTNQPDIIELMDNARTNIS
SQDSRGNNILHALVTVAEDSKTQNDFVIRMYDMILLKSKDRTLETTKNKEGLTPLQLA
AKTGKLEILKYILSREIREKPNRSLSRKFTDWAYGPVQSSLYDLTELDTTADNSVLEIIV
YNTNIGNRHEMLTLEPLNSLLRMKWKKFARHMFFMSCCFYFLYNVTLTLVSYHRPN
TNEAPPYPLALTRGVGWLQLSGQVMVMLGAIFLAIKESVAIFLLRPSDLQSILSDAWFH
FAFFIQALLVIFSVFLYLFSYKEHLVCLVLAMALGWANMLYFTRGFQSMGIYSVMIQKA
TVILQDVIKFLVVYIVFLLGFGVALAALIETCQEGGECHSNSSLGPVLMDFLKLTLGLD
LEIQNSKYPVLFLLLLITFVVLTFVLLLNMLIALMGETVEDISKESEHIWKLQ RARTIL
EFEKFLPKCLRKKFQLGERCKVAENDTRVCLRINEVKWTEWKTHVSVFINEDPGPTER
VDPSKIQDNSRTNSKNTLNTFEETDDL PETS V-----

>TRPV4_Rattus_norvegicus

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PGDGRPNLRMKFQGAFRKGVNPNIDLLESTLYESSVVPKPKAPMDSLFDYGTYRH
HPSDNKRWRKVVVEKQPQSPKAPAPQPPILKVFNRPIFDIVSRGSTADLDGLLSYLL
THKKRLTDEEFREPSTGKTCLPKALLNLSNGRNDTIPVLLDIAERTGNMREFINSPFRD
IYYRGQTALHIAIERRCKHYVELLVAQGADVHAQARGRFFQPKDEGGYFYFGELPLSLA
ACTNQPHIVNYLTENPHKKADMRRQDSRGNTVLHALVAIADNTRENTKFVTKMYDL
LLLKCSRLFPDSNLETVLNNDGLSPLMMAAKTGKIGVFQHIIRREVTDEDTRHLSRKF
KWAYGPVYSSLYDLSSLDTCGEEVSVLEILVYNSKIENRHEMLAVEPINELLRDKWR
KFGAVSFYINVVSYLCA MVIFTLTAYYQPLEGTPPYRTTVDYLRRLAGEVITLLTGVLFF
FTSIKDLFMKKCPGVNSLFDGVSFQLLYFIYSVLVVSAALYLAGIEAYLAVMVFALVL
GWMNALYFTRGLKLTGTYSIMIQLFKDLFRFLLVYLLFMIGYASALVLLNPCTNM
KVCNEDQSNCTVPSYPACRDSETFSAFLDLFKLTIGMGDLEMLSSAKYPVVFILLVT
YIILTFVLLNMLIALMGETVGQVSKEKHIWKLQWATTILDIER SFVFLRKAFRSGE
MVTVGKSSDGT PDRRWCFRVDEVNWSHWNQNLGIINEDPGKSEIYQYYGFSHTMGR
LRRDRWSSVPRVVELNKNSTGDEVVPLDNLGNPNC DGHQQGYAPKWRAEDAPL--

>TRPV4_Homo_sapiens

MADSSEGPRAGPGEVAELPGDESGTPGGEAFPLSSLANLFEGEDGSLSPSPADASRPAG
PGDGRPNLRMKFQGAFRKGVNPNIDLLESTLYESSVVPKPKAPMDSLFDYGTYRHHS
SDNKRWRKKIIEKQPQSPKAPAPQPPILKVFNRPIFDIVSRGSTADLDGLLPFLTH
KKRLTDEEFREPSTGKTCLPKALLNLSNGRNDTIPVLLDIAERTGNMREFINSPFRDIY
YRGQTALHIAIERRCKHYVELLVAQGADVHAQARGRFFQPKDEGGYFYFGELPLSLAA
CTNQPHIVNYLTENPHKKADMRRQDSRGNTVLHALVAIADNTRENTKFVTKMYDLL
LLKCARLFPDSNLEAVLNNDGLSPLMMAAKTGKIGIFQHIIRREVTDEDTRHLSRKF
KWAYGPVYSSLYDLSSLDTCGEEASVLEILVYNSKIENRHEMLAVEPINELLRDKWRK
FGAVSFYINVVSYLCA MVIFTLTAYYQPLEGTPPYRTTVDYLRRLAGEVITLFTGVLFF
FTNIKDLFMKKCPGVNSLFDGVSFQLLYFIYSVLVIVSAALYLAGIEAYLAVMVFALVLG
WMNALYFTRGLKLTGTYSIMIQLFKDLFRFLLVYLLFMIGYASALVLLNPCANMKV
CNEDQTNCTVPTYPSCR DSETFSTFLDLFKLTIGMGDLEMLSSTKYPVVFILLVTYIIL
TFVLLNMLIALMGETVGQVSKEKHIWKLQWATTILDIER SFVFLRKAFRSGEMVT
VGKSSDGT PDRRWCFRVDEVNWSHWNQNLGIINEDPGKNETYQYYGFSHTVGR LRR
DRWSSVPRVVELNKN SNPDEVVPLDSMGNPRCDGHQQGYPRKWRTDDAPL-----

>TRPV4_Loxodonta_africana_fragment

KQPQSPKAPAPQPPVVKVFNRPIFDIVSRGSTTDL DGLLPFLTHKKRLTDEEFREP
STGKTCLPKALLNLSNGRNDTIPLLLDIAERTGNMREFINSPFRDVYYRGQTALHIAIE
RCKHYVELLVAQGADVHAQARGRFFQPKDEGGYFYFGELPLSLGACTNQPHIVNYLT
EPHKKADMRRQDSRGNTVLHALVAIADNRENTKFVTKMYDLLLLKCARLFP SNLEAV
LNNDGLQPQMVAYNNKIYVFQHIIRREVTDEDTRHLSRKF KWAYGPVYSSLYDLSS
LDTCGEEASVLEILVYNSKIENRHEMLAVEPINELLRDKWRKFGAVSFYISVVSYLCA
MVIFTLTAYYQPLEGTPPYRTTVDYLRRLAGEIITLFTGVLFFFTNIKDLFMKKCPGVNS
LFIDGVSFQLLYFIYSVLVIVSAALYLAGIEAYLAVMVFALVLGWMNALYFTRGLKLTGT
YSIMIQLFKDLFRFLLVYLLFMIGYASALVLLNPCANMKVCNQDQTNCSVPTYPSCR
DSETFSTFLDLFKLTIGMGDLEMLSSAKYPVVFILLVTYIILTFVLLNMLIALMGETV
GQVSKEKHIWKLQWATTILDIER SFVFLRKAFRSGEMVTVGKSSDGT PDRRWCFR

VPSACWDAQNGSLCQSSAPRSGKMELWSLFYESFVVKRLPRARTDLSVPRVVELNKSS
NQDEVVPLDTMGPSCDSHQSYPPKYGGPTTPP-----

>TRPV4_Bos_taurus

MADPGEGPRVGPGEAESPGEDESPPGGEAFPLSSLANLFEGEDGSPSPSPADGGRST
GPGDGRPNLRMKFQGAFRKGVNPIDLLESTLYESSVVPKPKAPMDSLFDYGTYRH
HPSDNKRWRKRVIEKQPQSPKAPAPQPPILKVFNRPIFDIVSRGSTADLDGLLPFL
THKKRLTDEEFREPSTGKTCLPKALLNLSNGRNDTIPVLLDIAERTGNMREFINSPFRD
IYYRGQTALHIAIERRCKHYVELLVAQGADVHAQARGRFFQPKDEGGYFYFGELPLSLA
ACTNQPHIVNYLTENPHKKADMRRQDSRGNTVLHALVAIADNTRENTKFVTKMYDL
LLLKCARLFPDSNLEAVLNNDGLSPLMMAAKTGKIGIFQHIIIRREVTDEDTRHLSRKFK
DWAYGPVYSSLYDLSSLDTCGEETSVEILVYNSKIENRHEMLAVEPINELLRDKWRK
FGAVSFYINVVSYLICAMVIFTLTAYYQPLEGTPPYRTTMDYLRLAGEIITLFTGILFFF
TNIKDLFMKKCPGVNSLFDGFSQLLYFIYSVLVIVSAALYLAGIEAYLAVMVFALVLGW
MNALYFTRGLKLTGTYSIMIQKILFKDLFRLLVYLLFMIGYASALVSLNPCANLKVCD
EDHANTVPTYPSCRDSETFSTFLDLFKLTIGMGDLEMLSSTKYPVVFILLVITYIILTF
VLLLNMLIALMGETVGQVSKESKHIWKLQWATTILDIERFVFLRKAFRSGEMVTVG
KSSDGTDDRWCFRVDEVNWSHWNQNLGIINEDPGKNENYQYYGFSHTVGRLLRDR
WSSVPRVVELNKNSNPDEVVPLDNVGNPSCDGHQSYPPKWRTDDAPL-----

>TRPV4_Ornithorhynchus_anatinus_fragment

KETPSVKAPAPHPPIPKVFNRPIFDIVSRGSTADLDGLLSFLLTHKKRLTDEEFREPS
TGKTCLPKALLNLCNGRNDTIPLLLDIAERTGNTREFINSPFRDVYYRGQTALHIAIER
RCKHYVELLVALGADVHAQARGRFFQPKDEGGYFYFGKAGGGGARGLAGGQGRGETE
GWHGTRGDRGGXKFVTKMYDLLLLVQCKKQFPDRHLETVLNNDGLSPLMMAAKTGKI
GVFQHIIIRREVKDEEVRHLSRKFKDWAYGPVYSSLYDLSSLDTCGEEASVLEILVYNSKI
EVSARATRSTRRWSWPGSRGTRGASPTDGVGSKPRIASNCSEFIYSVLVMVSALYLGGV
EAYEAVMVFALVGMNLYFTRGLKLTGTYSIMIQKILFKDLFRLLVYLLFMIGYASA
LVSLNPCPGREACPRGQSNCTVPTYPSCRDSETFVFLDLFKLTIGMGDLEMLGSTK
YPVVFVILLVITYIILTFVLLLNMLIALMGETVGQVSKQSKHIWKLQ-----

>TRPV4_Oryctolagus_cuniculus_fragment

EPSTGKTCLPKALLNLSNGRNDTIPALLDIAERTGNMREFINAPFRDIYYRGQTALHIAI
ERRCKHYVELLVAQGADVHAQARGRFFQPKDEGGYFYFGELPLSLAACTNQPHIVNYL
TENPHKKADMRRQDSRGNTVLHALVAIADNTRENTKFVTKMYDLLLLKCARLFPDS
NLEAVLNNDGLSPLMMAAKTGKIGIFQHIIIRREVTDEDTRHLSRKFKDWAYGPVYSSLY
DLSSLDTCGEEASVLEILVYNSKIENRHEMLAVEPINELLWDKWRKFGAVSFYINVVS
YLCAMVIFTLTAYYQPLEGTPPYRTTVDLRLAGEIITLLTGVLFFLTSIKDCHEKCP

GVNSLFVDGSFQLLYFIYSVLVIVSAALYLAGLEAYLAVMVFALVLGWMNALYFTRGLK
LTGTYSIMIQLFKDLFRFLLVYLLFMIGYASALVSLTPCANMKVCDEGQSNCTTPTY
PSCRDETFSTFLLDLFKLTIGMGDLEMLGSAKYPVVFILLVITYIILTFVLLLNMLIALM
GETVGQVSKESKHIWKLQWATTILDIERSPVFRKAFRSGEMVTVGKSSDGPDRR
WCFRVDEVNWSHWNQNLGIINEDPGKNETYQYYGFSHTVGRLRRDRWSSVPRVVE
LKNSNPDEVVPLAHVGNPSGPGHQSHPPWRTDDAPA-----

>TRPV4_Canis_familiaris

MADPSEGPHTGPGEVAETPGDESGTPGSEAFPLSSLANLFEGEDGSPSPSPADTGRPA
GPGDGRPNLRMKFQGAFRKGVNPNIDLLESTLYESSVVPKPKAPMDSLFDYGTYRH
HPSDNKRWRKKVIEKQPQSPKAPAPPPPILKVFNRPIFDIVSRGSTTDLGLLPFL
THKKRLTDEEFREPSTGKTCLPKALLNLSNGRNDTIPVLLDIAERTGNMREFINSPFRD
IYYRGQTALHIAIERRCKHYVELLVAQGADVHAQARGRFFQPKDEGGYFYFGEPLSLA
ACTNQPHIVNYLTENPHKKADMRRQDSRGNTVLHALVAIADNTRENTKFKVTKMYDL
LLLKCARLFPDSNLEAVLNSDGLSPLMMAAKTGKIGVFQHIIRREVTDEDTRHLSRKF
KWAYGPVYSSLYDLSSLDTCGEEASVLEILVYNSKIENRHEMLAVEPINELLRDKWR
KFGAVSFYINVVSYLAMVIFTLTAYYQPLEGTPPYRRTVDYLRRLAGEIITLFTGVLF
FFTNIKDLFMKKCPGVNSLFIDGSFQLLYFIYSVLVIVSAALYLAGIEAYLAVMVFALVLG
WMNALYFTRGLKLTGTYSIMIQLFKDLFRFLLVYLLFMIGYASALVSLNPCANMKV
CSEDHTNCTVPTYPSCRDETFSTFLLDLFKLTIGMGDLEMLSSTKYPVVFILLVITYIIL
TFVLLLNMLIALMGETVGQVSKESKHIWKLQWATTILDIERSPVFLRKAFRSGEMVT
VGKSSDGTDRRWCFRVDEVNWSHWNQNLGIINEDPGKSENYQYYGFSHTVGRLRR
DRWSSVPRVVELNKNNSNPDEVVPLDNMGNPSCDGHQQSYPPKWRTDDAPL-----

>TRPV4_Normascus_leucogenys

MADSSEGPRTPGPGEVAELPGDESGTPGGEAFPLSSLANLFEGEDGSPSPLPADASRPAG
PGDGRPNLRMKFQGAFRKGVNPNIDLLESTLYESSVVPKPKAPMDSLFDYGTYRHHP
SDNKRWRKKIIDGLLLCFYSPIHHPPLYLFPPIRNLGEEMLTARTSEPLPSALTASSC
MSLLEPSTGKTCLPKALLNLSNGRNDTIPVLLDIAERTGNMREFINSPFRDIYYRGQT
ALHIAIERRCKHYVELLVAQGADVHAQARGRFFQPKDEGGYFYFGEPLSLAACTNQPH
HIVNYLTENPHKKADMRRQDSRGNTVLHALVAIADNTRENTKFKVTKMYDLLLLKCA
RLFPDNNLEAVLNNDGLSPLMMAAKTGKIGNRHEMLAVEPINELLRDKWRKFGAVS
FYINVVSYLAMVIFTLTAYYQPLEGTPPYHTTVDYLRRLAGEVITLFTGVLFFFTNIK
DLFMKKCPGVNSLFIDGSFQLLYFIYSVLVIVSAALYMAGIEAYLAVMVFALVLGWMN
ALYFTRGLKLTGTYSIMIQLFKDLFRFLLVYLLFMIGYASALVSLNPCANMKVCNE
DQTNCTVPTYPSCRDETFSTFLLDLFKLTIGMGDLEMLSSTKYPVVFILLVITYIILTFV
LLNMLIALMGETVGQVSKESKHIWKLQWATTILDIERSPVFLRKAFRSGEMVTVGK
SSDGTDRRWCFRVDEVNWSHWNQNLGIINEDPGKNETYQYYGFSHTVGRLRRDR
WSSVPRVVELNKNNSNPDEVVPLDSMGNPRCDGHQQGYPPKWRTDDAPL-----

>TRPV4_Gorilla_gorilla_fragment

RKQPQSPKAPAPQPAPILKVFNRPIFDIVSRGSTADLDGLLPFLLTTHKKRLTDEEFRE
PSTGKTCLPKALLNLSNGRNDTIPVLLDIAERTGNMREFINSPFRDIYYRGQTALHIAIE
RRCKHYVELLVAQGADVHAQARGRFFQPKDEGGYFYFGELPLSLAACTNQPHIVNYLT
ENPHKKADMRRQDSRGNTVLHALVAIADNTRENTKFVTKMYDLLLLKCARLFPDSN
LEAVLNNDGLSPLMMAAKTGKIGIFQHIIIRREVTDEDTRHLSRKFKDWAYGPVYSSLY
DLSSLDTCGEEASVLEILVYNSKIENRHEMLAVEPINELLRDKWRKFGAVSFYINVVSY
LCAMVIFTLTAYYQPLEGTPPYRYRTTVDYLRRLAGEVITLFTGVLFFFTNIKDLFMKKC
PGVNSLFDIGSFQLLYFIYSVLVIVSAALYLAGIEAYLAVMVFALVLGWMNALYFTRGLK
LTGTYSIMIQLFKDLFRFLLVYLLFMIGYASALVSLNPCANMKVCNEDQTNCTVPT
YPSCRDSGTFSTFLLDLFKLTIGMGDLEMLSSTKYPVVFILLVTYIILTFVLLNMLIAL
MGETVGQVSKESKHIWKLQWATTILDIERSFVFLRKAFRSGEMVTVGKSSDGTDR
RWCFRVDEVNWSHWNQNLGIINEDPGKNETYQYYGFSHTVGRLRRDRWSSVPRV
ELNKNSNPDEVVPLDSMGNPRCDGHQGGYPPKWRTDDAPL-----

>TRPV4_Cavia_porcellus

MADPGDSPCAGSGELAEPGLGDDSGTAGGEAFPLSSLANLFEGEEGSSAPSPAEAGRPTA
QGDGRPNLRMKFQGAFRKGVNPIDLLESTLYESSVVPGPKKAPMDSLFDYGTYRHH
PSDNRWRRRKVIKQPQSPKAPAPQPPILKVFNRPIFDIVSRGSTADLDGLLPFLLT
HKKRLTDEEFREPSTGKTCLPKALLNLSNGRNDTIPMLLDIAERTGNMREFINSPFRDI
YYRGQTALHIAIERRCKHYVELLVAQGADVHAQARGRFFQPKDEGGYFYFGELPLSLA
ACTNQPHIVNYLTENPHKKADMRRQDSRGNTVLHALVAIADNTRENTKFVTKMYDL
LLLKCARLFPDSNLEAVLNNDGLSPLMMAAKTGKIGIFQHIIIRREVTDEDTRHLSRKFK
DWAYGPVYSSLYDLSSLDTCGEEVSVLEILVYNSKIENRHEMLAVEPINELLRDKWRK
FGAVSFYINVVSYLCAMVIFTLTAYYQPLEGTPPYRYRTTVDYLRRLAGEVITLFTGVLF
TNIKDLFMKKCPGVNSLFDIGSFQLLYFIYSVLVIVSAALYLAGIEAYLAVMVFALVLG
WMNALYFTRGLKLTGTYSIMIQLFKDLFRFLLVYLLFMIGYASALVSLNPCANMKVC
NEDGTNCTVPTYPSCRDSDTFSTFLLDLFKLTIGMGDLEMLSSIKYPVVFILLVTYIIL
FVLLNMLIALMGETVGQVSKESKHIWKLQWATTILDIERSFVFLRKAFRSGEMVTV
GKNSDGTDRRWCFRVDEVNWSHWNQNLGIINEDPGKSDTYQYYGFSHTVGRLRRD
RWSSVPRVVELNKNSNPDEVVPLDNLGNPSCDGHQRGHPPKWRTDDAPL-----

>TRPV4_Spermophilus_tridecemlineatus

MADPSDSPRAGPGDPAEPPGEESGTPGGEAFPLSSLANLFEGEDGSPSPSPADTARPA
GPGDGRPNLRMKFQGAFRKGVNPIDLLESTLYEASVVPGPKKAPMDSLFDYGTYRH
HPSDNRWRRRKVMKQPQSPKAPAPQPPILKVFNRPIFDIVSRGSTADLDGLLPFL
LTHKKRLTDEEFREPSTGKTCLPKALLNLSNGRNDTIPVLLDIAERTGNMREFINSPFR
DIYYRGQTALHIAIERRCKHYVELLVAQGADVHAQARGRFFQPKDEGGYFYFGELPLSL
AACTNQPHIVNYLTENPHKKADMRRQDSRGNTVLHALVAIADNTRENTKFVTKMYD
LLLLKCARLFPDSNLEAVLNNDGLSPLMMAAKTGKIGIFQHIIIRREVTDEDTRHLSRK
KDWAYGPVYSSLYDLSSLDTCGEEVSVLEILVYNSKIENRHEMLAVEPINELLRDKWR
KFGAVSFYINVVSYLCAMVIFTLTAYYQPLEGTPPYRYRTTVDYLRRLAGEVITLFTGVLF
FFTNIKDLFMKKCPGVNSLFDIGSFQLLYFIYSVLVIVSAALYLAGIEAYLAVMVFALVLG
WMNALYFTRGLKLTGTYSIMIQLFKDLFRFLLVYLLFMIGYASALVSLHPCANMKV

CDEDQTNCTVPTYPSCRDSETFSTFLLDLFKLTIGMGDLEMLSSTKYPVVFHILLVITYIIL
TFVLLLNMIALMGETVGQVSKESKHIWKLQWATTILDIERSFPVFLRKAFRSGEMVT
VGKSSDGTDDRWCFRVDEVNWSHWNLGIINEDPGKSETYQYYGFSHTVGRLLR
DRWSSVPRVVELNKNSSPDEVAVPLDNLGNPSCDSHQSYPPKWRTDDAPL-----

>TRPV4_Otolemur_garnettii

MADSSEGPRGGPAEVAEPPGDDGGTPGGEAFPLSSLANLFEGEDGSPSPPADVGRPPG
PGDGRPNLRMKFQGAFRKGVNPNIDLLESTLYESSVVPGPKKAPMDSLFDYGYRHHHP
SDNKRWRKVKIEKQPQSPKAPAPQPPPILKVFNRPIFDIVSRGSTADLDGLLPFLTH
KKRLTDEEFREPSTGKTCLPKALLNLSNGRNDTIPVLLDIAERTGNMREFINSPFRDIY
YRGTALHIAIERRCKHYVELLVAQGADVHAQARGRFFQPKDEGGYFYFGELPLSLAA
CTNQPHIVNYLTENPHKKADMRRQDSRGNTVLHALVAIADNTRENTKQVTKMYDLL
LLKCARLFPDSNLEAVLNNDGLSPLMMAAKTGKIGIFQHIIREVTDDEDTRHLSRKF
DWAYGPVYSSLYDLSSLDTCGEEASVLEILVYNSKIENRHEMLAVEPINELLRDKWRK
FGAVSFYINVVSYLICAMVIFTLTAYYQVPEGTPPYRTTVDYLRRLAGEIITLLTGVLFF
FTNIKDLFMKKCPGVNSLFIDGSFQLLYFIYSVLVIVSAALYLAGIEAYLAVMVFALVLG
WMNALYFTRGLKLTGTYSIMIQKILFKDLFRFLVYLLFMIGYASALVSLKPCANMKV
CNGDPTNCTVPTYPSCRDSDTFSTFLLDLFKLTIGIGDLEMLNSTKYPVVFHILLVITYIIL
TFVLLLNMIALMGETVGQVSKESKHIWKLQWATTILDIERSFPVFLRKAFRSGEMVT
VGKSSDGTDDRWCFRVDEVNWSHWNLGIINEDPGKSETYQYYGFSHTVGRLLR
DRWSSVPRVVELNKNSSPDEVVPLDNLGNPSCDGHQSYPPKWRTDDAPL-----

>TRPV4_Sus_scrofa

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SDNKRWRKVKIEKQPQSPKAPAPQPPPILKVFNRPIFDIVSRGSTTDLGLLPFLTH
KKRLTDEEFREPSTGKTCLPKALLNLSNGRNDTIPVLLDIAERTGNMREFINSPFRDIY
YRGTALHIAIERRCKHYVELLVAQGADVHAQARGRFFQPKDEGGYFYFGELPLSLAA
CTNQPHIVNYLTENPHKKADMRRQDSRGNTVLHALVAIADNTRENTKQVTKMYDLL
LLKCARLFPDSNLEAVLNNDGLSPLMMAAKTGKIGIFQHIIREVTDDEDTRHLSRKF
DWAYGPVYSSLYDLSSLDTCGEEASVLEILVYNSKIENRHEMLAVEPINELLRDKWRK
FGAVSFYINVVSYLICAMVIFTLTAYYQPLEGTPPYHTTVDYLRRLAGEIITLFTGVLFF
FTNIKDLFMKKCPGVNSLFIDGSFQLLYFIYSVLVIVSAGLYLAGIEAYLAVMVFALVLG
WMNALYFTRGLKLTGTYSIMIQKILFKDLFRFLVYLLFMIGYASALVSLNPCANMKV
CSEDHTNCTVPTYPSCRDSETFSTFLLDLFKLTIGMGDLEMLSSTKYPVVFHILLVITYIIL
TFVLLLNMIALMGETVGQVSKESKHIWKLQWATTILDIERSFPVFLRKAFRSGEMVT
VGKSSDGTDDRWCFRVDEVNWSHWNLGIINEDPGKNESYQYYGFSHTVGRLLR
DRWSSVPRVVELNKNSNPDEVVPLDNMGKPSCDGHQSYPPKWRTDDAPL-----

>TRPV4_Ailuropoda_melanoleuca

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HPSDNKRWRKVKIEKQPQSPKAPAPQPPPILKVFNRPIFDIVSRGSTTDLGLLPFL

THKKRLTDEEFREPSTGKTCLPKALLNLSNGRNDTIPALLDIAERTGNMREFINSPFR
DIYYRGPLSVLHIAIERRCKHYVELLVAQGADVHAQARGRFFQPKDEGGYFYFGELPLS
LA ACTNQP HIVNYLTENPHKKADMRRQDSRGNTVLHALVAIADNTRENTK FVT KMY
D L L L L K C A R L F P D S N L E A V L N N D G L S P L M M A A K T G K I G V F Q H I I R R E V T D E D T R H L S R
K F K D W A Y G P V Y S S L Y D L S S L D T C G E E A S V L E I L V Y N S K I E N R H E M L A V E P I N E L L R D K
W R K F G A V S F Y I N V V S Y L C A M V I F T L T A Y Y Q P L E G T P P Y P Y R T T V D Y L R L A G E V I T L F T G
V L F F F T N I K D L F M K K C P G V N S L F I D G S F Q L L Y F I Y S V L V I V S A A L Y L A G I E A Y L A V M V F A L
V L G W M N A L Y F T R G L K L T G T Y S I M I Q I L F K D L F R F L L V Y L L F M I G Y A S A L V S L L N P C A N
M K V C S E D H T N C T V P T Y P S C R D S E T F S T F L L D L F K L T I G M G D L E M L G S T K Y P V V F I L L V
T Y I I L T F V L L L N M L I A L M G E T V G Q V S K E S K H I W K L Q W A T T I L D I E R S F P V F L R K A F R S G
E M V T V G K S S D G T P D R R W C F R V D E V N W S H W N Q N L G I I N E D P G K S E N Y Q Y Y G F S H T V G
R L R R D R W S S V P R V V E L N K N S N Q D E V V V P L D N M G N P S C D G H Q Q S Y P P K W R T D D A P
L-----

>TRPV4_Mus_musculus

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SDNKRWRKVV EKQPQSPKAPAPQPPILKVFNRPI LFDIVSRGSTADLDGLLSFLLTH
KKRLTDEEFREPSTGKTCLPKALLNLSNGRNDTIPVLLDIAERTGNMREFINSPFRDIY
YRGQTS LHIAIERRCKHYVELLVAQGADVHAQARGRFFQPKDEGGYFYFGELPLSLAA
CTNQP HIVNYLTENPHKKADMRRQDSRGNTVLHALVAIADNTRENTK FVT KMYDLL
LLKCSRLFPDSNLETVLNNDGLSPLMMAAKT G K I G V F Q H I I R R E V T D E D T R H L S R K F K
D W A Y G P V Y S S L Y D L S S L D T C G E E V S V L E I L V Y N S K I E N R H E M L A V E P I N E L L R D K W R K
F G A V S F Y I N V V S Y L C A M V I F T L T A Y Y Q P L E G T P P Y P Y R T T V D Y L R L A G E V I T L F T G V L F F
F T S I K D L F T K K C P G V N S L F V D G S F Q L L Y F I Y S V L V V S A A L Y L A G I E A Y L A V M V F A L V L G
W M N A L Y F T R G L K L T G T Y S I M I Q I L F K D L F R F L L V Y L L F M I G Y A S A L V T L L N P C T N M K
V C D E D Q S N C T V P T Y P A C R D S E T F S A F L L D L F K L T I G M G D L E M L S S A K Y P V V F I L L L V T Y I
I L T F V L L L N M L I A L M G E T V G Q V S K E S K H I W K L Q W A T T I L D I E R S F P V F L R K A F R S G E M V
T V G K S S D G T P D R R W C F R V D E V N W S H W N Q N L G I I N E D P G K S E I Y Q Y Y G F S H T V G R L R R
D R W S S V P R V V E L N K N S S A D E V V V P L D N L G N P N C D G H Q Q G Y A P K W R T D D A P L-----

>TRPV4_Latimeria_chalumnae

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QYPTENKRRRKRII HDKQSPNQKTQAPNPPPILKVFNRPI LFDIVSRGTAAELDGLLAF
LVTHKKRLADEEFREPSTGKTCLPKALLNL TNGKNDTIPILVEIAEKTGNLREFINSPF
RDVYYRGQTALHIAIERRCKQYVELLVEKGADVHAQARGRFFQPRDEGGYFYFGELPL
SLAACTNQP DIVHYLIENAHKKADLRRQDSRGNTVLHALVAIADNTRENTK FVT KMY
DMLLIKCAKLFPECNLEAILNNDGMSPLMMAAKLGKIGIFKYIIRREVM DENARHL SR
KFKDWAYGPVYSSLYDLSSLDTCGMEVSVLEILVYNSRIENRHEMLAVEPINELLRDK
WRKFGAVSFYISVVSYL VAMVIFTLIAYYRPVEGRPPYPYKTTIDYLR LAGEVITLLTGIF
FFFTNIKDLFLKKCPGVNSLLIDGSFQLLYFIYSVLVLTAAALYLTGIEAYVAVMV FALVL
GWMNTLYFTRGLKLTGTYSIMLQKILFKDLFRFLLVYVLFMIGYASALVSLLN PCLTTE
TCTANNASCTAPEYPYCRDSNTFGKFIMDLFKLTIGMGDLEMVNSAKYPGVFIILLV TY
IILTFVLLL NMLIALMGETVGQVSKESKQIWKLQWATTILD IERSFPVFLRRVFRSGEM
VTVGKNLDGTPDRRWCFRVDEVNWSHWNQNLGIINEDPGKNETYQYYGFSHTMGR

LRRDRWSTVVPVVVELNKTTPRADEVVVSLDPMGMSNVHDTKRGDPHNWKKDETQI-

>TRPV4_Oreochromis_niloticus

MNEGRSAIFKRRHLALPKANAISSSEPSISVDLGDSEAAQPEGDGAFPLSEFSLFESQD
GSPATQDSSQESILEPAQPGHPADSRQYLRMKFHGAFKKGISNPMDLLESTIYESNVVP
APKKAPMDSLFDYGTYGSSNQKKRRKKLPGKTEASCDESQSSDPPKVVVFNRSL
FDCVSRGDPGELEGLLEYLQSNKRRLTDEEFREPYTGKTCCLKALMNLYGRQNTIPV
LVDIAEKNGSLREFINTPFRDVYYRGQTALHIAIERRCKQYVKKLVEKGADVHAQARG
RFFQPKDEGGYFYFGELPLSLAACTNQPDIVHYLTENPHKKADVRRQDSRGNTVLHAL
VHIADNTKDNTRFLTKMYDLLLIKAKLYPDCNLETVPNNDGMSPLMMAARLGKIGI
FQHIIREIKDEEVRHLSRKFKDWAYGPVYSSLYDLSSLDTCGKESSVLEILVYTSNEN
RHEMLAVEPINELLRAKWNRFAAVTFYISVFSYLITMIIFTLVAYYQPTHGKPPYPHTT
SSDYWRLAGEIVTLASGIFFLTNIKDLFLKKCPGVKSLFIDGSFQLLYFIYSVLIIVTAAL
YLSGIEAYVSMVVFALALGWMNTLYFTRGLKLTGTYSIMIQLFKDLFRLLVYVLFM
IGFASALVSLTVCPPPGTVCNGSCPTYPACRDNNTFSIFLLDLFKLTIGMGDLDMIYSA
QNPVVFLILLVYIILTFVLLLNMLIALMGETVGQVSKESKKIWKLQWATTILDIERSFP
VCLRKSFRVGMVTVGKNYDGTDDRWCFRVDEVNWCWQNLAINEDPGKSETI
QANGLQQGVRALRRDRWSTVVPRAVELSKGSQSHDLAVEMEPLSPRH-----

>TRPV4_Meleagris_gallopavo

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EKPVAGTKGPAPSPPPVLKVFNRPIFDIVSRGSPDGLLEGLSFLTHKKRLTDEEFREP
STGKTCCLKALLNLSAGRNDTIPILLDIAEKTGNMREFINSPFRDVYYRGQTALHIAIER
RCKHYVELLVEKGADVHAQARGRFFQPKDEGGYFYFGELPLSLAACTNQPHIVHYLTE
NGHKQADLRRQDSRGNTVLHALVAIADNTRENTKVFVKMYDLLLIKCAKLPDNTLE
ALLNNDGLSPLMMAAKTGKIGIFQHIIREIADEDVRHLSRKFKDWAYGPVYSSLYDLS
SLDTCGEEVSVLEILVYNSKIENRHEMLAVEPINELLRDKWRKFGAVSFYISVVSYLCA
MIIFTLIAYYRPMEGPPPYPTTTIDYLRAGEIITLLTGILFFSNIKDLFMKKCPGVNS
FFIDGSFQLLYFIYSVLIITAGLYLGGVEAYLAVMVFALVLGWMNALYFTRGLKLTGT
YSIMIQLFKDLFRLLVYLLFMIGYASALVSLNCPSSSESCSEHSNCTLTPTPSCRD
SQTFTFLDLFKLTIGMGDLEMLESAYKPGVFILLVYIILTFVLLLNMLIALMGETVG
QVSKESKHIWKLQWATTILDIERSFPLFLRRAFRSGEMVTVGKGTGTPDRRWCFRV
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TEDVVVPLGTMGTAEARERRHGQNSSSL-----

>TRPV4_Gallus_gallus

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EKPVAGTKGPAPNPPPIKVFNRPIFDIVSRGSPDGLLEGLSFLTHKKRLTDEEFREP
STGKTCCLKALLNLSAGRNDTIPILLDIAEKTGNMREFINSPFRDVYYRGQTALHIAIER
RCKHYVELLVEKGADVHAQARGRFFQPKDEGGYFYFGELPLSLAACTNQPHIVHYLTE
NGHKQADLRRQDSRGNTVLHALVAIADNTRENTKVFVKMYDLLLIKCAKLPDNTLE

ALLNNDGLSPLMMAAKTGKIGIFQHIIIRREIADEDVRHLSRKFKDWAYGPVYSSLYDLS
SLDTCGEEVSVLEILVYNSKIENRHEMLAVEPINELLRDKWRKFGAVSFYISVVSYLCA
MIIFTLIAYYRPMEGPPYPYTTTTIDYLRLAGEIITLLTGILFFFSNIKDLFMKKCPGVNS
FFIDGSFQLLYFIYSVLVIVTAGLYLGGVEAYLAVMVFALVLGWMNALYFTRGLKLTGT
YSIMIQLFKDLFRLLVYLLFMIGYASALVSLNCPSSSESCSEDHSNCTLPTYPSCRD
SQTFTFLDLFKLTIGMGDLEMLES AKYPGVFIILLVYIILTFVLLLNLMLIALMGETVG
QVSKESKHIWKLQWATTILDIER SFPLFLRRAFRSGEMVTVGKGTGTPDRRWCFRV
DEVNWSHWNQNLGIISEDPGKSDTYQYYGFSHTVGRLLRRDRWSTVVPVPRVVELNKSCP
TEDVVVPLGTMGTAEARERRHGQTPSSPL-----

>TRPV4_Oryzias_latipes_fragment

RADTLGSAGSAASEDCKEGDAQAEGEAAFPSELSQLFESEDGSQSAQDTSQESALEL
VQPGNPADSRQNLRTKFGAFRKGISHPMDLFEATYIESNVVPAPKKAPMDSLFDYGT
YGNSSNQKKRRKKLPRGKTEASCDIVPNPDPPKVMKIFNRILLFDCVSRGDPEDLEGLL
EYLQVHEKRLTDEEFREPSTGKTCLPKALLNLYGGRNNTIPLLVDIAEKTGNLREFINT
PFRDVYYRGQTALHIAIERRCKHYVELLMEKGADVHAQARGRFFEPKDEGGYFYFGEL
PLSLAACTNQPNIVNYLTENPHKKADLRRQDSRGNTALHALVHIADNTKDNTRFLTK
MYDLLLLIKCTKLYPECNLEKMANNDGLTPLMMAAKLGKIGVFQHIIRREIKDEEVRHL
SRKFKDWAYGPVYSSLYDLSSLETGEEPSVLEILVYNSRNENCHEMLAVEPINELLRA
KWQKFAAVTFYISVVSYLITMIIFTLVAYYHPTEGKPPFPYTTSTDYLRMVGEIFTLASG
IFFFLTNIKDLFLKKRPGVKSLVMDGSFQLLYFIYSILIIITAALYLSGIKAYVSVMVFALV
LGWMNTLYFTRGLKLTGTYSIMIQLKLDIFRLLVYLLFMIGYASALVSLTVCPTSG
PECEGGCPTYPKCREPGTFSTFLDLFKLTIGMGDLEMINS AQYPEVFLILLVYIILTFV
LLLNLMLIALMGETVGQVSKESKHIWKLQWATTILDIHSPVCLRRSFRV GEMVTVGK
NLDGTPDRRWCFRVDEVNWSHWNQNLAIINEDPGRSDTSQTNGLRQSVKGLRRDR
WTTVVPRVMELSKSPQPHDLVVEMEPLTTRN-----

>TRPV4_Tetraodon_nigroviridis_fragment

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SNQKRRRKKLPRGLVKAASCDDGQADDPPKVLKVFNRSLLFDCVSRADAEALEGLL
EYLQSREKRLTDEEFREPSTGKTCLPKALLNLYSGQNVTIPLLVDIAERTGNLRELLNT
PFRDVYYRGQTALHIAIERRCKQYVELLVEKGADVHAQARGRFFQPRDEGGYFYFGEL
PLSLAACTNQPDIVHYLTENPHKKADLRRQDSRGNTVLHALVHIADNTKDNTRFLTK
MYDLLLLIKSAKLYPCNLETVLNNDGMSPLMMAAKLGKIGVFQHIIRREIKDEEVRHL
SRKFKDWAYGPVYSSLYDLSSLDTCGEEPSVLEILVYNSRTENHHEMLAVEPINELLRA
KWQKFAAVSFYVSVVSYLTTMIIFTLVAYYHPVQGKPPHPYTTSSDYLRMAGEVITLA
SGIFFFLTNIKDVFLKKCPGVKSLVIDGSFQLLYFIYSVLIVVSAALYLSGIEAYMSVMVF
ALVLGWMNALYFTRGLKLTGTYSIMIQLFKDLFRLLVYVLFMIGYASALVSLTVC
PPPGTECEGGCPTYPKCRDPDTFSTFLDLFKLTIGMGDMIWDSARYPAVFLILLITYII
LTFVLLLNLMLIALMGETVGQVSKQSKKVVWKLQWATTILDIER SFVCLRKSFRAGEMV
TVGRNSDGTDRRWCFRVDEVNWSHWNQNLAIINEDPGKNETCQANGLQQGVRAL
RRDRWSTVVPRALELSKGP HHRDLVIEMEPLTPRH-----

>TRPV4_Danio_rerio

QGFSASTLLKRYRLAMTESLSVSSPPDNSAQDSSEAADGDPNFPMSMAALLENDVVS
QPHELPRPGQQNDQKQNMIRIRFPGPFKKGVPNPMDLLESYTEYPKQAPMDSMFD
YGTQRQINNNKKGRRKLLPRGKAEIGMSCDEGSPEPPVLKVFNRWMLFEAVSRADPR
ALDGLLQYLQSHEKRLTDEEFKELSTGKTCLPKALLNLHNGQNDTIPILVDIAEQTGNL
REFINTPFRDVYYRGQMALHIAIERRCKQYVELLVEKGADVHAQARGRFFQPRDEGGY
FYFGELPLSLAACTNQPD MVHYLTENGHKKADLRRQDSRGNTVLHALVHIADNTRD
NTRFVTKMFDLLLIKCAKLYPDCNLENILNNDGMSPLMMAAKLGKIGVFQHIIRREIK
DEEARHLSRKFKDWAYGPVYSNLYDLSSLDTCGEEVSVLEILVYNSKIENRHEMLAVE
PINELLRAKWQKFAAVTFYISVFSYLVMTMIIFTLVAYYRPSVKGPPYAYDTTEDKVRLA
GEIITVGSGLFFFVTNIKDLFLKCKPGVNSIFVDGSFQLLYFIYSVLVLSAALYLSGIEAY
VSMVFALTLGWMNTLYFTRGLKLTGTYSIMIQLIKDLFRFLLVYVLFMIGYASALV
SLLTICPKDCKENCPTYPECRDTNTFSEFLDLFKLTIGIGDLNMLKGAQYPAVFLI
LLVTYIILTFVLLLNLMLIALMGETVGQVSKESKIKWKLQWATTILDIERSFVCLRRSFR
VGEMVTVGKGLDGKPKDKRWCFRVDEVKWSHWNQNLGIINEDPGQKDLSEHTQGGGR
GLRRDRWSTVVRVVELNRGSRDHTVEMEPLTGRHRLKSES-----

>TRPV4_Takifugu_rubripes

TLSSDCSGPAAHASANNGRTAQAEGDAAFPLSELSQLFESEDASPSAQGASQEPAPPG
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TSNQKRRRKKLPRGKTETSCDEGLAADPPKVLKVFNRSLLFDCVSRADAEALEGLLEY
LQSQEKRLTDEDFREPSTGKTCLPKALLNLYGGQNVTIPLADIAEKTGNLREFINTPF
RDVYYRGQTALHIAIERRCKPYVELLVEKGADVHAQARGRFFQPRDEGGYFYFGELPL
SLAACTNQPDIVHYLTENPHKKADLRRQDSRGNTVLHALVHIADNTKDNTRFLTMY
DLLIKSAKLYPDCSLETVLNNDGMSPLMMAAKLGKIGVFQHIIRREIKDEEARHLSRK
FKDWAYGPVYSSLYDLSSLDTCGEEPSVLEILVYNSRNENRHEMLAVEPINELLRAKW
QKFAAVTFYISVVSYLITMIIFTLVAYYHPTQKPPYPYTTSSDYLRMAGEVITLASGIF
FLTNIKDVFLKCKPGVKSFLIDGSFQLLYFVYSVLIVISAALYLSGIEAYVSMVFALVLG
WMNTLYFTRGLKLTGTYSIMIQLIKDLFRFLLVYVLFMIGYASALVSLTVCPPPGT
ECDGGCPTYPKCRDPDTFSTFLDLFKLTIGMGELDMIHSAQYPAVFLILLVTYIILTFV
LLLNLMLIALMGETVGQVSKQSKIKWKLQWATTILDIERSFVCLRKSFRAGEMVTVGK
NCDGTPDRRWCFRVDEVNWCHWNQNLAIINEDPGKNETCQATGLQQGVRALRRDR
WSTVVRALLESKGPHNRLAIEMEPLTPRH-----

>TRPV4_Xenopus_tropicalis

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RKRKKILLEKENLNSQAPSPDPPPIKMFNRHMLFDIVSRGSTAELEGFLPFLLAQKKR
LTDEEFREASTGKTCLTKALMNLNGGKNDTIPMLIDIAEKTGNLREFINSPFRDVYYR
GQTALHIAIERRCKHYVELLVEKGADVHAQARGRFFQPKDEGGYFYFGELPLSLAACT
NQPDIVHYLTENAHKKADIRRRQDSRGNTVLHALVAIADNTRENTKFVTKVYDLLVIK
VKLYPDSLEAIFNDSMSPLMMAAKLGKIGIFQHIIRLEIKDEEARHLSRKFKDWAYG
PVYSSLYDLMLDTCGEEVSVLEILVYNSKVENRHEMLAVEPINELLRDKWQKFGAVS
FYISVVSYLAMIIFTLIAYYRPMDGTPPYPYRTTMDYMLRAGEIVTLLTGVVFFITNIKD

LFMKKCPGVNSLFIDGSFQLLYFIYSVLVIITAVLYLVGIESYLAVMVFALVLGWMNALY
FTRGLKLTGTYSIMLQKILFKDLFRLLVYLLFMIGYASALVSLNPNCTSQESCIIETSSNC
TVPEYPSCRDSSTFSKFLDLFKLTIGMGDLEMINSKYPVAVFIILLVTYIILTFVLLNM
LIALMGETVGQVSKEKQIWKLQWATTILDIERSFPVCMRKAFRSGEMVTVGKNLDG
TPDRRWCFRVDEVNWSHWNQNLGIINEDPGRNDGYQYYGFSQTVGRLRRDRWSVV
VPRVVELNKAPQHSDDVVVPLGNIPQVQTYSQLQENAQNWKKDETHI-----

>TRPV4_Elaphe_quadriregata

MANLEDAAHASPSESTESPSEELSPQNDSFPLSSLANLFENEDGAPAAEAARTPPGAG
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DNKRRRKKALEKKPPSTKGPAPHPPIPKVFNRPILFDIVSRGSTADLDGLLPFLTHK
KRLTDEEFREPSTGKTCLPKALLNLNNGKNDTIPFLLDIAEKTGSTREFINSPFRDVY
RGQTAHIAIERRCKHYVELLVEKGADVHAQARGRFFQPKDEGGYFYFGELPLSLAAC
TNQPHIVQYLTEHAHKQADLRRQDSRGNTVLHALVAIADNTRENTKFTVTKMYDILLI
KCAKLPDNTNLEALLNNDGLSPLMMAAKTGKIGMFQHIIRREVKDEEARHLSRKFRD
WAYGPVYSSLYDLSSLDTCGEEVSVLEILVYNSKIENRHEMLAVEPINELLRDKWRKF
GAVSFYISVVSYLECAMVIFTLVAYYRPLEGTPPYPTTTTPDYLCCLAGEIVTLFTGVLFFFT
NIKDLFMKKCPGVNSFFIDGSFQLLYFIYSVLVLAALYLAGIEAYLAVMVFALVLGW
MNALYFTRGLKLTGTYSIMIQKILFKDLFRLLVYVLFMIGYASALVSLNPNPCPSAESC
GDHSNCTAPAYPSCRDSKTFSTFLDLFKLTIGMGDLEMIENAKYPGVFVILLVTYIIL
FVLLNMLIALMGETVGQVSKEKQIWKLQWATTILDIERSFPVFRRAFRSGEMVTV
GKSLDGAPDRRWCFRVDEVNWSHWNQNLGIISEDPGKNDTYQYYGFSHTVGRLLRD
RWSTVPRVVELNKNSQPDEVVVPLDSMCSAGANAHKPSYPHSWRKEDAQI-----

>TRPV4_Takydromus_tachydromoides

MANLEDAAHASPSESTESPSEELSPQNDSFPLSSLANLFENEDGAPAAEAARTPPGAG
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DNKRRRKKALEKKPPSTKGPAPHPPIPKVFNRPILFDIVSRGSTADLDGLLPFLTHK
KRLTDEEFREPSTGKTCLPKALLNLNNGKNDTIPFLLDIAEKTGSTREFINSPFRDVY
RGQTAHIAIERRCKHYVELLVEKGADVHAQARGRFFQPKDEGGYFYFGELPLSLAAC
TNQPHIVHYLTENAHKQADLRRQDSRGNTVLHALVAIADNTRENTKFTVTKMYDILLI
KCAKLPDNTNLEALLNNDGLSPLMMAAKTGKIGAFQHIIRREIKDEEDARHLSRKFKD
WAYGPVYSSLYDLSSLDTCGEEEDSVLEILVYNSKMNENRHEMLAVEPINELLRDKWRKF
GAVSFYISVVSYLECAMIIFTMVAYYRPLEGTPPYPTTTTDDYLRLAGEIVTLFTGVLFFF
TNIKDLFMKKCPGVNSFFIDGSFQLLYFIYSVLVLAALYLTGIEAYLAVMVFALVLG
WMNALYFTRGLKLTGTYSIMIQKILFEDLFRLLVYVLFMIGYASALVSLNPNPCPSSEAC
SEERSNCTAPAYPSCRDSKTFSNFLDLFKLTIGMGDLEMIESAKYPGVFVILLVTYIIL
FVLLNMLIALMGETVGQVSKEKQIWKLQWATTILDIERFFPVFRKAFRSGEMVTV
GKSLDGTPDRRWCFRVDEVNWFHWNQNLGIINEDPGKNDTYQYYGFSHTVGRLLRD
RWSTVPRVVELNKNLQPDEVVVPLDSMRSPAANEHKPSYPQSWRKEDSHI-----

>TRPV4_Oreochromis_mossambicus

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APKKAPMDSLFDYGTYGNSNQQKRRRKKLPKGKTEASCDESQSSDPPKVVKVFNRSLL
FDCVSRGDPGELEGLLEYLQSNKRRLTDEEFREPYTGKTCLPKALMNLYGRQNNTIPV
LVDIAEKNGSLREFINTPFRDVYYRGQTALHIAIERRCKQYVKLLVEKGADVHAQARG
RFFQPKDEGGYFYFGELPLSLAACTNQPDIVHYLTENPHKKADVRRQDSRGNTVLHAL
VHIADNTKDNTFRFLTKMYDLLLLIKTAKLYPDCNLETVPNNDGMSPLMMAARLGKIGI
FQHIIREIKDEEVRHLSRKFKDWAYGPVYSSLYDLSSLDTCGKESSVLEILVYTSHNEN
RHEMLAVEPINELLRAKWNRFAAVTFYISVFSYLITMIIFTLVAYYQPTHGKPPYPHTT
SSDYWRLAGEIVTLASGIFFLTNIKDLFLKKCPGVKSLFIDGSFQLLYFIYSVLIVTAAL
YLSGIEAYVSMVVFALALGWMNTLYFTRGLKLTGTYSIMIQLFKDLFRLLVYVLFM
IGFASALVSLLTVCPPPGTVCNGSCPTYACRDNNTFSIFLLDLFKLTIGMGDLDMIYSA
QNPVVFLILLVITYIILTFVLLLNMIALMGETVGQVSKESKKIWKLQWATTILDIERSFP
VCLRKSFRVEMVTVGKNYDGTDDRWCFRVDEVNWCHWNQNLAIINEDPGKSETI
QANGLQQGVRALRRDRWSTVVPRAVELSKGSQSHDLAVEMEPLSPRH-----

>TRPV4_Gasterosteus_aculeatus

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ESNVVQGPKKAPMDSLFDYGTTCRNTSNQKRRRKKLPRGKTEASCDDDGQSSDPPKV
MKVFNRSLLFDAVSRADPEALEGLLEYLQSHKRLTDEEFKELSTGKTCLPKALLNLY
GGQNVTIPLLDVAEKTGNLREFINTPFRDVYYRGQTALHIAIERRCKQYVELMVEHG
ADVHAQARGRFFQPRDEGGYFYFGELPLSLAACTNQPNIVHYLTENPHKKADLRRQD
SRGNTVLHALVHIADNTKDNTFRFLTKMYDLLLVSASAKLYPDCNLETVLNNDGMSPLM
MAAKLGKIGVVFQHIIREIKDEEVRQLSRKFKDWAYGPVYSSLYDLSSLDTCGEEPSVL
EILVYNSRNENRHEMLAVEPINELLRAKWQKFAAVTFYISVVSYLITMIIFTLVAYYHP
TQGTTPPYPTTSSDYLRMAGEILTLASGIFFLTNIKDLFLKKCPGVKSLFMDGSFQLLY
FIYSVLIVVTAALYLSGIKAYVSMVVFALVLGWMNTLYFTRGLKLTGTYSIMIQLFKD
LFRLLVYVLFMIGYASALVSLTMCPPPGTECEGGCPTYPKCRDPDTFSALLDLFLK
TIGMGELDMIHGAQYPAVFLILLVITYIILTFVLLLNMIALMGETVGQVSKESKKIWKL
QWATTILDIERSFPVCLRKSFRAGEMVTVGKSWDGTDDRWCFRVDEVNWCHWNQ
NLAIINEDPGKNEVCQANGLQQGVRALRRAVDRWSTVVPRAVELSKGPRPRDLSEIEM
EPL-----