**Table S2. Amino acid sequences of chemosensory receptors of *H. rhodope* in the study.**

**ORs**

>HrhoOrco

MMTKVKTQGLVTDLMPNIRLMQIAGHFMFNYHDENAGMSFLLRKIYAGVHAFLFVIQYVCMGVNMAMYSEEVNELSANSITMLFFAHSLIKLLLFAINSKSFYRTLAIWNQSNSHPLFTESDSRYHQIALKKMRRLLYIICGVTLFSVTSWVTITFFGESVRFIVDKETNETLTEPAPRLPLKAFYPFNAMGGPMYVFAFIYQIYWLLYAMSIANLMDVLFCSWLIFACEQLMHLKAIMKPLMELSATLDTYRPNTAELFRASAEKSEKLPDPVDLDIRGIYSTQQDFGMTLRGGGGRLQTFGEPTPNNPNGLTQKQEMLVRSAIKYWVERHKHVVRLVTAIGDAYGTTLLFHMLVSTITLTLLAYQATKINGINVYMFSTVGYLLYTLGQVFHFCIFGNRVIEESSSVMEAAYSCQWYDGSEEAKTFVQIVCQQCQKAMSISGAKFFTVSLDLFASVLGAVVTYFMVLVQLK\*

>HrhoOR1

MKRPTKHIISLINSIIFLFPLNGIKLEEINSMNTSMYRFFFVLNFLCMNFDAAGEIIWFLDGLWSGKEFVMLAHIVPCLIMTFLGNIKMIFHFLNEKEVVKLIINFKELEDDKNIELANSNEQKSTENIYDREIKHLNTIIKLVKVLNSSTIIAFGLAPFILMGAKYLKTKEFVPILPLYVKYHFFDPYNMIYYGLTYIHQFWSMCICMSSVTGVDMLFCTMCVFIKIH

>HrhoOR2

MHSCRIKPIDAFETSFQWLKLTGYFIAVPNIENPTKALLHNIYRAFTVFILIVYELQHLIFIIQVFGNVEYMIDGLVVLITSLYETIKLFLVNINSRRFEYLNDILNDDMFCAYLPIDEEIMRENKEQLERLSKIIYRTIAVTGAFWLIAPFLNKMSDGHPLLAAYFPFDTNDWFGFTCANIWLTTIIVWVGYGHMSLNILLIGYYSQVKVQLRIIRHHLEHIADDHVNSTEANKYTNYLDTVCCDVEKEFIVLLQRYEKVVRFYQEVELLLDRAMLVQFCGSTGIICAVVYKMTDIPINTTFLYLALYLAGLLLELFIYCYYGTL

>HrhoOR3

MVSKKVSSLVKELEDPNHPLLGPNIKAFYFFGFLQSYHTIQNICYKAWYTIGFFYVVTQWIELWLLKGDLNKALENLSISTLAIMSTTKGVTTVIWQKYWKELLENISTEEKKQINKKDNTTMKLMKNYKNYSRIITYFYWFLVSATVSMVITSPFLRYMYLKSRINDQNNSTISYPEIASSWYPFDKTNILIHSMKCFLDAIMLGQGATVIATYDSTVIVIMIFLKGQMRILQENCKKMFQEKQISNHVVINRIKNCYEHHQFLVRQHNLLNSLLSPIMFMYVLLCSIMICCSVYQLTLEEATTYQRLWFVEYTIAIVFQLFLYCWHSNEVAVESDLLDRGLYESDWWKSDINIRPIFILLAGKLNRIFVLEAGPFTTLSVATFIKIMKGAYSFYTLFTQMQK\*

>HrhoOR4

MGLTKIQQENKYHSIIMFVYICGLPHFWYKDVDWSPRKKNLLKFASKFINHIGNLFFITELLAYFTQKELDEQQFSFWFGCAFTHTMCISAIFSLVYHKKNIESLITRMIVTIPNIHHDEEVSEKMIKKCFLYVLTSISTLNLTVLFHGVKASKEYMNGGIFLPVITFWPKTSDLSTAATIGRFVAYIMWWIWVARVSGILTTAIILTICSSHLFNHLQTYFKKMSTIFEENLTIDQKQQKYEASMKVAFKMHHDILNHIEVLIDVCNVTYGGQILMNVSILTIMMFQLASLEHFSIVEILPHIMIMITVLTVTACYMWSLGDVTIESAELSNAIYMSGWENCQNDYSIKMRRLVMIAMTQTQKPLETKTLGLIPVSHESYVSIVKASYSIFSLIFYNNT\*

>HrhoOR5a

MCTKASKGVRAAVVRLRVCGFYRLGAGAVAAEAHMAYRALMLILTAIYLLQEVVYAVCERYDMDKLARVMFLLLCHFTSIVKQIVFFVDADRIDNLITLLDEPIFSRGPATLEAAALGAERLGRAYSGTAAVTCMLWTVFPVLNFLQGHHVEFPIWTGSINYNSNSLALLCFTFLYQLRYSLLTFSLLLIEIGGANTNINRMITKSKITYLPISRSYFCYVI\*

>HrhoOR5b

MDAFLGTLLHQAKTQLSILRGNYENITERAKIVAQLTKEDYDKVLKRLFVDCLTHFKKVSELLELLQSIFSSAIVVQFTIGGWILCMAAYKIIELNVLSIEFTSMVLFILCILTELFIYCYYGNEVTLESERVAGSVYAAQWVPAPAWFRRALLAALVRARRPLRPLAGRVLPLSLNTFLKILKSSYSFYAVLRQTKNQV\*

>HrhoOR6

MRNKIVSYLENEEHPLLGPTLWGLRAWGLYPPINSNWYTIISCSVHLAAIAFVVTQYIELWLIRFNLNLAMRNLSITMLSSICVIKAGTFVLWREDWMKIINFVSSLEKTQLSETYAIKNNIISRYTKYSRCVTYIYWGLVTATVFTVVMAPLAIFLSSPSTNELMRNGTIPYPEIMSSWTPFDRTRGYGYWACVVEHMLICFYGGGIVANYDSNAVVLMSFFAGQLKLLSANCTMLFGDENEVVSYNEALRRIRDCHYHHVQLVKYAKILNSLLSPVLFLYVIICSLMICASAIQLTTEGTTSMQRIWIAEYLMALIAQLFLYCWHGNEVLFMSEKVDDGIYTSTWYLQNNVLRRNVLLLRGQLRKRIIFTAGPFTTLTIAAFVGILKGSYSYYTILNKRDD\*

>HrhoOR7

KMLTKTSVKKEFLCDMAFLTTIGSKIFLYPFEGRTGYKIIGYTTVCCLIYITIAQLFLTLFVTGFHDLIDISNIAPNIGVCILTVIKYTKIYTHRKLYHAIITHYQKYMWSIIQMNDIKNLKTIVKYKSVSYFINKILYYYSLPLIIIIVSLPLIVMFYNKKFNDNEFEYLYPFDGWYPFDKVIWFYFIYAWESFMTALVIYTFAFSDMINMSCVAYMCMELSVLSNLLTNLITNEDIEDLKKFKNIFKIHQRIRRSLKIIIKRHQFLNKLAQGLDLALEDVSLINYIFGSVFICLTAFTFTFIDDLYKKIRYFFFFISLNFVILNQSIIGQILSDHSVKLTNAIYSSNWIYADRTTKTTLLYLMMKTQIPFTLTAKGYISMNLNTMTQVTSTSYQYYNLLRCIYHS\*

>HrhoOR8

YWPSSNDNSISGDAFRVTTTIVLCILMVTMLSIDCSTMIYLIMYKYKFITLRNFFENLREEFDKNVKENEIVATNLLTDGVIKGIVMHEELLSLSQDIDKAFGTVMACQVCQSSGSAVSLLLQIALADHLTLAGGMKIIFFVAALFFLLALFLCNAGEITYQASLMSDAIFYCGWHASLPQPPQHRDLRRLVSFACARAQRPLVMKAFKMLELTYATFILVLRSTYSVFALFYAQNK\*

>HrhoOR9

MVVFAGFTVILFVSITYSIFYTCSIFTRMHFTILKSDFEGIINIKKPFDVQKFNKNFVSLFKRHRLLIQIVDLLELVYNKAILANFISGSILICLCGFNAMEMNNKVAVVPYAFFLMMCLMQMFFLCLCGDMISRAVT\*

>HrhoOR10

MLHDRRPLNYFGLHFWLLRFLGIGWWHDPFSEDKRNFPSWYLYYSILMQIVWVAGFVGLETIDPFVGDRDLTQFMFSLAFVVTHDLTIFKLFIFYIKNKDIKDVVRTLEVDLYDYYQQDEKIFATIKKTKILTGAFLFFGWIIIGNTNVHGAIVDIQWKAEVAMLNNSSTKPPRTLPLPIFIPWSYQNDTSYIFTFIFETIGLFWTGHIVMTIDSFIGTLILHMSNQFIMLQDAYRSAYDRTVNRMLQKHNFNDNIDAEIEINKHFLEADKKELIVRKIYTAEHFNSELEKTLKSCYKQHQILIECVQKFATTYSYGFMIQLLSSVTAICALMVQISHDASSLTSSRLVTSLAFFVVMIIQLAIQCFTGNELTYQAGLVSEAVMECKWEHMPVRLGRMLVLCCARAQRPLRLTAAGFTHINIDCFLSIMKAAYSYYAVLSQKQYSN\*

>HrhoOR11

MLACAMDVLEKFTNDYKNTFIRYIKMINFIGLDFYLETGESLFKSRKRYYLFLICFIIFFLCQITFIFRSHKTDAKFLDIANAVPCLVLVIQDFVKLLAITTKRKEIKNVIFKINDEWPKEKNYGERSNIIENWTKRNKSFQNVYYGISLFCLCIYELIPLVATLYNRVMGLDTEYFFPFELYYPYKVDSFFVYLVTYFCQAFASSSLHACIYIASDLLITSLLSDVTALFALLQYDLENVTSQLKQTSINQDEEQYNCAVKNIVNRHQRLLGIIKELNGIYGVVIFIFITSSSIICCFFCFLTVVQNGLQSVKNLLAGGAMLGAILVVAFPGQQHYDMSFGVAYAAYCSLWYERNEKFKNLILILIVRSQRASCLSALGFSDVTLATFSKVSF\*

>HrhoOR12

MFFLTSAITTCTLWAMIPLFDDAGSRSFPFKIWMPVDPQKSPHYEVGYVYQMITIYISACLFIGVDSTTLSMIMFGCAQIEIIMEKVRQLQPLSNIKLKPYKRKQQIEEKNALFIECIKHHQEVVKYIEKVEDTYHANIFFQLSGTVAIVCIVGLRISIVDKSSVQFYSMVNYMVTMLSQLFLYCWCGNELTIRSQDLREVIYQTPWYDFDRKFCRLLWVAMERMKRPIIFKAGHYIALSRPTFVSILRSSYSYFAVLNQANK\*

>HrhoOR13

MASVKSHWLFAPSKDFFEFNLKYLTYLGLWPKEDWSKPQRFLFEIYSMTLSVFEGVFLILTSIGTYNCKNDITALLTNLDKILVVYNFVMKALIFFIKRKQIKILIDEIKHSKDEITMSRNRMMSVHVVVISVLVISIVSAFSLLATYKQEMTIEAWMAFDPLIDKKHLILASLILAVLFVPCACRAMAIQGIVCSILMYLCDQLIELQIRIRALDYRPETHKQMRVDFNEVIKKHVRLIGRFFRYSNTLRAIFKEYFLFQNLAVTVELCFNAMMVTMVGFKEKTLLLTFFAYLSVALLNSYIYCFLADELIVQSQGIALAAYESQWTTWPVELQKDILIIILVAQRPLTLSAGGMATMSIQTFGQTLYNGYSIFAVLSDVVD\*

>HrhoOR14

HKVLLKRQHLTMPKNDLTFANNFKLTTFALKVTRCHPDIIRNKFWIFQMLLIIIMNTTVAWILLNSVVFHDIKSGDFAEVSKNVAMFIICVTISFKLYIIVRECKFLIETMNNMNQDYRDSPENERNIIIKYTKRGAAVSKFWLAAASATSCIYPAKAAVAMVHAYLNGEFHLVPMFDVAFPENLNEKKHNLEISLPFFTLCLTFALYAMTVYVCFDPLAPIFMLHVCGQIEIINTKIAQVFCNKDLTRENFKTIVIKLQELYKFIRCIEKKFTIVYEFVMKTTTILLPLSAFQIVQSVQRREVNLEFISFFSAAMLHFWLPCYYSNQLMEKGEELRSAIYSCKWECSNDLLARKMVLLMLVRATNPLVISSVFYTIKLETFTQMCRDAYAIFSIMNAAWS\*

>HrhoOR15

MDKPMLVQFCGSTGIVCAVVYKMTGIPFNTTFIYLALYLGCLLLELYIYCYYGTLLMNESLLVNDSIYLSNWTSLSPRFRRIILIAMTRWSRPMTPTAAGLVSISLKTFVSVLRLSYSIYTIIKS\*

>HrhoOR16

MNDPIKSKYILRKITTFAYISGIPYLWYEELGWPKQLTNFHDKITNILTVLLCIFMSLEILALFTQKNMNNQQSSDALKYAISQPIFFMNFFSFVYYKEEVRILFYNLTNSMSTYHRDEEVERKLVKKIKFYVSAFISVAIAASMSAGLDGLWRVLEKDDTFTTVITAWPDVDDRSLAAGIGRIIAFIMWCIHTVRFVGGVTIVVALTVCVCHQYKYLQSYFYSLDKIFEINCSQSVKEEEYEKGLLIGVKLHNNIIRYTQDLCNVCNIAYGGQIVVNVTVLVILMVQMQNGNRQFMLVLTCAIMVSALLVLNGFYMWNLGDITVEASEVCTAMYMSGWENCTRRSSVRVRKILMVAMTQAQKEVTIKTLMILQVSYASYVSIVKFSYSVFSLIY\*

>HrhoOR17

SLFDHKGSTRFTYTTLSVFVPRTNVRMESLGRIDCFKFNINFWKFLGVWPETKSCYYAFYSKIFTFAFTFLYVILPTVNLAYIPPVMDIFVEEMMFYFTEVIGLFKVLTMLLTHEKIVNILKVLQSDLFHPESSESVEIINKAKIFIVKYWKFIATVSVTSNLTHVLSPLIVHLLLSVELQLPLCNYFFLPKNIKDTFIYPLYLYQCFGIHMQMWYNVNFDSFILGLMILVIAQLEILDLKLRTITDRCAKLYIKRKQNDTEVLTKLNQALQHYNELGRFCNLIQDVFSIALFMQFGIASCIICVCLFRFTLPAPWQYYIFLGTYILVMIFQILIPCWFGTRIIEKSQLLKFSVYSCDWTCQSRIFRSSLKIFSERANRPITLIAGKMFALSLGTFTSIMNSAYSFFTLLRHMQTRDDMD\*

>HrhoOR18

MAHVNNEDMYLNRAKFVMKILGVWMPLENETRFKKIYRTAMMFLQYIFLIFQTIFIFQVWGDLEAVSEASYLLFTQACLCFKITVFQIKIPMLRDLLKQMNADIFRPQTLEHINILILQATRIKRFLLAFMVSSQITCGMWALKPLFDNAGKREFPFDMWMPVSSEYSPQYELGYGFQLITICMSAYMYFGVDSVALSMVIFGCAQIDIVKAKILSIKSISNSVGTTKEHTRRIRKENYNKIIECITQHQAVLKFIQMTENTYHAYLFFQLTGSVGLICMSALRLVVVKFPSIHFFSIVFYVSVMISQLFICCWCGHELTATSEELFATLYQCLWYEQDFKFKRDLRFMMMCVRRPVVLKVGNYITLSRQTFVSILRMSYSYFAVLNSTEK\*

>HrhoOR19

LDRRHDAMPLLKKIKTYFDKEGFDYSKNYINPYEFHSTFYFFMKYFKVIDDEPAPKWANVVQVLIGAVGFTNLCLSILMCAINSVKPFTLPKFIEGGTYIIVVFYGISIHLCSIFNKSGYHCLLRMLRQDFDFICTRGQTYRKKFFENHLIIWKLSIVSIIFTQSIAIGMIAFSIILLSYYMATHEPGDGTSRPLLIPFWIFNLDLNKSPIYEILFNYSHLAQLCYGFTYVFLVQTQIVWIKHIETKADIVIWLLNDLFDNLTYPNTEEEKKVCDTEIKNRMCFIIRQHQSVYTLLESYAAVYRKLLMFEQKLCGPVVCFASYCIVLQLEAGEFNGVLLLLCIGALTLTYIPCYLCTTLSEKIMSVSDECMNIPFWNANPKIIRPYLVLMIRRSLRPLPLKVPGFQPHTLQTFSKSMVSAYSLFNMLRQANVQ\*

>HrhoOR20

LLDNFNKDFIFICSLGTSYRTSFLNSQLIVWKLFIIWITFCITISCAFVLNTVVYLMYQTLFMTITEDTVRPLIFPLWLPTGDDPYRSPNYEMFFVFEILGTALIPTAFAVYTYNLFHLLLHVYNLMDVMIKAISELFLGLNPDVADLPARNPERQITQAILKTKIKQIVKWHKSVYKYMSTISSIYGPVLVYQVMFSAIAICVMAIQIANALDKGKIDFLFCMLESAALLQLWITCYIGTMIRNKAFAVGDACYNSGWENSKFGCWLRSDIVLIIMRSQIPVSIKFPLLPQIELETFSSITSTSYSYFNMLRRAT\*

>HrhoOR21

MKRLKHKHIITSINSIRFLFELNGLKLEDTNSSDNLKYRIIYAFNFTWLNFDGIGELIWFCDGIWSSEHFVKLAAMFPCVIMCFLSNIKMILHNLNEKKVADLINSFKELEDDEFINDTDADDRSKEKIYEEEMKYLEKIVKIVKVLNVVTVIAFGIAPFLLMGAHYLETKEFMPVLPFYVKYYLFDPYNMKYYGLLYLHQFWSMCICLIGILGVDMLFCTMCVFIKIHFKLLEYDFERFIPIHTTPHGCLRENETITRRFKWLVKKHQKVISCSNLLNRIHSNEFMMNFFTSSFLICLSAFIITVVEEMRFRISFLSFLVTSLQQLFLLCFFGDMVMTCSINLSGSIYSSLWHSVKCNIGKQLSYALQRSQKPCKITAGGFIDVNLIVFTQIIGKTWTLFALLRTIFNP\*

>HrhoOR22

MLNDEGSFDVNEKFKPFHETYKIFTYIMTMGLIYPNPKTEKIRLKLILFAILFVSPLLFLIGYDVYKCCLRHDIVNIIRHSTVAGPIVFILLKIMSFYYNRDLVKELIDEINRDHVRYNKLPTKYQDIVEKSLRYHKTTEKRWVACVSISSFLFVIMATVFTIYSQIFDAEPMKYMIHEIDAPTIESIIGWPYYEIMFVYESYVSIYFVLNFSGFDGFFGVVINHACLKIKIFCNAFSDALKESNEDEIMRLIHEIIRDQCKMFSFVNTILAVFSSWFVCILIVALALICNCMYLVIQGHGFDIRYIVFTIATIIHIFMPCWYASKLKSMSQESSTMAYFSGWEDVPIPRVRRTLMFFMARGQVPLQIEALNIIKFDMELFVSIMRTSYTMLTLLQSSS\*

>HrhoOR23

MKNSECLSASIAILKVTGVWWSDSMVYKIIGSLIQLFLYVFTVLAEIAYVLMVLGDTERTVDAAVLLLSHLVQGVKVATVWFRQRRIKGLIKLIDGPNFEKTDLMKAKMIESFGALLKLSGHLFLSTAAVTALFWVIVPMLKSEITLPLKTAYPFDINDPGSFTLMYGYTTISVVLVGVGDAAENYLLAALLILPTIHLEILCQELQELDHGDDIYERTVSCIKYHQHIIEYANEVASVFGIIMFCQFVTSSVIICMTLFKITITTEPIEMITMVFYLVCVCLELFLYCYAGDLLMNKSLLVSEASFPGKWLKDTRSCRALLMTTVRAQRPLIVKAGGVFTVSLPTAAAIMQTAYSYYAVLQQKTKEHN\*

>HrhoOR24

MSSSRRQDDPQNTSSIIISIIMQSIQFIGVWSSVGYKRSIANFATICFILTIGAQVINLVLERNDSEKMMEAFSVFSVCLMGLLKYISLRRNSTAWQYLLSRVSQIENEKMNENNDNLLDYETDDDNKETVPSVKHVYTYNDKAKFISTVLTRFYTLTVFMFVSTPIFEYFWKTYKNHEPMKLPHILPGWTPQDDFHFCAYFITVACEAIAAVYCVRIHVTFDVTFVTLMIFSCGQFNYLWVKSERIGGSGNNCQLSIKRDKRANFRIMQCHKSHIMLVDLVTRLNKLLKIILGVYFTVITLTLCTVAVRLRASDKLGLVKLILLLQYMATNLMQLYLYCRYGDALLNQSSINMGEGPFGAAWWALSPPTRRHLSLLAAGMSRQQYMSSGIYIDNLPAFLQVT\*

>HrhoOR25

LTTLNKMTIFIRNVNLSISVSLTVLKLVGFWAPNDIKNNFNIIYYLYAIVTFMILLGIYLIIQVVDMFLIWGDLPLMTGTAFLLFTNLAQAIKILNLVWKRQRVEEIIFNANQLLRDQRTEEGKNIVKKCDRETTLQQLLYFCLTTITVAGWAGSAEKNKLPLRAWYPYDTSKSPAYEITYVHQVGALFVAAYLNVGKDTLVTALIAQCRCRLKLVGLALRNLNEELKADDKHIFNAEQQFVVRRRLNRCVVQHQSALEATVQLQDCFSVPTFAQFTVSMVIICVTAFQLASQTGNLVRVFSMGTYLLNMTFQVFLYCYQGNQLSEESMEIAGAAYESPWYTFSSSTRRSILVLMSRSRRPARLKAGGFTTLSLASYMAIIKASYSFFTVLQQVDENK\*

>HrhoOR26

MDDINSDKIPNYTHYIILPLKLVGCWDWYKNPEKEYQIIINNGYYALVLFVLMNLQWSLTVNLYTEWTTIMDNLEKLADSLPLLVSLAIIIHLASNKKKMYELVDFMNNNFKYHSARGLTNMTMRESYTTAKKFGYVYTACTLFSITVYVCMPLLSYAWTKQPLQYWVYVDVSSVSDFVIVFIRQCVGQIFVGLAVGQLGVFFASNAILICGQLDLLCCSLRNARYTALLQNDVHHRDIVADHGDIVNDEKHSYVYNKAVLQDSDYHYDEKMKPTLSRTDFDIYDAEFDVATITAYRECAKMSQVILQYKRDFELLVSPLLVLRVVQVTLYLCTLLYAASLKFDMVTVEYLAAVALDIYIYCYYGNQIIIQADRVTCAAYQSAWPAAGARARGLLLRVLAAHCPRRPVAVRAGGFLTMDLHTFVVIIKTSFSYYTLLVNVNEK\*

>HrhoOR27

MYKWLALIPLFNGAICICIVLVVISKEIDWHFVTHILPLFGEIFVYSYFGEQIKTKAKNIELALLSFDWCNMNKEDKINYIIVFTYMQKQFGIEVASNKDLCMVTLTAVLKLTYQAYTVVQSIDF\*

>HrhoOR28

CVFIKIHFKLLQNEFERFIPTQTKSRCYLTENETIKKRFKRLVKKHKKVISCAKLLDKIHSNELMLNFVTSSFLLCFSAFTMSIAEDVRFRISFLTFLLAGLEQLYLLCYFGDMVMT

>HrhoOR29

ETLQTFHSILSFAGIPIYAKTNWDSKIRLTHQIFNVFIGFLTFIFTTVFVIINYSDLLLCIQGACIWTTGIIMFISLGVCLIFRRKFRMFLTEMGFKDTMLEMPLVAHVMSLELEDGQKLKELKLKVTESQERLLKLTRDLLKLYVASVWLCATLYICSPIYFMITGEEKSPRLLAFDMWFPWSFDNLNVYVASFVFHAYAGYLCCIAYPGLQLTISLLVGQIVRQLKITSFIMFHLEEIATELSKGRLGNKQMYCTNILTQCVDHYIKMKRFSNNLNVICQPFYLALILVATMLVCVCSVKIAISDKLSLDTMKYYVHESCFILVVYMFCLLGQQVDNECENLERAVTEKWYKFNKTHKINVKIFKMAVNQRMPIYIFGSMKLSLPTFTWFIRNGMSFFTLVMSVLED\*

>HrhoOR30

MELDFERIYKLSVNLLKFNRFYPFYKIDMKWIVQVLFLYSISLLIFLALMQSSVYYIKINELSDVCDNGVFSLAFLGLTFMYGTVIWHKNDLIYLIESVQKDYDESKDLSQTEINFILDYIEKGKRVVHLWAFVSIFNVFFIPSRILVVMVSEGKYNLVDVLDSFHPNILEKSTSDIWIFFLELLIRLYYSIYANIMYVGFSPLGPIFMAHACGQLEIVMTRIKSIFTERNYDEREAKIKLIDVVQRMQRIYRFVDSINNTCELYYQITLNSTSLMLPLIVYMVIKDFQMDKVFQYITFIFGSFLMTFIPCSYSTLLLAKGDEMRESIYMSGWERHLDRDARATIIIVLTRASRPISIHTLFKTINLDAFTDVNIDFFINQSATIFIPDHRPLATPS\*

>HrhoOR31

MKIMNNNMNGKLAFLLPFLPLSDSETWDKLDPKLYHGVHIYWLKIYGLWYYSFSPKTFKFWLQLAYTAIVLWLVCFLPGIGEIVYLLKRRDNIGDVAGGLYLFLSEMYTYFKLAVFWLNKQKITRLLQYLYCDEFKPKELEHKDIILKSIKRARFVMSAYSTMCVCAVSVGIVMPLTENFDVLPTNVEYDQFDVYKSPAYGILYSHHIYYKPATCIIDGVMDTILAAFVASAIGQIEILSFNLRNFDKLAYRLRTRAIIAKENLYPDQYYIQVTMKECIKHHNSIIRYVSMIEEAFSLASALQFMLSVMVLCLVGIQFLSIEDPRSHLMQIVWMAIYLWCMLVEVFILCWFGDELIWKSQSVRQAAFEGPWLNVDVKTAKYIIIFLERSKRPLRVTAGKIFTLSLDTYTILINWAYKAFAVMSNMKK\*

>HrhoOR32

MENKIKPLDAFKMLFRTLTFTAYFMPVPDIENPVKKKWHRYYRIATVIILLIYDLQHITFVILVFGDVDRMIEGLSVLLTILNVTYKLITVNLNEKRFNKLHNVLEDDIFSAKCPKHEELMTKNKEELDGISKTINRTVTVIAVCWLLTPFLKKLSDEEVILPAYFPFPTDDWISFSCASIWITFVIIWVGYGHMTLNILIVGYYSQVKVQLSIVRYSLEHLADDDEGIPHEVFTCRNHGYKDNQSKLYQEKLVALIKRYDKAVWFSKEMESIMNKALLVQFSGSTGIVCTVVYKMTGVSNQYIIKNL\*

>HrhoOR33

MVVALFCFMPITLMAVDYYKNGKYKVNFPFLVKYFFDPFTEIWPYVYFHQVVSTFIVWVNVYGPDTFFYAFCVYVQMHFRILSQRLRKLFYKPNLLVEDKEKLIKLLKRHQELIQLVKDFETLYTSSNLWNMVISSILICLSAFNATTNPDAKAVLTFICFLFMSLSQISILCFFGDMIVNSSALVAEAAYSCGWYNVDADVKKSLLIVIMRAHTPCKLTAANFAVLNLRAFAMIISKSWSYFALLKTLYK\*

>HrhoOR34

KEVAEMISRFLETFEDPKRPLLAPNYWILNKVGLLLPDSKLGKFFFIIIHEIATLFVLTQYIELYVIRSDFDLVLTNLRISMLSTVCIVKSNTLLLNQSKWKQIIDYVTTADIFERENRVPDKKNMLDSCTKYCRSVTYFYWVLVFSTVMTTTSTPLVRVMSSLSYRDELRNGTELFPHIFSSWMPFDKYHSPGLWITVGWHIIICVYGATILGAYDTTVIVMMEFFGIKLELLRARCQMMFGKDESGISDDKATKIIQQLHTIHVKLLEHSRLLNSILSPVMFVYVIICAFMLCTSAYQLTTATSTTQKVFMAEYLIFGIAQLFMFCWHSNKFLVKSQEGMFGPYESNWWAAGIKQKKLILMLTEQLKLVHIFSAGPFTNLTVSTFLGILKGAYSYYTLLRK\*

>HrhoOR35

MMCNVSTDSFMAGIVTILIAQTKVLNYKLQNLKVRNENFVEETHVQHKIFTVILKKYLKHYGLIMECYIKIQEILSLAMFVQFTMASAIICVTLCGLYLGPTMETLIFLVTYLIIIILQIFIPSWLGTQFSHECNKLAVAAYNCDWISQSEDFKKSLNLFILKANATVILKGLKIFPLSLETFVSIMKTAYSFFALVQNVQAR\*

>HrhoOR36

MTLQYDMAKIKKKETETKFKSFHETYSMCAFALAIGLMYPNSENRRKRLIYMIIFTTANVPQLYWLTINTLQTLKDSDFYNFSRHITISVVVLLFLFKTVYAIIMCDMYKKLLNQITDDMNKGNELDDSYKAIYKQYIKEAKFGQICWVFIPIAMSFQFPAYAAICTIYESIISDVGPKCMIHNLDLSFMGDQYNISPYFEIMFVYNAIQTIALVPNFTGFDGSFCIVTSHLRLNLKLLSHKLKRIFEDSKSNLELRKNIKTCVIEHQEILRFYDAIQVFYAPWLMTVFLLTSVLISFNLYRMHLDQKIDLKYSFFALSGVIHMLAPCYFSSKLIEAGEEVAIEMYSVKWQRWNDNKVTKVLIFMIARAQKEFVLVGAGIILFNMNLFLSLMRTSYSVFTLLCTR\*

>HrhoOR37

MFDSIRNYIAYFKNRIKDNNFDSLLWIVNGAPSIVGFNLRKDKIWAPFFVIHMSLLTYVYGVGNVMYQVKYAKNTGDFIESYVNITIMILAAVSGYWFIVYRPPLRVILNLAEENDRLSKTSPIVKKKREKLLATIKIIVFIFYGCNLTNATFVYLPHRVDILSHYAMQPCVGLEPLTSSPNREICLTILCAQELSIMTVVLNYQALWLVLVAHTAVMYQVLSEEMLIVNTDEEILEDKLLSFIHRHNVILDITHRLKEIYSMPIGMNLGVNAICMCLFFFMPLSDWFKFMPILVYCFVVFFLNCFLCQRLINASEEFERAVYGCGWENFDVIKKKWVYIMLMNSQKPAQLLAADIIPVNIATFATTMQSMYKFITVFKL\*

>HrhoOR38

MENTNSPERSVIQYVRSSRAFRQFKNPPQPHMCIQDTLKDTTEKMFINVLGWQKIANPKQYSDPIPLYGGMQVPQGCGPNSNKPPLLVFAVMVNPDILKANGKNATNPTDRDALVNLLCDFVEAMNPGLALARKPVILRDRDLAGELKDVWLAVQKKRDKEKEGNQEVMYKVYDIDGVGNDEVNDDERQANLRYNQGDGGSPTKVQNNRKNAVKSSKQILMNAGQKSEFDLGMNNCQLNQNHSNRDNKCATDTTYCTPVYEQIVSYSENHNQINDIQEKFTKHDANASTSFTAEWDALHGKPSDGWEDFSKRNINSIKSNEADTRQRCSKTENGKLVNKTQYNFFPVFNKTEADSSIDNVSNEQNLRIEEKAKIILDPMQKLVLHSTDNKICDNNSSALSSLSS\*

>HrhoOR39

MSSLSSHRAIKLFRRMCCYAYVTGLPNFWYEKPNWSIHVGKFHDFISHVTDVINCVFYLGQFFSFFTQKNLNERQETDQIIFTTINPCIYWAPIAMNYYKEQVRDLIRNLVLVLPSVYNDREVERKMVKKSCLYVSLLLSTANATLLLYGIDSFIKVLKGAVFTTVITAWPSVEDRSRIAGIGRAAVFIIWTQFMFRSCGAISLIISLTINTSHQYIQLQSYFRNLSNIFQENLIQEEMETKYEEHLKIGIQQHIKILSYTKKLKQACILVYGGQIFTNMVILVMTMMVMMGDDLSLTKLMTFMTLAISSTVTNGFYMCTIGDITVEVQRYGSQ\*

>HrhoOR40

MTVWPDLKDESFKAGAFRIATYIAWWILMFRLSGAIVLVMSLMTYTSYQFKQLQSYFITLANIFQQDLSQLEKERKYEEALKIGIKLHVDVISVTRKLVTTCNVSYGGEIIVNVIVIATIMIRLANEDRNLTNILASVQIALTVLGITGFYMWTLGDITLEAD

>HrhoOR41

MTGAKNVKNRVEAWNVNKRQNRINCANANPVHSEATFQEALRATLIIGQIFSLIPVDRVSSKNTANVKFSWTSWKCFYLVLSLGGQVFMTAMCLNKLFDRDTSLKATTSVIFYTMTTVTMLMFFQIARNWPCLVQQIANTEQMDPNFDRNLTFKCNITCAIVLTLALTEHILSLLSAFAGALTCYPNMSLYEGFVKYFYPWVFNFLPYTVPLGILTQFFHFQSTFIWNFSDLFVINMSYYLTSRLQQINNKLLSVQGKYLPESFWRVTREDYSRATQLVRRVDDVISGIVFISFANNLFFICLQLFNTLEDGIQRTEACRRRLGRTGPLGGHEAETYFLFSLGYLIARSVAVSLIASQINMAASVPAPVLYDVPSPVYCIEVQRFVDQVNGGSVALSGLQFFNVTRGLLLSVAGTIVTYELVMFQFNSSGNSNSTEVAANATIS\*

>HrhoOR42

MFIDGELKDGSEQLEQLNKKKKTKSNAKGTNQQEAPKSMLVSLFVPFENSMPESVEYMECDGSIHFSGVVSSSVFMYPKATVNEAIASVKQDIVRSLASRFTMHCDALIDDNLLPEEKVCFNEPPRRVLVPVGALHLCDYLFPGEAPAEALLSVRELLDLHITEADVVCDIETPADTSEFDALDRDTSSEELLASPQEASQFMYITGICFAMLVLFISIIIHYYDGITKFISGMFSKAT\*

>HrhoOR43

MPRSQSIRNTEWFNVTFILMAAVGIWEPPCSENKIIVKYLYLIYRLIFLSLFAFAIISMQLFLFFLVLGDMDALIEASVLFFCNIIHGIKMITIIIQRKRIKSLLTIVDDDVDNHKVYENLGKRAGFMSNMFYLNVAATGILWSIYPMTKSELKLPYSCPLISKDSYWFTYFYVY

**IRs**

>HrhoIR8a

MDFFVLFFILMIVNVIFVTSEISLRFVFILEHHDYELAEQIGNALKTVEESTPGVHLSDAVIFLNREEDGESYRKLCSSVSTGVSMIINLSWAPWPAAEDMASSSGVPIIHTALGSQQLIKALDDYLESRNASDAAYILESEKDVDKTLYELLGRSNVRVWVHAGLTRDSANVLKSMRPEPSFHVVVGNKGFIMDTYRRAVKEKLVRRKYRWNLVFTDYSGADMDWSQVTLPAMVLYINPDECCKLMKQEKCTCPPDFQRTQSMLSYLIEYIVTSYGKLEDQQFTTKLDCNAIEMGDMNVTKEKLLDFFNQDSTNNDSLFYWNIERSGLFLRSRFVLSYSDGSERLELVAKWSADEEYKLLPGVTLEPLRMFFRIGTSAAIPWTLHKMDPNGQPMVTDEGDPVYEGYCIDLIQKLSEVMEFDYEIVTPKSGSFGRKLPNGTWDGLIGDLARGETEIAVAALTMTAEREEVIDFVAPYFDQTGIIIVIRKPIRKTSLFKFMTVLRTEVWLSIIAALILTGFMLWLLDKYSPYSARNNPDAYPYPCREFTLKESFWFALTSFTPQGGGEAPKALSGRTLVAAYWLFVVLMLATFTANLAAFLTVERMQTPVSSLEQLARQSRINYTVVEGSSIHQYFINMKFAEDTLYRVWKEITLNATSDQAQYRVWDYPIREQYGHILLAINASGPVPDARTGFRQVEEHLDADFAFIHDSAEIKYEVTKNCNLTEVGEVFAEQPYAIAVQQGSRLQEDLTRALLDLQKERFFEQLNSKYWNESLRQSCPDADESEGITLESLGGVFIATLFGLGLSMITLAWEVFYYKRKQKTNVHDTTTSEKPRPAFVKKGKLRRRKKTVTIGDSFKPAVDVSHITVYPKGYVP\*

>HrhoIR21a

MFWYVFGTFTNCFTFVGKNSWGKTTKNTTRLLIGWYWVFTIIITSCYTGSIIAFVTLPIFPATVDSIKQLLSGFYRIGTLDRGGWERWFINSSDPDTNKLFKKIELVSTIQAGIKNTTKAFFFPYAFLGSQAELEYIVQANYTKTRSKRAVLHISNECFVPFGVALSFPNNSIYTSRFSNDIRRVLQSGILKKIVSDVKWEMQRSSSGKLLSVGSAILKSTSIEEKGLTLEDTQGMFLLLGAGFLIAAGALLSEWMGGISRRCCVIKKKATSANSSRNLMTPFNTENEVKDDTDGFDLERKSDLDSNNSSADSRKTLDGHIIKLTENSITVHENFNSNDWNCRRSSSVDIDQEVKEIFEKDISRRRKAFDDRSSLQDGRLTTASKGKFGEYIP\*

>HrhoIR76b

MVANGRAVFRSFTSDRDFLPTVKAGAVLVKEQTAVDHLMYFDYLTKVREGVVEEERCTYVVAPNAFMKRTRAFAFPMNTNLTTLFDPILTYLLQSGIVDFLEHRDLPTTKICPLDLQSKDRRLRNSDLMMTYMIMGVGLASAIAVFIIEMILKRYAVKHKLKPLKKFNSKTFTFKDDSMPPPYDSLFGKNSKYRGSKRTVVNGREYWETKMKDGTTRLIPLRTPSALLYQ\*

>HrhoIR41a

MLTSKMLSIPIEILLKIILQKYFINSYCITVVSEDSIQLKTSIPFIYAIPNDNFVDLLLNSSDIGCSDYIVNMKNPQEFMKAFEKVTHLGLLRKSDRKILILTHSKSYNAQDKDAILKVLSMNETRFVANILLVIQADVNEKCYIYDLITHQYVGKDDVRKPIYLNQWNSCTGFTNNVSLFPHYNMSDLYGKTLKLACFNYEPYSLLDLDTSVDPLGRDGMEVRVMDEFCRWVNCTIELVRDDNQWGEIYSYENLTGVGVIGNVVKDEADVGISALYSWYEEYIALDFSTPLVRTAVTCIAPAARVLASWELPLLPFSLHMWLGLGFTFFYASMALMIAKGFNTDKMFLTTFGMMITQVRFLNSCKKSGGYHSPH\*

>HrhoIR60a

MTMVVFLFISLLINEVSLINPNGPTAVEDFTNCITSIVKVSFKNPGLLVFVDTFFIAEAVGRIKGNVLKQIHLNKKFSVRVVRPKNEYPVCVNLNEFNTGVVHQNQVDVIPLADYFVIIVDSYSEFTHAASRLIRLRNWNPHGKFLILLYSFDNIYYLKQIEYIFTCLFRYNVLNVVVLVPHIRNIRATIIYTWEPFEPPKYCGYYNETAENRIKVADFCEKGHLKNNTTLFENVVPIDMMSCVVNILAIEKQPFIGKDDNVQEANIERFLINEVLSTINMKTNYIITNKSRGERFYNEWNGALKKIVSKKFNVLLGGIFPDFDVHEDFQCSNTYLEDSYTWVVPRAHPRPPWVALTIIFHKTVWLSVLIGFTISALSWKFLSTVSGDSTYYTSIDHCLLSTWLCILGLTTHIRPKKESLRIFFVFFNIYCIIFITAYQTKLFDVLTNPSFEYQIANVEELIDSGLKFGGFEELHDLFYNSSDPFDNLIGSQWVIVENMSNAMVDVVVHRNFSVLCSRLELTYLSATMPQLSDSIGHHKYYAFKTNVFTVPIELIAMRGYALVEKFSEILEAFKQSGIVSGIRRHYVTFAERKRASIILKLQSQQNDVRALTIQHLQGGFLALVLGYVGGIIVFIVELIIKCNLVQKVLYQK\*

>HrhoIR75q.2

MKAVNLLALFIITVISCLAEADLVSIIGDLIRVMNKPSSVIATLCWPQYKQLKLYYFLHRENISHLTTIQFLKLGHEPKNYWPSQNILFLLDLNCTNVTNHLKLSNDKNLFRSPYRWFLIGIDETLNNSNSNINIKRQFKPFDIFPDSEVMIILFHYNSRNDSRYEVIDIYKTCKNSEDMKTKLYGNWDATNRFQKSLNFYKPTALQRLDLGGCEIAISYVLTNNNSIHHLYDQMDDHVDTITKVNFPTTNHLLEFLNATRKYSFTDTWGYRLNGTWNGMSGYLFRGEVEIGGSPMFVTSERISFVEYISNPTPTSSKFVFQQPKLSYGNNIFLLSFRETVWYCATALVILIFLTLFAVTFWEWKKINDGNMLDNRDPGILRPNVTDILILIVGALCQQGSPVQLKGSLGRIVLLVLFLALMFLYTSYSANIVALLQSSSSQIKTLEDLLHSRMKFGVDDTVYSRYYFSIATEPIRKAIYETKVAPRGEKPRFMSMEEGIKNMQKGLFAFHMEVGVGYKFVGKYFLEGEKCGLKEIPYLQVQDPWLAVRKNTPYKEMFKIG\*

>HrhoIR68a

MNFKSKLYKPVNADINKWGQKQSNGSFSGLIGEMVRGKADVGLGNLQYTPYHLDLMDLSIPYTSQCWTFLTPEALSDNSWKTLILPFKLYMWITVLLVLLVTGSIFYGLAKFYLNLLEFKDHSSIYDKHLDKQIVYDGAKPVGLYLFGEIINSILYTYGMLLVVSLPKLPTGWSIRLLTGWYWLYCILLVVSYRASMTAILANPAPRVTLDTLKELVESKIACGGWGTQTKIFFEESLDEIGEKIGEKFQIVNDPDEAAAKVAQGVFAYYENKHFLKYLSVKRKNSLIDTTPQDNSTANSTAVTAKKKDERNLHIMSDCVINIPISLGFQKNSPLKPLADLYLSRIVEVGLVEKWLNDAMHPIKSLDSQEEEIKALMNLKKLYGAFIALAIGYFLSTISLIGEFIHWYLIVKKDPNFDKYALDVYYANKNKRQ\*

>HrhoIR75p

MKLYNLLYILLCIPTDVACSRNVDDMLLSYITMENQPTSLLAPELCWPLHHKTSFTRLLNGVGVNVAYTMRPSRKEQYLHHITILADFSCSSASDLVLQSDEHGFFMSPYRWIFINLHQQSPNATILDKLNILIDSNVVVVQKVDDTKYVFHEVYKIAKDYQVIKNLRAVWRAVNDTEKRNEQTTSSIHVNLTPGNNSVSVNSKTNGEIEDLFYSTPLSCRRRNLRGHSLTMVNVITDSNETKNHMHDRLFLHHDSISKMSYMVVRICFEMMNASENLLFTNTWGYRDKHGNWQGLIDHLLKKKADLGTLTIFTKERTEHIDYIAMVGSTAVRFVFREPPLAYVSNIFTLPFSGAVWFAILICVLGCALFLYITSKWEATMGSHPLQLDGSWADVLILIIGAVLQQGCTLEPRFTAGRCVTLLLFISLTILYAAYSANIVVLLRAPSPSVRSLQDLLSSPLKLGASDFEYNRYFFRQLNDPTRKSIYDKKIAPKGKKPNFYNMTEGVEKIRQGLFAFHMELNPGYRLIQETYQEDEKCDLVEIDYINEIDPWLPGQKRSPYKDLFKVK\*

>HrhoIR40a

MRVAVVTNPRESVFRIYYNQGTPNLLHHLTLVNWWSGRLYRSPVLPPAEKVYKDFRGREFEIPVLHAPPWHFVKYNNDSTVNVTGGRDDKLLSLLAKKLNFRYKYYDPPERSQGSSISGNGTFKGTLGLIWKRKAPFFIGDMTMTWERLQAVEFSFLTLADSGAFLTHAPAKLSETLAIIRPFRWEVWPLVLATLLVTGPALWMVIAAPSLWRRQRRDQLQLFNNCCWFTTSLFLRQSSSKEPSSTHKARLVSVVISLGATYVIGDMYSANLTSLLARPAREQPIGTLQALEEAMRDNGYELVVERHSSSLTILQNGTGVYGRLAKLMKRQQVQRVRNVEVGVRLVLTRKRVAILGGRETLYYDTEKFGSHNFHLSEKLYTRYSAIAMQIGCPYLETFNNVVMTLFEAGILTKMTTDEYRDLPKLSRRSDPVTESDTEGSDAIGESTAASQTQVESTKGLEPVTLRMLRGAFCLLGIGYLLAGVSFCIEIQIHRRRTRTKAPVPETKIKEKQKKFQRILTNIKIRFRRIAIKIYSKIDTALGP\*

**GRs**

>HrhoGR2

MPITRSRPGTITFSWKSRATAYAIFFYIASTAVVLVVGYERIMILRSIKKFDDYIYAILFVVFLIPHFWIPFVGWGVAHEVAIYKTNWGKFQVRYYRVTGENLQFPNLKNLIVVISVGCLLLAVCFLLSLCALLDGFLLRHTAAYYHIITMINMNCALWYINCKAIKIASQSLSLCFRKVRKYNNSCVRRRLRDCGPRVWIQL\*

>HrhoGR3

MITFANMSARIIIEAMGSETGFIFGVLEFTALSSLMRLGTCAAVMICVVSYCERVYRQRERILTIIDHLFISKMINAETRKSMNELRELVQSRTICFHMANLVVIQYSLLVSVASVVVTYTIILLQSIK\*

>HrhoGR4

DVADEIRAMIVETDLKSKSAIIELRNMVQSRPITFTAANFFRIDYALLVSTATACITYTIILAKL\*

>HrhoGR7

SNAQATFLWTFNDIMTMMFSIYLIAYFRDMNRLIYSPIPKNIHVWNRLRIFCSELVSLVQLVNPRLKYFILNSIGCSLY

>HrhoGR29

MSLICCFPKIMYILYGILKLYKARASALPIVVLGFGALQWGLMPCLPGAVMEFAYNEVEKIKKTLVHQCQYNKDELLREDIKEFIQYIDSRPYKYRILRMITVDMSLPIGLLKLCTTYFIVIIQFTHLFE\*

>HrhoGR64a

MKVNGTYKRYDHQDEILERDEFLDTLNTIFKKSRWFGVAPRRRSLLFIWAIINAVLMMAVEAGAIWKLIRAITGTVFNTAGGHSLVARLSGSIFYANGLLSLALSWRLITSWSSVHSYWIKTELNRSLFLPPDVHIKKRVIFITSLVVTCALGEHILSMISAIGFRCPPSEYMEKYILVSHGFLIHKNEYHIWLAIPIFIVSKTATVLWNFQDLIIILLSTGLTSRYKRLNSYVKNLVEIEQSQEMKKHANEIYIEVQTWRRVREAYIHQANLVRRVSNKLGALILLSSLNNFYFICLQLFLGINKDKGEMINRLYHFLSLSWLMLRASGVALVGADVDEHSRKALKYMKMCSNHNVEIERLKNQMKNDRVVLRGLGFFALDRNMFLKVAAAIMKYELVLVQYDK\*

>HrhoGR67

KRRIVEVDEAIKNMDEQIDYVRQVHSVWTIAVAPVVVSLMRVFSIYISIATSDIAVPIEKMGQLIYADIFALLITALHCGHNNLLRERFKIVNVTLRKIKDRKAWFRGALFSRISISDTKHVAQHREKYICDKIKACAKIYDKLMGCVISLNTIYGFAMVQTMSLSLVYIVLYLFYLMEATASGLYNDANRYVNFIFYVSWQILYGVGVIFFNIHYCEETVKEAKITSRIV

>HrhoGR68.1

MFRVISKIIPIYRQLNVTWYSAFKPIYYLTSLLGLFPYTLKHESTNVFKTYLNSYYLNFIYASIIFIILCVFCVLHIQDVIYAGKSYSMTNENLTEINYIFEFVFLLVYCFVAYYCAFTNGKLYINILNRVIATCRRTAVDRYEKNMKLVDKRLKKIVYSYTLLAVTTIIINFTRKGSVWKSVLVLFTFILPQTVQLATLAHYCSLVVMITGLLDNIILCLSYYDQNKRVAHGIWTTKPRAVSILSNLKTCFIKVYNIKEDINRAFQAPILFTAIQCFHCLVSEAGSLYHGVG

**SNMPs**

>HrhoSNMP1

MKLRKHFKIAIGSAIVGVFGVLFGWLIFPTVLKSQLKKEMALSKKTDARKMWEKVPFALDFKVYLFNYTNVDEIHKGGVPIVKEVGPYYFEEWKEKVDIVDNDEDDTVTYKKLDTFYFKKDKSGPGLTGDEIITLPHAFILSLVTIISRDKPAMLNMAGKALNGIFDNPPNMFLKARALDVLFDGININCARTEFAPKAVCTALKKEAGNQLKILENNQFLFSFFGMKNHTVDSHVVKVSRGMKNVMDVAKVLEIDGKPQMDKFRDKCDLFDGTDGTKFPPFMTNQPVASFSTDTCRTFKPWYQKQSSYQGIKTLRYISNIGDYANDPELNCFCDTPDSCPKKGFMDATKCLSAPLYVTLPHLLDCDPEEQKNVKGLSPDVEAHGIAIDFEPITGTPMTARQRVQFNLRLIKTDKIEQCKELPDTIAPLFWIEEGYALDRDFVKLLKHQLFLPKRIVGVVRWLLVSIGILGTFGSLVFHFKDRIIQFAIPSNATSVTKIKPEEENKKQISVIGNTQDATELAKIDM\*

>HrhoSNMP2

MMYEKWRKLPMPLNFKIYVFNVTNVEEVNAGANPKLVEIGPYVYKEYRERTDIEVTDNDTVRYMLKKSFVFDGEASGSKTEDDIITVIHYAYVAAIVQVHDTMASLLPILNPALQEFFGNVSSPFLTIKVKDLFFDGIFLNCNGSQQSLGLICSKIEVEKPPTMRQADGGNGFFWSMFGHLNRTITGPYEMARGLTNIQELGHIVSYQGKRVMTEWNDPYCGQINGSDSTIFPPIDENNVPSRLYSFEPDICRSLYISLSEKTTRFNMTAYLYEMDSSALASKSANPDNKCFCDKNWSANHDGCLVMGVLNLMPCQGSPAIVSLPHFYLASEEILSYIAEGIDAVKEKHKSYVYIDPSTGVPLDGLKRLQFNIELRKIPNIKQFENVKTGLFPLLWIEEGAVLPESLLSELRQGHTMIKYVEVFRWVLLAVALIVTAVSGYLVARAKSLVWPHHAPVSFVLQPHGMSEVNKVH\*