

**Supporting Information S1.** The training dataset  $\mathcal{S}$  contains 500 non-NR proteins and 159 NR proteins classified into the following 7 main subfamilies according to NucleaRDB (<http://www.receptors.org/NR/>): (1) NR1: thyroid hormone like; (2) NR2: HNF4-like; (3) NR3: estrogen like; (4) NR4: nerve growth factor IB-like; (5) NR5: fushi tarazu-F1 like; (6) NR6: germ cell nuclear factor like; and (7) NR0: knirps and DAX like. Both the accession numbers and sequences are given. None of the proteins included has  $\geq 60\%$  pairwise sequence identity to any other in the same subset except the NR6 subfamily.

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## 1. 159 NR proteins $\mathcal{S}^{\text{NR}}$

### (1) 50 NR1

>THB2\_RAT

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>Q5RZV7\_PSEAM

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>Q15156\_HUMAN

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>NR1D2\_HUMAN

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>Q6IBU6\_HUMAN

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>NR1H3\_HUMAN

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>O97095\_LOCFI

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>Q6GMI3\_BRARE

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>Q8WSA1\_BOMMO

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>RORA\_HUMAN

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>Q60Q78\_CAEBR

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>NR1I3\_RAT

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>Q6GZ85\_HUMAN

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>HR96\_DROME

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>Q9BMU6\_AEDAE

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>O76241\_UCAPU

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>USP\_CHOFU

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>Q9U3Y3\_AEDAL

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>EAR2\_HUMAN

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>Q9NG48\_APIME

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>USP\_DROME

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>O45117\_CHITE

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>O97120\_SCHMA

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>NR2E3\_MOUSE

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#### (4) 7 NR4

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## (5) 12 NR5

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## 2. 500 non-NR proteins $S^{nNR}$

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>B5DW00\_DROPS

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>B5DW05\_DROPS

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>B5DW07\_DROPS

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>B5DW13\_DROPS

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## &gt;B5DW14\_DROPS

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## &gt;B5DW17\_DROPS

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## &gt;B5DW18\_DROPS

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## &gt;B5DW19\_DROPS

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## &gt;B5DW21\_DROPS

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## &gt;B5DW23\_DROPS

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 PGPVPPSPQHLPQQQQHVRPAAGAPYPQGG SAYPTVSRTPGSPYPSQPGAYGQYGASDQYNATGPPGQP  
 FGQGGQYPPQNRNMYPPYGEPEGEAPPAGANQYGPYGSRPYSQPPPGGPQPPAQAVAGGPPTS GSPVAPP  
 TGGYAPGTPTQQDYRPPPDQSPQPRRHDFIKDPQPYPGYNARQIYGAWQGAQQYRPQYATSPAPQS  
 WGSAPPRGAAPPPGAPHGPIIQQPAGVAQWEQHRYPPQAPPPPPQQQQQQQQPPYQQVAPPQQQPQA  
 PPQWAQMNASQTPQGIAPPGSPLRPPSGPASQQQRMPGMPGMPQQQAPGSQQPPQQPPHGGGIPSPGM  
 PQVPGGMVKPPYAMPPPPSQTVGQPVGQPAPGVGMIPQKQPPIVGPGMPQLQQPPPHQQHPHSHQQH  
 PQHPQHPQHPQHQLPPNQQQPGGYAPQVPVGGPGAQLVKKELIFPHDSVESTTPVLYRRKRLTKSDV  
 CPVDPWRIFMAMRSGLLTECTWALDVLNVLFFDDSTVQFFGISNLPGLLTLLEHFQKNAEMFDERCEE  
 PLDEAEDDADSGTVMCSGGLERRVRGGRQTRCVRSICSYNRKRHYENMDRKNNGSDEDADEGLDQVR  
 VQPNEERSLLL SFTPNYTMVTRKGVVRIQAAEQDIFVDERQKAWDIDTNRLYEQLEPVGSNAWYTGFT  
 EPDPLDGIIDVFKSEIVNIPFARYVRSEKAKTRQD TD TATS PKPDIKQEENTNSTEDGLQESFNKKRRL  
 VSGDSSGEAGEGSAGVKKSKLLADEIAPPNAEVKKEPGTSGTTDASDSDCRAVDMEIESPSLQQQQQR  
 LTNGIASASPLGAFDPRGTVRDAAQVLQRKRDSSEDECYTRDEASLYLVNESQDSLARRCIALSNIFR  
 NLTFVPGNETVLAKSTRFLAVLGRLLLLNHEHLRRTPKTRNYDREEDTDFSDSCSSLQGEREWWWYDYLIT  
 IRENMLVAMANIAGHLELSRYDEL IARPLIDGLLHWAVCPSAHGQDPFPSCGPNALS PQR LALEALCKL  
 CVTDANVDLVIATPPFSRLEKLCVLRHLCRNEDQVREFSVNLLHYLAAADSAMARTVALQSPCISYL  
 VAFIEQAEQ TALGVANQHGLNFLRENPD SMGTSLDMLRRAAGTLLHLAKHPDNQSLFMQQEQRLGLVMS  
 HILDQQVALVISRVL YRVSRGASRMHSVEFRLLQQRQQQQQLQQLRPSENQALAAASAEAAAAATAAAAA  
 ASGSGVKLESGSGEPNAEPLSGADV KPSPAATSTLSTSGSGMISSAINDENSNSQQLPAAATFNDVSN  
 SSTNSNSCGTASSNQTNSTNSSNSNSLGSQSTSTMNAPTTPAAHITPPSVTEQQQQQQQQQQQQ  
 QVSKAAATAALVSSNLSGSLSNATSAASAAPPPSSSSSASAASATAVSQPAAPPTNAGTTTAVA

>B5DW25\_DROPS

MISNYDITDSKSSSVL RPPGGSSDIFGSDMPQT PRNVKNRMVSNIFSVEKDNSVKNTVRQGAHRFYFI  
 VYIRNMSRVEDNEKSKQTKTDTAGCPLTPVASAPAPPADV LGIDLPCLDLEVGDPVKDNEYTETGKHD  
 VNIQTRRDSGSNVEQPHSLEKMRSTANLKEPLALCPDYVKEVHGPCNARNPITGLGLNGDGVGGLKPVKQ  
 KIREGNPVTGEGYRAGGTDYIKAAGSTNSG SVGN DNGNSVVNKNRVP PGGYSSGLW

>B5DW26\_DROPS

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 AEEETCRDSGKTKEPDQDDDAIFQFDLEPIVSI GEPQAQPLLAPPGLGAPPV RPMHRHSLPRASQGRP  
 KEGRLSGVLTRPTTSQINATDANGIPINVELGVIYICPACGAEFRQDLWKRHMNMHFNTRRGLNFMA  
 MDKLYHRCLECNKRIAMHSRENLLKHKFTHLPFRCTKCYICKREYKYRQDLMVHLRMVHCDEVVAMMREG  
 FNLAGRKT RVREPRTEQMQRKDPFEEDDERNDLLEPETETVPPMLEEEAPRRRKKRYQGGPSGDGGAD  
 LCEDYIHYMCPDCGTECDTHAQWSQHIEFVHDYVSRRLNFISVDMQMQCLECKKIVIPNTIKTLRAHKF  
 THLSQPEWL RCKLCYKGYTEHHELVSHELLKQHHELSMPEDSPDPSPVKKT DGGGGDDWEDNGNSVFDD  
 VSPHFEDVPRRGGRIGSDMYEPHIDYLCPCGKEFIEKKHWRTHVVQVHGMNDVTKLNF EI INDRQLKC  
 TECAKIITNAYGIQNAQQHRI THLPFKAYARCRKCHKSYTRKGLVKHLATYHRVGYVPRKTLKRGGRSA

APFASPKQRRQIVTLGKETYEIIFLDEELMHSSVDEENDFGEQMQMADEEDLPTVSAGVPPSPNRYKC  
 VECGLTFPTQVALKLHISEAHTFRDPPQYGGSKLDKSQGKEESPCKRRRLGAGPAAALTPSSSPAATSTP  
 SSGTVEQNYIFLPCSCGEEYKTFEWRRHINEAHNFDRKQYLNMRQLDKYRYQCTQCNDIVCNSKLKGLQ  
 DHHRHLPRFLYLKCLVCGTCYNHKPNIAAHLRTRHNIYERETPWRELQTKPQYSYVQSKEKDRDTAVKS  
 RPQSPSHAVVPSSSGSSSTSSRPLWPQSEKRPTRPAGLNTLEDSISYHNAVDMDFITYYCPKCNKFNDSH  
 AFWRKHIVEHHNFSREGLNFRQIDIHHLCLCECYKRVTVTHTKGAIQQLSHKFRHLPYRSFKCLTCNG  
 EFVRKQMFKHLNRDTRNCDNKPSAAEVFDDEEQDAIGVTAAEDEDVEASAYRLMCPQCGDDFTTCNQAV  
 WHNHLNVSHGLDKQLLHIRKVGEGLYRCHDCNEELATKSRRVLQQHRFKHMPHAGYIRCQLCESGTDEKA  
 AEVHSMRELHQHIREHHPAVDESDEMLKVRQLMDEEETDEDROPTANSDNESGSTPNNGPYMPLPHLL  
 DEVEDLDFEDQYLLG

>B5DW27\_DROPS

MQSMKANELPENPRETSNPLSSLMFCFAMPVLFKGRKKTLEQKDLYQALKEHKSDSLGDRLCAAWDEEVV  
 RNKNPRLGRVMTRVFGWHLVLTGVLLFLQEFLLTKVTQPICLFGIMAYFAGDDTDLFKAQLYATGLIAASV  
 FTVFFGHPYMLGLLHLGMKMRIALSSLIYRKSRLSRTALGDTTVGQVNNLSDVGRFDMVLINVHYLW  
 VAPLELIVVTYLMIIEIGVSSLFGVAVMLLFLPFQSYLGKRTSVLRLMTALRTDERVMMNEIISGIQVI  
 KMYAWEKPFKLVFETRFKEMQCIKQVNYIRGILISFAMFLSRIFISTSLIAFVLLGNVLTAEKAFVTA  
 YYNILRRSVTMFFPQGISQFAELLVSIIRLETFMHHPETQVRDKSKIQKEEPVIGDSPKANGLPEKLLDF  
 SGFTARWDSQSAEPTLENINLQLGRRKLVAVIGPVGAGKSSLIQAVLGELPAENGLRVDGSSYSYASQEP  
 WLFTGTVRQNILFLEWDKHYRTVVKKCALERDFQLLPYGDKTIVGERGASLSGGQKARISLARAVYRR  
 ADIYLLDDPLSAVDTHVGRHLFDQCMHGYLRSELVILVTHQLQFLEQADLIVIMEKGRISAMGTYSMKR  
 SGLDFARLLTNPNNEDDTMDELEVAVGDQMDRLSVPSLSRRGSGKISRPTSRNNSFTSLSSMAESMAQEA  
 ALQMEEPREVEGKIGVGLYKEYLTAGSSWFMISFMLFLCLATQIVCSAADIFLAYWVNKNSKAEMSSDPA  
 DMYFAALNVAVVFTLVRTMLFYKMMARSSSTLHNAMYRGI TRAAMYFFNTNPSGRILNRFKDLGQLD  
 ELLPTVMLDVVQLFLILAGIVVVICITNPYYLILTLTIAIFYYIREFYLKTSRDVVRLEAVARSPYISH  
 LGATISGLPTIRALGAQKALIEEFDNLQDLHSSGYAFLATNRAFQYLDLFACTLYIVIIILNYFINPPE  
 SSGEVGLAITQAMGMTGMVQWAMRQSAELENMTAVERVLEYDEIEPEGEFESDPKKKPCDTWPPEEIEI  
 AEDLSLRYFPDPQSKYVLRALNFRIRPSEKVGIVGRTGAGKSSLINALFRLSYNEGTIHDHRDTADIGL  
 HDLRSKLSIIPQEPVLFSGSMRYNLDPFEEYSDAKLWDALEEVELKPLISELPSGLQSKISEGGHNFVSG  
 QRQLVCLARAILRENILVMDEATANVDPQTDALIQATIRNKFRDCTVLTIAHRLNTIMDSRVLVMDAG  
 QVVEFGSPYELLTGSASKIFHGMVMEGGQSHFDGLLKAERAHQESQKPKSE

>B5DW28\_DROPS

MWKVQALVVQILLSSCLLKIYFEGSRLLPNLKPQKVLPEWGI GPPANRLVVFLTDGLRAETFFADNCSSV  
 PDLREVFKQGLVGISRGSVPTLVRSGQIAIFGGFYETPPLLRTGFQWNPSTFDTVFNRSKTSKLCWIESQ  
 TNVYTKSLTRGMFQHSSDPKPKDPWVLLQLRSYLGINETVDKLRKTSLSILFVYLGNIATEGPLSKRYL  
 ERLHSAQRGIRETYDLIESTFNDSRTAYLMTSSHGISHLGSNVAGSRDETDTPFFLWGSVGRQTAHNAP  
 TFAANNAGLQRPLIDLQQIQLAPIISALIGEPVNNLGRFPLGFLDVSMEQETQAAHLNALQLLAQAQL  
 LMRHHERGFDFKFLPQFKHLNQSQAESYILEMDREVRMGRTQEQALQTEKVAALAECLRYHSHYRIPL  
 LIATMAGLLGWYCLLVQASQQARNSSEPPESVELISWTNVMGALGVVSVIILLKVPFLIGFCLLLP  
 IYIWCMALAGRPLQKPIRYGLLHLKLILVSI VCFIVPIFRRLCLLYVGLVCFYNNRHFHFKMSPSFLA  
 WLGLVCCSLVLLFCLHCPSTLSLTINYGMFYQGASMLLAILRPLILGEKYGASVWIINAGTLLIGGYGMY  
 LKETGATVPLLLHTVCWAYLFFAFGSVPYKRLPPKRRLELICFNMLTHTLLSDSFASLFAQALIFEYQ  
 MGIDVYQETKQPRNALEQRADENEVQNEPKIVCPEENLARASYFSVSIILLYFLLALLGTGHWISSFTFAP



STARLFAKDCCYGLTAFVLLKIFIPSI I I LSSMYARSEYARRNIRLIFISLILTCNGSLCLFLFVDHGQ  
FWPAAHPSVHVVLINTAVVFLVVCSCVTNFFFRGSLQARPTSSTKINEEVSSQSDVQTNV

>B5DW29\_DROPS

MFCDWLNELQRFLHWGPVIVFSLMTCVTTVHVNAMWWPPAESFNAAINFVLI VFFNLI TLYHFMSIL  
VGPGLLPKHWRPENPEDEQFLQFCKVCDGYKAPRAHHCRRCKRCVLRMDHHC PWINNCIGWANQANFFYF  
LFFFMLGSIQSALIIGFSCYEGIYRRALLKQGD TNGIRVVLTLRSAMACMYSLGIVVGVLLATLKLMLQ  
IKAI IWNLSEIEGWIVKKAERYRYASSSIGIAIPTFDYPYDMGVWRNILETFTPSNDGINWPVRPGCDQY  
TMTREQLAQVQKRARTRYRCIASATGYWLPILSQGLMVTICMPCADDPRI VVHKGDLVQVTRVQEYWL  
YGERVLSKREKQLKQLKLGHIRGWPRCCA VEQFDEDDQSAGDTV DVTHNTDQEKTKTGSKIKRKP  
NTFSLN

>B5DW32\_DROPS

MALAAKAIPATKPDTKLAEATATATATAAAATTIWRPKATSTPTMTLRPVDVQQNGQKP

>B5DW33\_DROPS

MTDLFVLVQLLAESSTDLVNGCIQQDCPSDSGSTPVYPRIADHTLGFSET

>B5DW38\_DROPS

MMMMTMDTTSQSQPMDVAPAMAVAATTVGTTVDFTATMVSMAATAESNNHIDMAEYKEHRKNKKKRD  
KREKEGKEHRHHKRDREHREHRRHRDREQREREREVSSHHLNNSQHSTASSSPSSASTTPSAT  
IEYVGGASASPSYLGAAATAGGVSGASGATTATATTTYPHNLKIRFLLSGQRTLSPPHQTSAE VN  
ATLAPAISATIAATASATTAAVTSVAGGTTTGSSTLSSNATSSSTAGGAGGSAAPAVGGAAGV GASGP  
KTDSSRANTSGSSSKHSSSGSGGGIKESSSNTPPASGSGSSNSNAPSLYVSVPLSTANVPGINLPSS  
NSSAATNPSGDPHVTAASRSTQQQANQSALSTAGTAGGAYATATSGGAASTVIQHSGKSSPALGGSG  
IGTLVSGNSGGSIIASASTGSSSIGSGALSTGNLTATTTESGNLKI SYEKQTTTRVQQLQEALPATSR  
SRSRSGESSSTSSHHHHHHHSQNHHHTNVVPPNHPTQQQQHLTSLQSLHTAASVGSTLTPPIAPVSS  
SASNASNIKATSGGRSGKRGAAALNKNETNAPGAASATGNVAAAAATTAIAEKHSRHSSPHQSPSAAGLP  
GGIASPVVLTSSSQSSIDSPPAVAPTTTTPTPNRSTRNSSNLSLLHSNHNGDQTSSSSSSSTSSSMS  
SSGASSVPVNNLDSPPVMSTSVPSVGYRVGNTGTSTPTGKGTTS DGNYGSSSNGGTTKPLNKKML  
RAQQTQLFQQQQQQQPQTYAPIIPARTTSPTNLTSASPSSASPQQQQSQQQNHEDLEILQFTNS  
IPTNPSSTSTTTTTITKSNRTPDLATTSAAATSSLPSTTTLSQQSSQSMPLVGGKFSYESQTQHQLM  
DVAMLPVSSIKDPPSSPGSEIGGATQLHTAALSATAVAVAAPQPGNVRKRGRKAKDTTIAAAAAAAQ  
AATVAAAAATNVQHQPDLKDVRI LQNGAASSSSSSGP ISTPTPPATPAAASGASASSIIAHTATHMLGNH  
VNPNSSVAQKLSEQLHMEVQDHAIYTS DAMSSQFTGVFPFGKQRNNTSAASMNAAPAPNPLQSMFSGGM  
NSNMSIPQSLEQLLERQWEQGSQFLMEQAQHFDIASLLNCLHQLQSENLRLEEHTSLIARRDHLAVNA  
RLQIPLNPIANKSEAHAATTTSTTTTSTTTTATSTTCTTSVLSLAASNMSALNAATTIAAVSLAT  
TAINTTTPTMVNRRPTVAPASSGVLDYRGTGTATGGGNNNGMNSNPGVAAGGVATSSSNVSSGTTTP  
MSLSGTMSNAASLGLRHVS AVHAAYNNSNSGSGSVGNLHQHPSQNNQQQSHPSQQQVVQHLQQQH  
QQQSSSSHASAAVAAHMLGVGVGVGMGMGGAGGVAAGGNI GRGGSATALAGATSTTTTTTTFTT  
TVGMPLRVGGVGGIGHGVNLGLDLSSTTTTSTSSYAAHHAALYSTHHQSLLRRDDNLA KTS

>B5DW41\_DROPS

MVKI ILLTIYGAQIHGGFPEDALARHNEHRKNHGCPDLKLDSDLSNECAEYAKTLAGKGLEPTKLD

GYTENLCMTIKKPLECIESWYIEKNLYDYNAPRLSSETEHFTAMIWKASKTLGIGLFTKDENHYVVARYK  
 PKGNVKSDFKENVPMATYVVFVSFCEFSFIILISLCFRGNADHSTSFCLAVLILVAIFIERN

>B5DW42\_DROPS

MPAPGSRPVVPCRAVRESILVRPGLCIWPLQLLGPLPQRHANHEQSLKRRQQQQQEAGGATAKQKLPQ  
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>B5DW43\_DROPS

MIPIRNSLPFATLLLLLLLLLATAKARARPNEATGEASLYNEADNVINADTNTLRNHLGTVPKGKLVQFIN  
 IFCGDCQRFAPTFKDVARDLYKWQRVLSIYAVDCAQEKNVQICRDFQVLKPTPLRYFPPVYTGNGTGIDI  
 PTVKPNKIDLLAGYLAKEMNWNLLYFDPLRSDSNAKTTIGDHKGGQAAEYIALVLQPKGSNIGRDTIF  
 ELLPYPAVVVRLVDDAQIFANFGLTPQGQKLAILDLAGNVQALCAAQETSQAYAASIAEYLAQKGHTPVP  
 PLPTTVAPKVRTVRNKEQQAAILATVLRGGPAKIYRADLEQAIDKLLHIELPKADLIQGSNLTALRDI IAV  
 LRHLNPLNNGQELLTNLHGFLLPINRLTGSEFADLVKSTEKKLEGNVFKAKRYVGCIASRPFLRGFTCS  
 LWTLFHYLTVAAAKPPYYLQAGSVLSA IHGFAKHFFGCRDCADHFLALAERKHIDRVTDHDAEILWLWEA  
 HNEVNKRLAGDTTEDPKPKIQFPSKKYCPACSNENSQWNRTEVLKYLKIIYDNKNLSPYGLPTTRGYP

>B5DW44\_DROPS

MKIVLKFLAYFGLSGAVVQGRQASILQYTTEDNIFLDSNLDDLLANNPLNAVVFYSHSKSDPVILKETVE  
 SLLVLRLLNVYMLKCNVEVNKKTCADYHMESHSRMRYFRRRFPIRQGKKGLEIPMDTPLQITDSVWNVM  
 SRQELPLPDGSPNFRPIGPHDDYKSLFDQAVLSHFTHLVLVEQIEHYSKLRDITLALLSLDNVIVRIVM  
 NPYIFEHFDLEFNSGEDKLGIDRRGRAVVLHPKETNGLAFAEAVVSYLESKGLI

>B5DW45\_DROPS

MTAPSDSFGALSVIVGPPKEKEEQKVQEEKEHEEEDLELEQLQLWKRRKLVKM

>B5DW46\_DROPS

MHISSEYICLERVAEEFMGRKWKNYQEQAATRSQLNIEEQPIATAGSDEDEDNKDNRNHCKPENQHHLR  
 EQQFEEDFDNQTSQDSSRTATPISIPSPPEPNDWRPSDKCNFCVNGRLLTVNAQQLVAETVAPTATVH  
 SSSSSTSKGPIYHNGQHSDSNSSASLHQSGARNIANSNGSLELYKLLTQRAAKMTSMDSMAAQLAQFSL  
 LADFNILNSLASQQQQQQQQQHPPHNSVTTTTSELLSAAAI SAPLKDTPSPSADAPLDLSSKPSNSS  
 ISGDVKSIRALSDCPTPTPSSGRRTYSEEDLNRALQDVTASKLAPRKAAGQHRSSLMNKLGHHEQRLERL  
 ERLEQDEPDEPEDSADDAEVDSNASTPAPVPELAQRIAATAQLHKLSSHLSEHNGSEDLGEDLEGGGQH  
 SPKLSRIPGPASAVAPIPIDTNVLLHTLMLAAGIGVMPKVDETQTVGDLIKGLLVANTGGIVNDALINLL  
 AASQQETSNGNAASLLLQQHQQLNAPHHRLPKSETPETSSSLDPNEASEDPILKIPSFKVSPPSISPS  
 ISHSHHQQQQHLQQQHHHQHPHHNNHSSSN SHAHGHAHAHSNNSNRNGGGGGRERSPHSASPML  
 AAAVSNSSASAAAAAAGLLSASPTSIQMMASNIQRQINEQSSHEAAAAAATASSSLRNGSNSAGSDC  
 SNNGAASGNNSSSSSYKPKPSISVAKIIGGTDTSRFGASPNNLSQHQQHHAHLPAHHAAAAAASH  
 QAQLSAQEAALAAGKGRPKRKYRNYDRDSLVEAVKAVQRGEMSVHRAGSYGVPHSTLEYKVKERHL  
 MRPRKREPQPDLVGLTGPANKVCPEKLPKGNHINHTGNHHGVGSKLSNALKNPSSQAAAAAAAAA  
 AAASATVPNGLKIFDGVPQLGFPNIFWTQQNAGNAYGLDLHRMAEAMRQQTNQTAHERPMKSALEIA  
 EHYDGIIRKTLQSSGDGNGSGSGSGSSSTSNHALGHGLGHGNALLDQLLVNKTPLPFTNNQSNDY  
 RGAACSSGGGERIKRSASPLGVYADIKRERLSADSASSDEERDRDRDRDHDHSSNNNNNSDLAHNKN  
 KSNSSNNNGNSSRNNNNNGNRSRMTSRSDATDASSLKS DHSRHRHRHNKMDLNGSNSSSSQNDGDG

DGDGDGEGEMTHSQMPSNPSPGSPNPHPCPSRSRSPGSSSAVGGSLHEKLAQIKAEQLEQQQQQQQL

>B5DW47\_DROPS

MSEPTSHLLPLHRI IMLGGEGVGKSALTLQFMYNEYDDEYEPTKADIYRKTIQLDGEVQIDILDTAGQN  
VNVVIRDSYRRADGFLCVFSIADEGSFQATQAARDLVQLRKDESVPFLLVGNKSDLKEERQVPLGECQ  
ARAHKWGVSYVETSAKLHQNVHLVFDLMRQISSRKASGSMATNGGRKCKKKGCHACAIL

>B5DW48\_DROPS

MFSQAPVLSQKSKLLSLDEQLIRQLFYKYHTLELSKALDKQSDSKGLSVYGKRLEGGSKRRTSTTSVN  
PKVSKQGSVASVRPNSSFSHSTAPRRHFESSFRDSSRHNSATSRLFNMSHCLRPNASATSHISNVSKR  
LQELAKAKQSPKVLNTRPPWHLTWSMRTFKASDRLTLLAKSRMPSIEKLYNPFVAQRALTYKATERINL  
LAVPRKRTPAVVEYSDIQVRSTRKGFPRGHLTLRLYNLAAPKLREDDTIRRKPFVRRSAMRATLTPRLE  
QLSQPRQFQSRNWE

>B5DW50\_DROPS

MSKPKLDEEESEAAAATTEQLDFLPADLTATTTTIAAATPTAAAAAVRNLIQLRTPFVPAIDCAASA  
TASASVLMGLLNFLEQQGQPEEEY

>B5DW51\_DROPS

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NCYACQQQQQQHQQQHQQQHQQQQQFLAPTTTPSAVAATAIAATRQVIQRHRPKVYLAKALSSA  
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>B5DW53\_DROPS

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GSNKNYITNKKPTSVVAPVTPPPPSYHSSNYFTVPTTKLTAVTPTAGAYPHPSSSSSSTSTTTKATTT  
AATTTQGTLPSSRRPIPVTTTTTTTTTTVPAKYTTTSRRPIPLHAAPTTTQPRTSTTRKKFVPTKKY  
SPTLPSSSSRPTIEQEERRPSTTQQPRTPSSSDVAFTTHHATPQAAIFPTEPMTAKIYTTSSSTPPVV  
FTEGTPPPPFSPIPGTGIPNLDPADVYHTLGQKNTQAEQQQQKEQQLQKEQEQQYQQQQQQKQFQQE  
QQQYMQQQHMQQNMQQHLQQHLQQQQKQQQKQQQQQQQQQQKQQQQQQKQPQQQVQQQH  
QQQVQQQQQQQQQLQQQLQQQQQQQQHQQQHQQQQQQQQLQPPPRPMTLSDFNSLAEEE  
SAVAHNYQQNQGFDSQGNLIEPIAPSKPSPFAMQAVGQPLSQPGAPQRPSTAGAGTTPGQSPYPNDQKV  
ISGSQENYSNEYVSYVQQPNVMQYRVPVPGQINNVIISPGQHSASFVLGSQVQVSVGHPSVEKEPLFAK  
DTPGVQYGVINEDIGNIKRPVVPYKPAAPQEPMPSTSYQQMPNVQQNSNFHQNGNMATAGTTVPAGSY  
QEPPEAPSPYQLPLIGSNIRPANKPVAPKPEQPSPSYQPTKASTPHQTPTRPAMHGDDTQDLLVSSN  
IRFPVLAETSVELASSAVGPGPPAGPHINGHAQPLSLQQIHNSNPVFPKVKDEETPGANVQIQQHEVV  
NLNQQQQQLKFPAAQPGHGEQPSRDMEPPPRYPTTSSGPQVPSTPGNRPPFYNEFNKPKQGGRPSNLPN  
ILPQFRPNAKISSGHPPTLKQDPGNIRLPTQGMKRPYNPSAPPHFAHRRQPLQQQMLQKRYPMNRISEYP  
VGPQVGGDINRRVYRLPPYGGQNPYRPHMYARRPNGPGPANGPLRSVDGYPAERHAPSAGSEPYQTI  
NAEGAADFEEEDLVINDPPQVTPSKDRMGVEETKLEPVVTLQMLQSQKAVSLPGDDTGAGEIQVTADN  
DPQEAASSLSQKLDPSGMVVFPLKQSEKQIEGEPSSAPAEYQNTPFVSVIRDQPQEPILKNKKPQSL  
QQQNKAAQQMPKEKFPYIEKDPSPSYSELNPSPEQGHVPGVLIAPRIIHGAFGTGTETPIAIAIYTPTEPS

VFRRTSAAGDQDQKFSNINLATPVISEIRQDTQTEEGLSSDFDLRGQNYEKNFMAPPYPSVSLGGGGPGA  
 SGAAAVNWNIVPSTTDQAIYEKNSINRADVEPAEETKEKESATASALTAEKNEPILDSFQPQLQGGFKPIY  
 PPGYQHVEQQIDHEDAKNRDQDQPLALPLVAVTTSTAKPATAAATSSSSSSTTTTSTTNQPGTTKAAAT  
 ATTTTTQAPAGSVKPTQRKKSFTFETSLAALLFGDEDEEDGARKSAEPPKAQAGPRNVPRMGPRSLTLS

>B5DW54\_DROPS

MLVTPPDGQKDNKRQQQPPNRHNPQAGRQLQSGNGKPKRGALSFSIEVALGRACGAGSPDTSAYTDY  
 RDSPCKELVVEESLKERILDMVQRGSSGHDTEPPGAGGS

>B5DW55\_DROPS

MDNTSKVDNSEPSFDQAVVFKFTNIVGESYNQSWFVYHNYRLKAVSRNKVLLNINGTILHPVNDASIHGR  
 IFKKANGYKPLFDIYIDACQYLRKRNPVANIVYGLFKQFSNINHSCPYVGPQIIKDFYLRPELLRIPM  
 PTGDYLLALQWYFDKQLQFDTNVSFTFVEDLMKSK

>B5DW63\_DROPS

MAMTGDDDDNEDNGDDRQTTYPIRYNMHQRQRQSQHQNSWTLEPGPRPDLFGGDRDGDGRDKGMHCLPS  
 FKPKPKIVDWDRLGLCLGLRLRVSRTAIGHVAASVAAPWPNVAPIATHLRAPRRL

>B5DW64\_DROPS

MHVASVWSTFLGLFAGSIAADIPDCNFFDTVNLNSWKFPNGSYSYRGLIIPLSLAGEYDYEIQFDGASR  
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 PLPCGNHYALSRHNYTDLWTLFENGTLRQYDKRYLSKQDYCLQPRRSREQIGYNYTIVPYNCSIDPDE  
 QWLSISVLFMAITIAVYLWLPQFQSLHGKCCNLFYICLTATFLLNVFSIFNVFDSKMACSQGWSGMLYF  
 YSPLAILLSFNLTIFSVTTRHIYLLDKISSKKNLNGIEQKQMSKNRANYGVYLHLFIIMGGSWVLEIVAFI  
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>B5DW66\_DROPS

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>B5DW68\_DROPS

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>B5DW70\_DROPS

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>B5DW73\_DROPS

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>B5DW74\_DROPS

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>B5DW75\_DROPS

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>B5DW76\_DROPS

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>E1FMB3\_LOALO

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>E1FMB5\_LOALO

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>E1FMB7\_LOALO

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>E1FMC1\_LOALO

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>E1FMC2\_LOALO

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>E1FMC3\_LOALO

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>E1FMC4\_LOALO

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>E1FMC5\_LOALO

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>E1FMC9\_LOALO

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>E1FMD1\_LOALO

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>E1FMD2\_LOALO

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>E1FMD4\_LOALO

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>E1FMD5\_LOALO

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>E1FMD6\_LOALO

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>E1FMD7\_LOALO

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>E1FMD8\_LOALO

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>E1FME3\_LOALO

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>E1FME5\_LOALO

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>E1FME8\_LOALO

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>E1FMF1\_LOALO

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>E1FMF2\_LOALO

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>E1FMF3\_LOALO

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>E1FMF4\_LOALO

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>E1FMF5\_LOALO

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>E1FMF7\_LOALO

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>E1FMF9\_LOALO

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>E1FMG1\_LOALO

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>E1FMG2\_LOALO

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>E1FMG3\_LOALO

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>E1FMG5\_LOALO

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>E1FMH1\_LOALO

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>E1FMH5\_LOALO

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>E1FMH6\_LOALO

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>E1FMH7\_LOALO

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>E1FMI1\_LOALO

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>E1FMI3\_LOALO

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>E1FMI5\_LOALO

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>E1FMI9\_LOALO

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>E1FMJ0\_LOALO

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>E1FMJ3\_LOALO

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>E1FMJ5\_LOALO

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>E1FMK6\_LOALO

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>E1FMK9\_LOALO

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>E1FML0\_LOALO

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>E1FML2\_LOALO

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>E1FML9\_LOALO

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>E1FMM1\_LOALO

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>E1FMM4\_LOALO

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>E1FMM7\_LOALO

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>E1FMM9\_LOALO

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>E1FMN0\_LOALO

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>E1FMN1\_LOALO

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>E1FMN4\_LOALO

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>E1FMN7\_LOALO

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>E1FMP1\_LOALO

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>E1FMP5\_LOALO

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>E1FMP6\_LOALO

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>E1FMP7\_LOALO

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>E1FMQ0\_LOALO

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>E1FMQ1\_LOALO

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>E1FMQ6\_LOALO

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>E1FMQ8\_LOALO

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>E1FMRO\_LOALO

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>E1FMR2\_LOALO

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>E1FMR8\_LOALO

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>E1FMS2\_LOALO

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>E1FMS5\_LOALO

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>E1FMS6\_LOALO

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>E1FMS7\_LOALO

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>E1FMS9\_LOALO

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>E1FMT0\_LOALO

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>E1FMT2\_LOALO

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>E1FMT7\_LOALO

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>E1FMT8\_LOALO

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>E1FMU1\_LOALO

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>E1FMU4\_LOALO

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>E1FMU5\_LOALO

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>E1FMU8\_LOALO

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>E1FMU9\_LOALO

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>E1FMV1\_LOALO

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>E1FMW5\_LOALO

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>E1FMW7\_LOALO

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>E1FMX3\_LOALO

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>E1FMY6\_LOALO

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>E1FMY8\_LOALO

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>BAG6A\_XENLA

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>Q9YHT5\_XENLA

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>NOGG3\_DANRE

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>Q9YHV6\_TAKRU

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>Q9YI01\_DANRE

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>Q9YI32\_CARAU

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>TYR03\_DANRE

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>Q9YI90\_XENLA

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>Q9YIB1\_ANGJA

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>LEG2\_CONMY

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## &gt;SYUG\_MOUSE

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## &gt;CDC7\_MOUSE

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## &gt;WDR46\_MOUSE

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## &gt;CST9\_MOUSE

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## &gt;Q9Z015\_MOUSE

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## &gt;ITSN2\_MOUSE

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>CLD13\_MOUSE

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>TI17A\_MOUSE

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>PA21B\_MOUSE

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>IRS4\_MOUSE

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>STAU1\_MOUSE

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>Q9Z117\_MOUSE

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>Q9Z161\_RAT

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>P2R3A\_MOUSE

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>Q9Z190\_MOUSE

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>EYA4\_MOUSE

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>ZSC12\_MOUSE

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>DEF3B\_RAT

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>Q9Z1F3\_MOUSE

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>SAE2\_MOUSE

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>VPP1\_MOUSE

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>NEK4\_MOUSE

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>NDUA7\_MOUSE

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>KANK3\_MOUSE

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>AP3B1\_MOUSE

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>Q9Z1W6-4

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>HNRPC\_MOUSE

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>Q9Z271\_MOUSE

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>TULP1\_MOUSE

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>PLD1\_MOUSE

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>Q9Z284\_MOUSE

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>KR121\_MOUSE

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>RGR\_MOUSE

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>E2AK3\_MOUSE

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>ATOH7\_MOUSE

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>OASL2\_MOUSE

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>Q9Z2G2\_MOUSE

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>LETM1\_MOUSE

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>PMM2\_MOUSE

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>Q9Z2P0\_MOUSE

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>VAMP5\_MOUSE

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>Q9Z2R2\_MOUSE

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>APOC3\_CAVPO

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>Q9Z2R8\_MOUSE

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>ZN292\_MOUSE

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>Y944\_HELPJ

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>A0AQD3\_DROME

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>A0AQD7\_DROME

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## &gt;AOAQL9\_TRISP

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## &gt;A0AR24\_HUMAN

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PLTALDRLSRQKLNKEKMDLNYTLEQMDLKD IYRTFYPTTTEYIISTWYILQDRPYDRPQNESQ

## &gt;A0AR27\_HUMAN

MVAQTIFLSHPQQVITKEYELFEFRRTEVPPLLLILDRCDDAITPLLNQWTYQAMVHELLGINNRIDLS  
RVPGISKDLREVVLSAENDEFYANNMYLNFAEIGSNIKLMEDFQKKKPKKLESIADMKAFVENYPQ  
FKKMSGTVSKHVTVVGGELSRVSEKRLLEVSEVEQELACQNDHSSALQNIKRLQNPKVTEFDAARLVM  
YALHYERHSSNSLPLMMDLRNKGVSSEKRYKLSAVVEYGGKRVRSDFSPKDAVAITKQFLKGLKGV  
NVYTQHQPFLHETLDHLIKGRLKENLYPYLGPSTLRDRPQDIIVFVIGGATYEEALTVYNLNRTPGVRI  
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## &gt;AOAUH1\_HUMAN

MQAAWLLGALVVPQLLGLGHGARGAEREWEWGGGAQEEEREREALMLKHLQEALGLPAGRGDENPAGTV  
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## &gt;AOAUJ2\_HUMAN

MPSFPTPIQHSIGNSGQGNQAKERKKGYSNRKRKSKTLFAGDMILYLENLVSAQKLLKLISNFSKVS  
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## &gt;AOAUP8\_DANRE

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VAEEETSRNSGPEQDTEEKESKDNQTTKPSDTGNGKARKRGAQNQQRPAPECEGVGDP  
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PDGE

>AOAUQ0\_DANRE

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>AOAUR7\_DANRE

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>SMKY\_MOUSE

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>CB067\_HUMAN

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>S12A8\_HUMAN

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>A0AV37\_HUMAN

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>RBM47\_HUMAN

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## &gt;TTC26\_HUMAN

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## &gt;AOAVG2\_HUMAN

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 GQVPSDVGTTYDFAHCTFTGNESKPLCVLDEHNLPRFPEWITIPLVCIYMLSTNILLVLLVAMFGYT  
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## &gt;FR1L5\_HUMAN

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>TM129\_HUMAN

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>E2F8\_HUMAN

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>UBA6\_HUMAN

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 TD

>A0AVV0\_DROME

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>A0AVX5\_DROME

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>A0CPX7\_PARTE

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>A0DJ92\_PARTE

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>A0DLR9\_PARTE

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>A0FJI1\_DANRE

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>A0FJI2\_DANRE

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