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T DPFASACLAAHNDFRATHHADPLTWNDTLAAAAEKWT SEFEQDFVAAHNSYRRKHGAPPLQLSRDLCRSAQQWA AS K QFNN EVL R A H N E Y R R Q H G V P P L K L C K K L N Q E A Q Q N G KEF $\square$ NVCLDTHNFYRSRHGAPP L RLSKQLCKTSQDWA S FEQEALDAHNKYRRQHGAPQLQLSRELCDSSQKWA
 TSPRSFERDAI KAHNEYRSNHNAHPLKQKAELTRTAQKWA FQTQFLEAHNKYRKKHNVPPMRQNAELSKSAQTWA $S \square A E D L Q Q Q F L$ EAHNEARNEVGLDPVVWDDEVAAYAASYA S F K DVSLDAHNNYRAKHGAPPLKWSKECTTHAKKWA K S F R K DLLSEHNQYRKLHGAGAL QLSVALSQDAQKWA
SS QFA D ELLUDA HN S K R A K H R VAA P L Q W S Q E L A S Y A A E R Y S
LRQQICL D M H N R L R A LIH G VAK P L D F ERECLKAHNEYRTRHGVLPLKLSKRLCRYAEEWA DEFSQTMLRFHNEHRRRHGAPDLVLHKELVRDAQQWA

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$T$ D Q Q N A V N L H N E A R K L V G CSS P L T WD A GL A N DA QVVY A SKA QDSPQDYVRVHNEARAGVGVGPMQWNESIAAVAQSYA DNFVSEFLQANNKYREVHGAQPLKWSSEI SQGAQKWA TDCGFEREFVDAHNDYRRKHGAPPLALSRDLCNSAQKWA
 P NF VVEDFLKLHNKYRAFHNSPPLKDDDELNELAQEWA

T GDFAEDCL SA QNDYR QKHGAPPLKISAKLCKHAQQW H A Q DT P Q DYLDA HNAARAAVGVAPLTWDDQVARFA QD Y


FEETVLNVTNHYRAQHDATALTWNSSLADYAENW SEK DFKTALRRTHNMYRKRHGAAPDGWNSSSAAQAAQEAA A LTED DKRLI VEMHNNYRS QVSPPAMSWDPELABAFAKA Y SNELMKKAKNWA A N A Q N S R A D YVN A H N D A R R QVGVGDVVWDNTVASFA QD Y A SSDFQNTMVDRHNDKRSQHSTGSL EWDDELANYAQNYA FETEALDAHNDYRK $\square H K A T E L V F D Q E L R D Q C K T W A$ $R K V Q Q E V L Q R H N E Y R Q Q H G V P P L Q P D E Q L N R Y A Q A W A$ QFRQS L L K AVNDYRREHGAK PL S LCP VVLSKEAQDWA SEFTDSSSLK QHNKVRAKHGDVADLKLSKDDCAHAQKWA
 SFAQDSIKDFVDAHNAARAQVGVGPVHWNKTVADYAHQY A Q D S Q Q D Y V R V H N E A R A A V $G$ L S P K A DA N ILLKE HNVFRA K E HVVP P LIK WN A TVVA GYA QK Y A TRSDDFQAAMLTTHNRFRSQHSAPDLEWNDTLADSSASHLL SA Q S S PQDFLLN LQNAARA GVGVGML S WD STVVA YA E G Y A
 SDQQAALDAHNKARAEVGTPNLVWDETLAANAQEWA
NEKSDND VVKEHNVFRYREKVPPIEWNATLATYAQKYA ANAQNSPQDYVNAHNSVRGQVGVGPVSWDQNLAAYAQNYA TDDTFVNAVLNTTNTYRAQHNASD $\square$ TANNRTLAAYAS AY
 SLA QNSPQDYLSVHDAARAQVGVGPMTWDPEVAAYAQDYA $T Q A Q N S P Q D Y L N A H N A A R R Q V G V G P M T W D N R L A A F A Q N Y$ Q N S Q Q D F V D LH N A A R S DV GVGGPVSWD D NVA A FARS Y A
A H A
A Q D S P T D Y V NAHNAARSEVGVPNVVWDNTVASFAQSYA
A Q D S R R R T M V D D L H N L L Y R A Q A S P P A MR W D A E L A A FA K A Y A
A Q D S P Q DF L D A H N Q A R A AVGGVD P L A W
DTFKKDVLDQHNKYRRNHGVPELKWSYLLEGNAHKWA
 SHAQDLPQDYVNAHNAARAQVGVGPVTWDDRVASYACNY DEQKALDAHNAARAAVGQKPLAWDAGLAADAKSWA
 EFSK QULNAHNEKRAAHGVPALTWSKKVYNFAQQYA NPTSPRAFVGAHNEVRAFLGEPPLVWSPDLAAYARNY SLNDEEKQTVVVELHNDVRSQVGSPPAMKWDEDLAAAFAKA YA
 DSDFANAI L NAHNEKRSQVGVSALSWSKDLEEYAQNYA T T F P NFESDVLNEHNKFRALHDTAPLTWSDTLATYA QNYA

SDFQSSLLEEHNKKRALHNTGPLTWSEELAQYAQ



 A DQQKALD LH NAERSS LGSHPSSLTWDA GLAS DAQAYA DFENDVLLKLHNEYREKHGCPSLTWDS GLLSAECKTYA S F S A E E DQ G I L D R
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RGLAETNSTAD CGSGLVHTGGPYGENLASGVSSCSHGVQLW KHLAKKNKFKHRERNKYGENLALGTGSSY SVEDAVQSW KVIAARGVLVHRSNSAYGENIFCSWSSSSTGSSASSVCNW E LLARDDRFTYRQNSKYGENLYCLWSSDRHAKPSKDVCRS EHLLSTKTLAHSNKGYGENLYYAWSSANKKLTGHEAVDSW KTLASDDKLQHDVNRGNEGENDYYQYGSGSPPYAAATTWW DQRRSDCNLIHSTGPYG ENLAKSSGDDSGVRAVNLW EHLVSLRTLQHSDAPYGENVWAKTGSRHITTATGQEVADAW DHLLSUKSLKHSSTDHGENLYYAYSSDPKKPVGKDAVDSW NKLAKEGKLIHDKSRSGQGENVFMSSGANFDDAGEAACEW
 LHLAKENRLEHRARSQYGENL FSMWSTNIAGAKDACNSW NNCASRGMMYHSNHPNDQENIYA DRLVKSNTLQHSGNHDYGENIGMKWSSDNKPVSGASIDMW E Q C ANTHVDDCQLVHSNGQYGENLAMGSGDLSGTDAVNLW N T Y VCDGQLKHSTLPYGENLALGY AKKCLWQHSHGPYGENLAEGYRNAS ASTEAW EEAAQTNTLRSV DTPNVGQNMAAMTGGERPGDRVSTMW AAKCDWGHNKARGRRGENLFA DTDEMDVEVAMEQWYD QSNAN $\square G Q M E H S S G G D N \square G E N L Y C G S G R L T D G R K P V E S W$ NQR KGDCQLIHSGGGGRYGENLAWSSGDMSGSDAVKLW DKYDCSGDLVHSNGPYGENLAVGYDDEGT DAMAATGTIEDSASKNGENI WFKPNATEVLGKEPVDSW NYLAKTGKLKHRSQHKYGENIFMSYSSAPKPKFTKAVDTW AHLASDGALQNSRKGYGETLSYKWTSSMVPPTGKEVAENW EHLASSDSFQHSQCTVGENIACKWSSGGGDYSSQEVLDQW EHMLLSKKSLGHSETENGENVYYSFSSVKKTPTGKEAVDSW ANKRDKDCNLVHSKGPYGENDAWGSRNDAGTVAVRMW ADQRRGDCNLVHSSGPYGENLAKSSGDLSGDRAVNLW ANQRTADCDLVHSGGPYGENIAWGSDDLSVADAVKMW NERKGDCALEHSTGPYGENLLMYGQGKAWTW RHTVDEW DEVA GDCTPSRCELAHSGGPYGENLALGYADAAVGVVAW A QLA KKDEFKNSSEKDVGENIMHYNSASTEFSGQEVVDMW THLTSVGSTTHSQVSDQGENLYMQSGGDSPNLNAVNAFVS EKRRGDCKLE HSTGPYGENMMFGTGKEWTWKKTVDDW NQQ GGDCHLVHSGGPYGENDFGGSGAAFTGLDAVNLWAS NKKUETCEMVHSEGPYGECLAEGYGDMTGAEATKFWVTEK DTTGDDCLVAHSGSP YGENLAKGYPDATASVAAW TNFASKCIVAHNPDRHKDAKNYDWVGENDAWGTGTCVKRW N【RVADCGLVHSYGPYGENDAEASYALTGAEAVQMWVDEK ANQR\|GDCRMQHSGGPYGENLAAAFPQLNAAGAVKMW AQRAGDCALQHSSGSGYGENDFVGGAGADWSASDAVGLW NQR KDCQLMHSDGNHGGYGENIADSSGDMSGTEAVSLW QQCVWGHNKERGRRGENLFA ITDEGMDVPDAVEQWHV ANQRRGDCADEHSSGPYGENDAWSSGDMSGVEAVNMW KYLLAKNRMEHRQNSGYGENDYM ASGGNDTGTDAVTSW KKCLKR LLFDYDEQTQEGENDAVMKDIEVSGTTVVDYW RQRVGDCRLVHSNGPFGENIF WAGQNNWRPIDVVKVWAD KKLAIDDDPKNVTHRPGKGLGENDYWMTRSQPPYEKVEAW ANKRKGDCNLVHSGGPYGENLAWSSAGLSGTDAVKLW QNLVSVGSLQHSTSGQRGDQGENLYWQSHDKTPCKNAADS NQRAGDCRMQHSGGPYGENLASAFPQLNAAGAVQQWVNER EQSDCKFEHSGGPYGENLAEGYPNATAS VEAW DAYDCSGNLKHSGGPFGENLGVGYK ANQSAGDCAMKHSGGPYGENLASGSWDDTAKEAVGLW SKCV WGHNKDRGRRGENLFALTEGEMDLQLAVEQWYN NHLAHTNTFYYKNDRNVGHNLYCRPGGGVPGDVTGQEVAS $N Q Y S C S G N L Q H S G G K F G E N L A V G F A D G P A A L D D A W Y$ DQYS DQYDCSGVLTHSDGPYGENDADGYTDTGA AYADNHYNCDGQLIHSGGPYGENLAAGYTLLGSVDAW TECKFEHRSCLSKPYKCTEDFQFVGENIWLGGFPYFITAW NDLKSTSTNACSVHSSRSGLNYGENLAYGTITDTQAVDLW
 NHLTTVGSLVHDSNPGGQGENLASQSGGTTTYFTNGVQLW ANGCVFQHSGGTLGPFGENLAAGTGSSYGDASAVKSW NQLA LIGGQLIHDPNNRNQGENLYYQYGSSAPPYTAASTWW E EI A GKD S MI H S T GP
ELAGKDSMGENGCYTTSDPTTCVKMW DECLWEHGNPTNDSPFSSVGQNDWLGTGSQPDGVGPTQSW
RYQRNQKKCEFASPNPGRYGANQLWAKGLAVTPSGAVETW

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, Q Q
KNY KNFQNPGFTSGTGHFTAMVWKNTKKMGVGKASAS YSEEKQHQFGCEPRRSLGGSGHFTQQVIWKASTEELGSARARTA NDEEKMYDYNNPGFTHDTGHFTQTI WKATTQLGCYYGKCN
 YAEET QHQYGKEPTTLLKTGHFTQQI WRDSTEDLGVGMARNR Y N E $\square K$ D Y S F GRRP GF QS N T G H F T Q QV V WK D S R E V G V A K A V D


 QYYDYDSNTCNDPNGGTCGHYTQQVVWKNTVRGGCAKVVCN Y D E $\square \mathrm{K} D \mathrm{Y}$ NFRRATETPGTGHFTQVVWRETTEVGVAMAKGK Y NENAKYSFATPGFQSGSGNFTQMIWKSSSQVGFGLSTDN Y DEV
 Y TEMKRYNFETPGYQPRTSHFTAMVWRSTVKVGCGVARAE Y DEMEYYDYKNPGFSGNTGHFS QVVWQESSQLGVGVVK
 YSE IIK DYDFNNP GFQSMCSQRAPTRWRQSPHQAVWWCVQV Y GEI K DYNFSRPGFSSKTGHFTQVVWKDTKELGVGLATDG
 V E EKA NYDYS SNTCNGGECGHYTQQI


## Y

 Y S E VKN F S Y GVEPRA LVNSGHFTQMV WRDTK E GGVGRAK G K
 $\square G E K A D Y D Y N S N T C G K V C G H Y T Q V V W R N S L H V G C A K V R C N$

YDEYKLY
SF N
D F GDE GEMYNYSDPGYSEATGHFTQLVWRASRTVGCARVNCT Y DEEKN F DYNNPGFSSSTGGSFTQQLI WKSTKEMGAGRAFGK



 YK DNVKYNFA DP GFQK GTGNFTQM WRSSE QVGVGLGBSDG


 SEEKRSYHYGSNTCDKMCGHYTAVVWKHTTDDVGCGRVTCT


 EK Q Y Y HYD S NTCDPGRVCGHYTQLVWANSVSIGCGRVTCN EN Y Y Y A S NTCTKDECGHYTQVVWRNSTDLGCAKAHCK GDERGGYSFDAAAYTEETGHFTQLVWKNTTDVGCGRKLCA FSESSKSYNFLTGQCS GKCTLYTQMVWWESNKLGCGAKRCG P Y VNEKQWYNYNSNSCAPVCGHYTQVVWRNSVRLGCARVRCN V A E K Q WY D H G S N S C S Q S CGBH Y T QQV V WR D S TA I G C A R T V C N V D E K A N Y D Y N S N S C V G E C L H Y T Q V V WR D S H R V G C A K V K C D VISEQA DY X GSNTCGKQCGHYTQQV
 YKE IN NYDFSND GLA QKTGCFTQLVWWSTDKVGVARVSTS ENKFYDVRGNTCEPGQMCGHYTQIVWRDSTKVGCARVDCS YKESEN YTYSP GGYSP DTA HFTQLVVWKSTTEVVGC GYNVSN
 Q Y N ERDKFDFGDPRFTHDTGHFTGQVWKNT LEEKKNYNYNTPKACRTVLDHFTAVIWWSTTGLGCAYK DCS
 Y WY S A V R Q Y D F L H A NVNA GHF T QLLI WA S S R Y F GVVGKA H SR NEAGKD GLSYDYGSSTHYNHFTQVVWKATTKVGCAYKDCR

 Y N E I S E Y D Y S N P GF SESTTGHFTGQLVWK DTS QV G CA I K S C N YNETAFYDFDTKACSKVCGHYTQVVWAKSYKVGCAVS DCP



 YDE $\square$ K D Y DF DKPKYSPATGHFTQQV WKASKELGVGQAKSA


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70 KVIAARGVLIHRNNSQYGENIFCSWSNTNSNIVREPVENW NQCLYK HSKAKDRTIGGTRQCGENLGMSSSPTSWSNAI QSW AAKAFSCDNVKLVHSHGPYGENLAVGYDGGAKPVDAW RECKLAHNPCYECLEDYDF DGENDYLGRDETQPEDVVDNW $K R L A D L D G T S H V T H R P V R G F G E N I Y W M P G S Q M P Y E Q V E A W$ NTCDYH HDTSNYGQNDAFGMDSDKVDE IITNMMYNDEMMF EELAVKDKMVHSKGANNGEFGENDAFRTHDD DHCVQSW QNLAKRQKMEHSPNGKYGENDYYSSGQQVTP DMPAKMW NHLSSNRKFEHSQGENLWMGTSRKFSFTQMVGSWGGEKQY NKRVT D NQRRADCK LVH S PGYA AFGENL ARKRYGDCEDEHSDG
K Q C KQRKPVCNMMHSDGPYGENGENLYASENPDTSVRDATDAW NQRKGDCQLIHSGGGGRYGFNWYRRKKTWSLEKVVTRWFE NQY NCNGTLIDSTFEYGENGADGYNTSAAI EAW NERAGDCELVHSQGPYGENLFWGSGKVYN AEDAVKLWVD
 NHLAHTDDFYYRKFRDENLFCRWSYVPDFDVT GDQVARYW EYLLKQNKMEHSTNRDYGENDALKGGTPGFQFTGYDASQM EYI ASDDQMRHREGNPYGENIYRRVDHGYKPKAKNVVDSW QHLLNTNSFQHRQNNQYGENLYM ASGANLNGAAAVKSW NR C RQRRGDCALI HSSSNYGENLDWGAGRAWKPQDAVAAW NQRAADCQLVHSGGPYGENDFSGFGRDYTAADA NGY ECGADDKHSGGKYGENDASGFKDGVSAFDAW D Y $\square$ AD QMRHRDGNPYGEN $\square Y S \square G R V Q H G Y Q P K A K D V V D A W$ NSRAGDC NLIDSGAGENLAKGGGDFTGRAAVQLW EKRSHDCT LKKSRGPYRENDYRGSAGRRRTAADAVARWVR NELADRGFELQHRPSHQRPYGENAASNGRYLTPTQVVDMW SSRVA AHCSLENSGGPYGENLAKVYGTSVSGSDAVEFW NSRKADCSLT HSNGQYGENLAKGSSSTFTALASVKLW AKRAGDCKLQHSGGPFGENDFWGSAGRAWGAADAVKSWVD
 DNYDCSGTLTHSGGSYGENLAAAGYDGAADGYSTDAVEAW DQYVCGSD V VHSGGPYGENIAAGTSPVGS VDAW RKCR WEHSTSGENLAMGYANVTATVQAW NGCVFEHDMDQGNGGYGQNLASWGATSDDDNQWYDSEMSN EYLASTGTFTHSKNSPYGENLYMDSGGPAEGVCVKASTSW NKHASDCTQLVHSG GPYGENLA WASPDLTGTGAVNMW NQR KQQCDYRHHSTSPYGEN FWELYRQNTATSIVQKW DGDADCTFAHSGGP $Y$ GENDAVGFQTVHGAIDAF EHCV WAHNPHRGRRGENLFAITGDSMDVQMAVAEW ANQRKDCQLVHSGGDRYGENIAESSGDMSGIEAVKLF EHDAD $\square$ QKLQHASDLNGQGENLAYGCNSAGTEMSEAVKNW $K A Y A Q Q C V W G H N K E R G R R G E N L F A D T D G L D V P L A M E E W H H$
$A A N T F S C D N V Q L V H S G G P Y G E N L A A G Y P G G D S P V N A W$ PTCAFAHSRSLGRDS $\square$ GENILYGPGSPESMVQTMWY NYLACKLTHRPFKGKWQQKYGENLVMGSFTAFNVTDAVKT ADKCVFKHSGGTLGPFGENLAAGTGSSYGITEAVKSW
$\qquad$ $\square$ ASTNRFEHSHGKVGKYGENLYWTTNNKA ICRDAMEAF N NHLQQQNDCRMQHDRQRKYGENLAWSGGMEMDPDSVVGMW EELAA GEEHDQSNEYGENVAVRKTEKQTTDTGKQATLMWY DHLAGSGKFEHSDGENDWMGTTGYYSYSQMAQGWADEKALD

 KRLTGDCRLVHSGGPYG ENDLWS S GDLT GSDAVK DW EGC】WK HSGGPYGENDAANFENSTDAIDAW ADNYDCSGVLTHTHGQFGENLACGYK DGPSAVQAW EKRRGDCLLQHSDSSGLYGENLFLGSAGGNWTGSDAVALD
 SKCVFEHDTSVGGESYGQNDGYGDPPQDUGKMUTNMMYND
NKLKGNCKMVHSGGP KGCKWK HSSGPYGENLAYGYKKASSAVTAW KGCVFQHDMNQGSGNYGQNLASNGDSGDISGQEVDSIMWY NHDANTNELYYQDGSNYGQNDFCCPAN SLLTXDLSGQEVAT TDNKNKGTIEHAKNNKYGENAMNMDESSDGDT GFGFTKMW SE KLIGDCNLEHSGGPYGENDAARGATDFDGADAVKMW QSQRDSCLP LTHSNGNYGENDFWGSGQNWTPFEADTAWND
 AKC QWGHTPNNPYGQNIAAGTWTDFGAKDATDLW STLAS CQMVHSSGPYGENLYMWRGSDGLAPPPATDAVKEW EKC NNYDCSGNLVHSGGPYGENLADGYSPVGS NQRAGDCDLV HSNSGPGENLAMSPDGDDTAKDAVDQW H KRQGDCALIHSNGNYGENLFWGSGKDWKPGDAVAAW DSCKFEHVNEGLVVGEFNTVGENDFAEGGESGDTKTVNKW EQRRGDCQLRHSDSGGKYGENDFWGSAGAAWSAADAVSSW DKLLAKGRULYRDEQDDGENUTTVKRSTRLPTGTEVTEKW ADYAAKAFDCNNVQLIHSSGPYGENDAAGYVGGDEPTDAW
$N T C Q F K H N D C V K L P F E C M E E Y Q F D G E N D W D F S P T D A D V A W$ NQCKFAHDTCRDVKRFKVGQNDATIGGTTGDVMWYNEVEHF


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100
110
120







 I A E K Q Y Y D Y E N N S C G QVVCRHY T Q V V V WQ N T T A I G C A R T Q C S
 ERFNYDTKTNTCASGEMCGHYTQMVWRATRAAVGARVKCD EKADYNYNSNTCASGKVCGHYTQVVWRNSQRVGCAKVRCD Y DEDVQKYNFNNPGFSEATGHFTQLVWNSTTKVGCAVKDCG EKEYYDYNSNSCQPDQMCGHYTQVVWWNTERVGCGRVQCD
 WY SEDRAYDFK GGDQLKKCGHFTQLVWSDTKQAGFGDAKSA
 Y S E V K D Y D Y S NP GF SMM TGHFTGQIV WKETT QVGC GVVKVCN
 V S E K Q Y Y N H N S N K C A P N C G H Y T Q V V V WR S S T A I G C G R V R C N YKE $\square$ K Y Y N Y SKP GF G L K T GHFT QVVWKGTRRRGGC WAR S Y VS E R P D Y N Y A T N Q CVVKMCGHYTGQVVWRNSVRGGCGRARCN ESAYY DCGSNTCLD GRRCGHYT QVVTWARTTRLGGAADVTCD GNEVK DYDYATNTCRRVCGHYTQMVWRKTTEFGCGDVRDG
 EKKHYHLSSSNSCDP GKVCGHYTQQVVWRKSTRRGCARVVCA Q A
Y E S KY S YNEDSKYDFCDPGY Y S El S S Y D F S N P A Y S S S T G H F T QLL V WK S S T Q V $V$ G C GF K Q C N
 WAFYGQENPPSDMNDDLYGHFTQVVWKDSTKVGCATVKCP $Y N E \square S K Y N F K K P G F S M N T G H F T Q Q V V W K E S K K V G F G \square A K H K$ VGEKPDYDYNANSCAPMCGHYTGQVVWRNSVRGGCAKACCA FGEKQFFNHATNQCNCQCGHYLNVI WRSTTKVGCGFVYCD
 VDEKPNYD YSSNS CVVGECLH Y T QQVVWRNTKRIIGCAKVVCD Y S EVVCSPGYD F DK D GDA TGHFTGQVVWKASTELGMGKATS K E HE HY N L S A A T C A A G Q M C GH Y T QQVVVWA R T E R IVGC G S H F C E $\begin{array}{lll}Y & N E \\ E & N & K \\ L & D & Y \\ L & L & N\end{array}$
 YAEKKLYHGEPNNNCHADGHYTQLMWPTTTHVGCAUATDK

 $F K Y G A F P D L S T D G N W A S V G H Y T Q M I W S N T T Q V G C A K G T G$ Y DE IIK DY DYS NPSYS SATGHFTQVVWKGSTQLGCGDKNCN Y D E I R N Y D F S K A T Y K P G T G H F F T Q IV V WR D C R Q L G V G I A K R G VDEK S N Y D Y N S D S CVGGECRHY T QVI WRNSFRLGCAKARCS AHEEKKYDYSKRKFSTSTGHFTQLVVWKNTTDVVGCAVIDCN Y E E GQTYYDYSTANEY N NHFTQMVWKDTTKVVGAYKDCS VAEK Q WY DHASNSCSAPCGHYTQVVWSNSTEIGCA GVVCD WYKDYKKYDFDNPVWGAGGHFTQMVWKSSTEFGDGKTKNA MF QNQWYREPAMTYFEQWGHMTQVVCKSTTHVGCATHYCP EA GLIFAGMYGQANPDMSNFSKWGHFWKGTTVVGCATVVCS VGEKPYYDYNSNTCVGECRHYTQVVWRNSVRLGCAKVRCN GDEAALLYDFSKPTATEEETGHFTQLVVWKSTREVGGAABVDC G
 GDEREE YDYKDPDFSEKTGHFTQLVWWNTTTVGCGRKLCG Y WY ST N R R Y D Y F H T NV V T G H F S Q M V WR A S R Y F GVVSK S I S K

 LS EK S LY N GETGGNYMSFGHYT QCVVWKTTTKVVGMAVAKGS
 VKEKA DYNYASNTCAPVCGHYTGQVWRNSVRVGCARVVKCN

 VAEKADYDYKTNTCAP QCGHYTQQVVWRDTGLVGCAMVQCA
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UniRef90 WIPHT7 UniRef90-Q5DFA7 UniRef90-B4FQY0 UniRef90-V4SAT9 UniRef90-E3MMMM6
UniRef90_UP10002B43450 UniRef90-IPJJX6 UniRef90-K3 YA88 UniRef90-D7MmF4 UniRet90-B3XX21 UniRef90 ${ }^{-C 4 W U X 6}$ UniRef90-Q6YSG4 UniRef90-C3Y3H2 UniRef90-Q9HOB8-3 UniRef90-C4JU13 UniRef90 ${ }^{-}$M7ZDM1 UniRef90-UPIOOO23B23C5 UniRef90-L5JSY9 UniRef90-L7M961 UniRef90-Q8W084 UniRef90-M4DQN7 UniRef90-UP100046DAB49 UniRef90-UPIo002233340 UniRef90_B9IIX3 UniRef90_UPI0002742238 UniRef90-S8EGN6 UniRef90-D8RT13 UniRef90-UPIO003FOFODF UniRef90-W1PBI4 UniRef90-UPIO002742239 UniRef90_A5COZ4 UniRef90_S4R594
UniRef90 D8Q6B4 UniRef90_C1LHZ3 UniRef90-COKMO8 UniRef90-H2DJY3 UniRef90-P16562 UniRef90_UPI0002C31280 UniRef90-J9BM16 UniRef90-M5VHU3 UniRef90-M0Z4H7 UniRef90-A7RT35 UniRef90-R9P9L6 UniRef90-E2L8C4 UniRet90-G1X1E9 UniRef90-M2XIX6
UniRef90 $V 4 M 4{ }^{2}$ UniRef90-Q7PT56 UniRef90-H6QPO2 UniRef90-W4YL30
UniRef90 V8P811 UniRef90-D7U614 UniRef90-D7SQ43
UniRef90_тамно6

SDSNFKSQMLATHNYFRKQHSASDLITWNDNLIADQSKEWA SSDKQEALRLHNVARSNVKVKAIVWDSKLESAATAYA MDKHFNQECLAEHNRLRKLHGCPPLRLSRSLAKAAQKYA YQKQUVDKHNALRRSVKPTAMEWNSRAAQNAKRWA NKTFDKEYVDAHNKFRSEVKPSAANMDYMLARDAKAYA SMAQNSEQDFVDAHTAARQEVGLGQVWWDRNLEDYARWYA TDRS $\frac{D}{F} A R E F V D A H N E L R A R Y G V P P M K W D N Q A R Q A R R W S$ TDRSFlDQCVQAHNQMRDRVQPPAMSWESSLAKVAHKWA NFHQLCREEHNKYRTKHHVPPLKSNSTLYILARAWA A LS GDWQSEMVR DHNEARDKDSMPHLSWHAGLAEKAQQLA TNAYQQA LLYNHNTHRSNHSASSLTWSDTLQASAQKLA AAQNAPADFVSLHNSLRALVEVGPVTWDTTVANYALNYA MDESFNRACLLEHNRLREKHGCPPLTLDSKLTKDAQEYA QNSHQDFVNAHNAARAKVGVGPVSWNYTLAAYAQTYA QDYVNAHNQARAAVGVGP QWDDT:AAYALSNV RQFLYAHNAVRGRKAEAPLEWDPQLRNYAVWWA AAAQSSPQDFLDAHNAARRGEGVPDVAWNATLEAFAESVV NERF回KEVFVATNKYRAMHGCPALTINNELNKLAQDWA DKSFASSILDAHNQYRSQHQVGPLSWDVDTYNYAKNNA KKIQEEIVNKHNELRRSVSPTAMKWSKEAAANAQRWA

FDKNCLEAHNEYRKRHGAKEMTWSASLAADAQKWA SQMVYYHNAWRAHHGVGAVTWNSTLASAALVSA FEADCLNTHNQLRAVVGAPSLSWSRSAANAAQTWA QNSPQDFVDPHNAARADAGVGPVTWDDNVAAYAQNYA TDNDEFFDECLREHNKYRKDHRVEPLRHSDALDKTAQEWA AQTTATDIVNDHNAARSAVGVPALSWDDNLAAYAQGYA AQDQPQDYLDEHNRARTQVGVPPMKWHAGAEQYAWNYA
SDDDFQGSALYHHNDHRANHSSPEVSWDSKIAGYAGDTA
FTSAMLNSTNTYRRQHNASSLEWNATLASFARSYし
 TTSPATVAQYLVPHNKLRAQMGLTPLQWDSKLANVAKWWA EFLYYHNLVRLASLEPPLAWSPRLASYAGWWA SSAHNKPQDYLKAHNEARASVGVGPMSWDYKLADYSHKHA KEFDDQULVEHNTRRQRHSAPSLEYNDELSEMAQQWA QNSPQDFFDAHNAVRAKVGAEPLFWDEELEAYAKNYI

## AK

TEAKAFTDAHNKARAMVGVSPLVWSQTLEAAARLAR SETKNVITEALERHNFYRKKHNVPAMKNNSKLNGDGAQANA A TPREDKEE DKHNELRKGAEPPASNWQEELAGMAQEWS ADDDYRGVVLYHHNVHRSNHSAPALEWSTDLESSARQLDA A TDQSFDDQCVNVHELRGQVNPAAMTWDEGLAMDAEAWA RKLQRQVLRNTNRYRRLHGVHTLAEDEKLNRYAQAWA SDAQNSPQDYLSPQNAARSAVGVGPMSWSTKLQGFAEDYA STEQQDYLNTHNAARSQVGVPNDVWNAT ASYALNYA $T A P P A L A Q E$
HDPWF $\prod_{D}^{D}$ FLAAHKIRAMHNDTSLSWNRMLARYARRWA 1 DK QCVRAHNEWRSEVNPPAMSWDAGLAEDARSWA
KYLSDHNTVRAHGAAADTWNNTLAAAQSW
 M
D A EFLFA
A DEFLFAHNLVRAAKWEDPFTWDFNLENYAKWWA TADDERRALTEYHNRLRASVHPQAMSWDWELAGMAEAWA MDDKMRKELLTDHNTVRAA $\square$ S $\square$ KPLKWNMELESKAQSLS

DYAQKCVDHHNAHRANHSAGTLEWDAGLAATALKI A TTQSEFVRECLKEHNKKREDHHVKP

A QD S $\frac{1}{K} Q D Y$ YL S
SKED DDGFVE
EEA SANAARRAVGVEPLTWSPGiAGYAKDYA
EEALKAHNRLRKVHGVPAMTLDKELSKKAQAWA
TSNGDDEQYLAAHNSVRAQHGAQPLTWSDEAASKAQQW EYRDADLRVHNEVRAAHDVPAMRWSRDLVNYAMANT SKAQDSPQDYLTAHNQARTAVGVAPVQWDERVAAYARSY SSSPDSADRWLAAHNDIRARYSVGNLIWSSKLEASAQAWA A AAPPNSTEEFLEAHNQARAEVGVGPFQWSEQLAHATSLLV

KFARNALEAHNDRKOGGPDLKLDDDNEDAAKYA

UniRef90_S3DEI7 UniRef90_W9JN65 UniRef90_U6HJ32 UniRef90 Q6K917 UniRef90-G1KGZ4 UniRef90-V7BTD1 UniRef90_I1GPJ4 UniRef90_K7VTQ5 UniRef90-UPI000331907B UniRef90-H3F2P5 UniRef90 V5GJ51 UniRef90-G7YJJS8 UniRef90_A0A017S5Z2 UniRef90_F8S6U0 UniRef90-G7YIQ7 UniRef90-W1PDP4 UniRef90-UPIO002B46776 UniRef90_BOVZU4 UniRef90 Rol161 UniRef90_S8CD35 UniRef90_Q6YSH3 UniRef90_B4MVV7 UniRef90-M3JT99 UniRef90-U4KVR3 UniRef90_UPI0003317A55 UniRef90-A7SGM4 UniRef90-S8BM22 UniRef90_F4NXQ3 UniRef90_UPI00035EC7EF UniRef90_M7ZRX5 UniRef90_U6FUL0 UniRef90-Q7EYQ2 UniRef90-F4JZQ4 UniRef90-G4U2K7 UniRef90-M7SFD8 UniRef90_J5JQD9 UniRef90-S8ADZ5
UniRef90 W1PHT7 UniRef90-Q5DFA7 UniRef90-B4FQY0 UniRef90-V4SAT9
UniRef90 E3MMM6 UniRef90-UPIO002B43450 UniRef90-I1PJX6 UniRef90-K3YA88 UniRef90-D7MMF4 UniRef90_B3XX21 UniRef90_C4WUX6 UniRef90_Q6YSG4 UniRef90 С 3 Y3H2 UniRef90-Q9HOB8-3 UniRef90_C4JU13 UniRef90_M7ZDM1 UniRef90-UPI00023B23C5 UniRef90-L5JSY9 UniRef90_L7M961 UniRef90_Q8W084 UniRef90_M4DQN7 UniRef90-UPIO0046DAB49 UniRef90-UPIO002233340 UniRef90 B9IIX3 UniRef90_UPI0002742238 UniRef90-S8EGN6 UniRef90-D8RT13 UniRef90_UPI0003F0FODF UniRef90-W1PBI4 UniRef90_UPIO002742239 UniRef90_A5C0Z4 UniRef90_S4R594 UniRef90_C1LHZ3 UniRef90_C0KM08 UniRef90-H2DJY3 UniRef90-P16562 UniRef90-UPI0002C31280 UniRef90-J9BM16 UniRef90-M5VHU3 UniRef90-M0Z4H7 UniRef90_A7RT35 UniRef90_R9P9L6
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UniRef90 V8P811 UniRef90-V8P811 UniRef90-D7SQ43 UniRef90_T2MH06

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NRCVYQHSGQPGVGENLA W GNSLGRGKAVQLW DQCTLSHSTQQHRE DSTSNCGENDFMASYPATWSKA $\square Q D W$ DKLSQTDAFKHDYASDNSKSQYFTPQKPNNTADMDAFDAW SKCVFAHTKNNPYGENIAAGTYTNPAFY NHLASTGLFQHSGGAVGGF GESDYRSSHGQSCGVAVRAF EQMAQSGRFAHADQHGQFTGTRGAYSYAEMDDLWLAERRD EQRRGD CQLIHTPDGRPYGENLFGGSGTQWTAADAVNSW ETLIFQRDNVTNSPDSNKGEDGESIRSDLTAQWYND
NQRAGDCALRHSDRNNYQYGENLSWNPSVQAWTASSVDQW QQRKGDCSLTHSNSNGLYGENLAWSGGALSGAEAVKLWVN N N C
 ADAARKDCEFAHSGGPYGENIA GYY ANATAATEAW

 A QRRGDCALRHSFPDGQFALGENVFWGGPGWRPRDAVADW QKLKGNCNSKKTQVSKYSETIA WSSQGEDTAAEYVKICMD DKLAKQAHDSF SELSGVGENDTFFPPDIDAESVVEHW TSKDKTCEMVHFVGPYG ENLATANPVLTAAASVNTW GELRTECSLRPPPPTAARGTGDGAAVYGRNLFKAYGRRHT QSRRGDCAPRR SPGFYFGENVVVGKGRHWNATAGAAPW YQRNQKKCEFASLNPGKYGANQLWAKGLVAVTPSLAVETW RVCVNQHSNLQKYPRTGENLFASMNMKIDAS WLKTAMRMF
DELAKRDVASHRPNNAYGENDYTVKSTEQVTEGTRAVNSW A QCQADCQPVSTNNGTATYGENIYVNDTSSSPAAAAVGAW ERCTWDHGQPHRDHSPFSWVGQNLWTWTEGSS IHGAIQAW SQCDWEHGPTQNDGAHWGRYRSPGFHVQSWYDEVKDYTYP ETCVYGHNTEYGGGGYGQNDGYFSNDASMDTNAMYNGEAP
$A Q R A G D C R L Q H S G G P F G E N I F W I C W G S G Q S W T A A N A V K S W$ NQRDGDCNLVHSGGPYG ENLLAXGSPSSTSDDAVNDW KKCKFQHNTCDCHPTFQY DGEN IWLGGDSMFSPKSAILAW LKMAEMDSMQHRTRPDHGENDYMWWSSDLRAP DRMAVKAW RQRKGDCRLQHSGGPYGENDFWGSAGADWTAADAVRSWVD NARRSDCNLVY SAGPYRENLAKGSSSTFSADSAVNLW AKKQTDCGMRHSKGQYGENLFWGFKAHWDPKEAVEDW QNWANKC $\square$ YEHKDRRTNTSCGENLFMSSAPTSWSYGI QS W NTRLDDCKNLEHSPNSPFGENLFWGLR DH WNASKVVKYW NKCTFKHNTCLDKAYECYAAFEYVGENDWSFSPKYAVTAW ANGCVFKHSGGSLGPYGENLAAGTGDGYGDDQAIQSW ATLRDQNNCALIHSGGRYGENLWKWWGSPGPPATDAVAAW ERCVWEHGQPEVSNPPYS I GQNMKKGT GLNAMTALDQW NQRRRGCAQIHSNGKYGENIF WGGGKSWGPADAVKTWAS EKCTNTYNPCTETLYNCYYAYEHVGENRWQFTPTNATRSW GQRRRDCKVEHSFPEDGFKLGENIYWGNGDTWTPTDVRAW $K Q C K W G H G P S D Q Q N L A V Y V G S E R P L A Y H V Q A W F D E E E W Y Q ~$
$N G C$
 QSCVYAHDTQMDGGGYGQNIAAGCPASNFYNNEVGNFASM KKLLQQDA LMHDTQSGMGENCGYFNTKSDTTWAVNVCNMW ASKHVHDCQLVHSGHKYGENLLAMSWGEMF GLDDAVSMW ERDASKADCDIHDPSKRFGENLFYYATNEETMALMTVQSF ADKRDDDCAMEHSMGPYGENLASGEGMSGAAAAKY WV RSRRADCAPDR SSLFYFGENVVVGKGRRWDAAPLVAQW EKDAKDGDGSHDNNRGNVGENWNVACRPEKKSPTAAVVTW PSCANNCKFEHSGGS LGSFGENLAAGTSDSYS DSRAVKGW DSAAGTFQHNTDGGKYGQNFAGSSFTYPNQTDGETAVDLW ADQRRGDCRLIHSGGPYGENLAWGSSDLSGVRAVNLW NYLASRNVMQHRTNNK NRCV
 ETCLWEHGPASLLPSHWGRYRPLTFHVQSWYDEVRDFTYP RYQRDKHGCQFANLSNSKYGGNQLWASGSGMTARLAVEEW NQRRRD

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| :---: | :---: |
| UniRef90-S3DEI7 |  |
| UniRef90-U6HJ32 | WYSEDSFYKFGKENQTNCGHFTQVVWR |
| UniRef90-R4G203 | YDENKKFVYGTGAKPPVIGHYTQIVW |
| UniRef90-06K917 | RERALYDAASNSCRGGCGHYTQVVWRRTTAVG |
| UniRet90-G1KGZ4 | HSEDKYYDFSTHKCTHVCGHYTQVVWASSYKVGCADAFCG |
| UniRefefo-V7BTD1 | VDEKQYYDYDSNSCGQQCGHYTQVVWRKSVQLGCAKVRCN |
| UniRef90-11GPJ, | VAEREFYDYDSNTCPFGCGHYTQVM |
| UniRei90-UPIO00331907B | YNETQYYNYNTLQCTKVCGHYTQVVWAVSNRVGCA |
| UniRef90-H3F2P5 | SEESSYNYNYGGHSSSTGHFTALVWR |
| UniRef90-V5GJ51 | ENTKYDYDVGGYSPDTAHFTQMVWE |
|  | FEEHVNYDFSTNCRQGMCGHYTQVV |
| UniReef90-A0AO17S5Z2 | EMGFFSDLYGLMALIFDSWGHFSQI |
| UniRef90-F8S6U0 | EKQFYDYATNTCATNKVCGHYTQVVWRS |
| UniRet90-G7 | VREOKEYYDHNDNVGNPDCTHYTQVVWRNTEKAGFGRAYTK |
| UniRei90 - UPIooo2b46776 | VSEKKYYDHHSNRCDDECRHYTQVVWRGTKHVGC |
| UniRef90-B0VZU4 | EPTHVYGKEPATLKTGHFTQVVWRDS |
| UniRef90-Rol1 | YNYAANTCNAVCSHYTQVVWRNSVK |
|  | EERYYRYWDNSCMYCGHYTQUVWKTTRR |
| UniRef90-06YS | ASYVYSSNTCTDCGHYTQUVRSTTS |
| B4MV77 |  |
|  | NEPVVTSNGFVYHLT ${ }^{\text {a }}$, WKAS |
|  | RRYFNFQNGGFSAQTGHFTQVVWKGT |
| UniRef90_UPIO003317A55 | YDESKDFUYGKGPKTSHDGHYTQVVWYSSSLVGCGUSYCP |
| 88 | YNEVSQYDFNNPGFSGATGHFTQVV |
| UniRef90-F4NXQ | ERVYYHGGP |
| UniRef90-UPIOOO35EC7EF | FVNAPTPGFSRTGRAGDVAHYTQVWRGTRA |
| UniRef90-M7ZRX5 | VSEKQYYDHGSNSCSDSCGHYTQVVWRDSTAIGCARVVCS |
| UniRef90-U6FULO | SYDFDCATGPAGNFTQMVWAATREVGFG |
|  | SYDYASNSCVGMCGHYTQVVW |
|  | IYASNTCSDGKQCGH |
|  | TDYNPSNPKASHFTQV |
| UniRet90-M7SFD8 | KSTYYGKKSPDMSGF |
| 55J |  |
| S8ADZ5 |  |
| UniRet90_W1PHT7 | ERAYYNYQTNSCQSNEDCTHYTQLVWRQTSRIGCAKVICE |
| UniRef90_Q5DF, | GHEVVNQWYSDAKNYNYENNFTQLVWSSTREVGFGKARGP |
| UniRet90_-34FQ | AAEGADYSYADNACAPECAHYTQIVWRRTTAVGCARVACD |
|  | GKPLLYDHNSNCAINGTKCAVYTQVVWRNSVRLGCAKERCN |
| UniRef90-UP10002B43450 | AAEKKYYNHNSNKCEGECRHYRQLVWKN |
| UniRef90 -11PJ | ADGRRWYDRCGAYTQVV |
| UniRef90-K3YA88 | VAEGQWYDYGSNSCAAPCLRYTQVVWRNTTQVGCARIV |
| UniRet90-D7MMF4 | CNHTCGVYKQV |
|  | EDSCSLLVCGH |
|  | GSND |
| UniRef90-Q6YSG4 | AAEEQWYDPDTNGCSAPCDHYTQLVWNATTAI GCAE |
| UniRef90-C3Y3 | YNEVSYYDYDTASCAHDCGHYTQLMWGKSHA GCGL |
| 888 |  |
| Ref90-C4JU13 | FENEYGLANPRSNFHAWGHFTQ VWKST |
| UniRef90 M7ZDM1 <br> 辟 | VDEKRNYHLNTTPCDKVCGHYTQVVWRKSTR |
|  | YNETRMFDYSTDSCTGDCGHYTQVVWANSYK |
| UniRet90-L7M961 | YDEDKMYNYNNPGFRSGTGHFTQLVWKDCRRLGTGVARGR |
| Q8W084 | KYY |
|  | VAEKPYYNYSTNSCTKHCFHYTQVVWRDSVKLGCA |
| UniRef90 UPIO0046DAB49 | A EKMQYNREKRQCAQDCGHYTQVVWKNTQHVGCSRFRCS |
| Unireego- | GDEVQNYDPGANECLNNCGHYTQUVWNTSQSVGC |
| iRef90-UPIO002742238 | YDEYKFYDYDNLSCSEVCGHYTQVVWAKSDKVGCAAASCP |
| UniRet90-S8EGI | T |
|  | VSEQVDYNYASNTCGKVCGHYTQVVWKNSVRVGCAYVQCN |
|  | EFYNDNTC K C G |
| UniRef90 W1PBI4 | EKVYYNHQRNSCQSYEECGHYTQMVWRKSLMVGCA |
| UniRef90_UPIOOO2742239 | YNEGESYSYDTMTCTSYCDYYIGQVWAYTSKVGCAVASCP |
| UniRef90-S4R5 | YPEEKECSPECPHTCPICTHYTQLVWAESRR |
| UniRet90-D8Q6B4 | NNERPQYNATT FQGAGHWTQVVWKSTKTV |
| UniRef90 C1LHZ3 |  |
| UniRef90-C0Км08 | YGQATPANDNDEПAFDGFGHFTQUVWKGTTKVGCATYHCD |
| UniRef90-H2 |  |
| UniRet90-P16562 |  |
| 02C31280 | G |
| UniRef90-J9BM | GFTQLVWKSTTQVGVGVAMRN |
| UniRef90_M5VHU3 | TEKEFYDYDLNKCVRDECGHYLGVIWGKTTEVGCG |
| 㖪90-MOZ4H7 |  |
|  | YNEVCKPGYTFGTESMGAGHFTQVVWKSSTKMGFGMAEGT |
| niRef90-R9P9L6 | FLDEDRNWATNPHMSEDNGHWTQ\\|VWKETQFVGCAVSQRK |
| iRef90_E2L8C4 | DSN |
| UniRef90_G1X1E9 | DKELRLYDFNR |
|  | MLEEKQYNFQDPGFSDSTGHFTQVVW |
|  | NEMK Y \% |
|  | WV |
| UniRef90 ${ }^{\text {W }}$ 4YL30 | TNEDRFYDYETNSCERMCGH |
| ef90_V8P |  |
|  | YNHSDNSCNHECGVYTQV |
|  | VSERRWYDY |


|  |  |
| :---: | :---: |
| UniRef90_S3DE17 | N |
| UniRef90_W9JN65 | KGAWYTVARYSGPGNVVGQ |
| UniRef90-U6HJ32 | DGGUYVVGRYQKPGNYLNN YCENVPPPK |
| UniRef90_R4G2033 | SSKYLYVCQYCPAGNURGSIDATPYKSGPPC |
| UniRef90-Q6K917 |  |
| UniRe990-G1KGZ | KNGGTLICNYAPAGNYRGVRPYKAG |
| UniRef90-I1GPJ4 | NGGVFITCNYYPPGNWP |
| UniRef90-K7VTQ | KGGVFITCNY |
| UniRef90-UP1000331907B | NHTTIFVCNYAPPGNFANM |
| UniRef90-H3F2P5 | SGNTYVVAQYWPAGNVGGH YRQNVLPPQ |
| UniRef90 V5GJ51 | SSTIGFVCKYFPQGNDDGQ |
| UniRef90-A0A017S5Z2 | SLGNFTVCNYNPAGNTGGE YADNVLKP |
| UniRef90-F8S6U0 | NRGVFIICNYSPRG |
| G7YIQ | GKI YVVGR |
| Ref90-W | SNWIFVYCNYDPPDNY |
| UniRef90_UP10002 | NNWIFVYCYDPPDNY |
| UniRef90_BoVZU4 | SGQVFVVANYDPPGNYI |
| UniRef90 Rolic1 | AGGNVVSCNYYPRGNYVG |
| UniRef90-Q6YSH3 | AGDVLISCNYFPPGNVPN |
| UniRef90-84MVV7 | ADRTWVVCNYNPPGNVLGQ |
| UniRef90-M3JT99 | GWYVVCEYDPYGN |
| UniRet90_U4KVR3 | G |
| UniRef90_UP1000331 | NSKYYFVCQYCPAGNLRSKLHVPYLSGPPC |
| UniRef90-A7SG | GKEYVVARFSPAGN1 |
| UniRef90 S8BM | GNYMLFCEYSPYGNVL |
| UniRei90- UPIOOO35EC7EF |  |
| UniRei90 ${ }^{\text {M }}$ MZRX 5 | SDDVFIICSYNPPGNYVGQSPY |
| UniRef90-U6FULO | NGRCVVVAHYRPPGNVRGR YKNNVF |
| UniRet90-07EYC | NRGVFFICTYFPAGNV |
| UniRef90-F4JZQ4 | NGGTFVTCN |
| UniRef90-G4U2K7 | TPATYYVCEYREAGNVIGN FAANV |
|  | ARAWYVACEYWPRGNVQGQ YGDEV |
| UniRef90-S8ADZ5 | NLSYMVWCEFSPPGNVSPSNNYVANVARPKR |
| UniRet90_WP1PHT7 | G |
| UniRet90_Q5DF | GKCVVVA ${ }^{\text {a }}$, |
| UniRet90_B4FQ | GGGVFITCNYYPPGNV |
| UniRef90-V4SAT9 | KNGTFVICNYDPPGNVFGQRPY |
| UniRei90-UPIOOO2B43450 | NNWSLVSCNYSPSGNVVGERPY |
| UniRef90-I1PJX6 | NGDTVAVCDYYPPGNIVGQRPY |
| UniRet90_K3YA88 | SNDTLLVCDYFPPGNYG |
| UniRef90_D7MMF4 | ESTVLTICFYNPPGNI |
| UniRet90-B3XX21 | DNGQLLFCRYAPPGNYFRKKPYEA |
| UniRet90 O6YSG4 | DAGlVFVICNYYPPGNIPD |
| UniRef90-СЗҮ3 | AYLLTCNYGPGGNYA |
| UniRef90-Q9HOB8-3 | KNAVYFVCNYSPKGNW |
| UniRet90_C4JU13 | NNADFIVCNYGPGNY |
| iRef90_M7ZDM1 | NRGVF 1 CNYNPPGNFNGERPF |
| UniRef90 UPIO0023B23C5 | SGGWFVTCNYDPPGNYVGQRPF |
| UniRef90-L7M961 | KGTAYFVSVYEPRGNTMGQ FAEQVPRP |
| UniRef90-Q8W084 | NRG\\|FIICNYEPRGN! |
| UniRef90-M4DQN7 | NGWWFVICNYDTPGNYI |
| UniRet90-UPIO0046DAB49 | NGSLLICCEYAPPGNY |
| Ref90_UP10002233340 | NQGYFYVCQYCPAGNY |
|  | NNGHLFVCSYDPPGNUYYQGP |
| UniRet90 UPI0002742238 | NTSTMFYCNGPAGNYANTHPYQKGV |
| UniRef90 D8RT | GMNSYLVCNYDPPGNYIGQKPY |
| UniRet90-UPIO003FOFODF | SNSNMVVCNYGPAGNYRNTAPYDSGV |
| UniRef90-W1PBI4 | SGDTFITCNYDPPGNYFGEQPY |
| UniRef90-UP10002742239 | NGGTVFDCYYGPGGNYPSMHPYRT GPPC |
| UniRef90-A5COZ4 | SGDVFMTCNYDPVGNYIGERP |
|  |  |
| UniRef90 C1LHZ3 | , |
| UniRef90- 0 COKM08 | GGPDFTVCNYKTPGNYLGE |
| UniRet90-H2DJ | GT |
| UniRet90-P16562 | NQKYYYVCQYCPAGNNMNRKNTPYQQGTPC |
| UniRef90 UPIO002C31280 |  |
| UniRef90- M5VMH | NGLNYVICNYDPAYN |
| UniRef90-M0Z4H7 | SGDTLLVCDYFPPGN |
| UniRef90-A7RT35 | FQCVFSVARYDKPGNYANR FSKNVVK |
| UniRef90_R9P9L6 |  |
| UniRef90_E2L8C4 | GKARYYVCEYTPQGNVGGQ |
| UniRef90 G1X1E9 | YGTYVKCDYRGKGNIIGQ FEQNCKAPK |
| UniRef90-M2XIX6 | TYNQFVIVCNYLIPPGNVIGE |
| UniRef90-Q7PT56 | GTSVFVVCNYDPPGNVYGQ YAQHV |
| UniRet90-H6QP02 | NDAPYWVCQYNPPGNVLGE FDTNV |
| UniRef90 W4YL30 | RWIVVCNYLSGGNIRGRQPY |
| $\begin{aligned} & \text { UniRef90-V8P811 } \\ & \text { UniRef90-D7U614 } \end{aligned}$ | YSPKGNWWGHAPYK |
|  | YDPPGNYIGERP |
| UniRef90_T2MH06 | TGCHYSVIAYRPAGNFIGE YTSNVLKDNK |



## UniRef90 A8N1Y7

 UniRef90 C5X8S2 UniRef90-UPIOOO2C56458 UniRef90_T1FCL9 UniRet90_w9ZAS9 UniRef90-G2WWV4 UniRef90-L8GNV2 UniRef90 UPI0003597AF6 UniRef90-A7SP03 UniRef90-F7A572 UniRef90-W9QBP0 UniRef90-D8R227 UniRef90-V5HIR UniRef90-E7EZYO UniRe990-T11JR0 UniRef90-R7U3K1 UniRef90-B9H6A4 UniRef90 UPI00037E38D3 UniRef90-F4RH15 UniRef90-A9U5A3 UniRef90-M3JCR6 UniRef90-M7AK48 UniRef90-E7FB91UniRef90
U2KNL5 UniRef90-F9XEB5 UniRef90-F2Q6E2 UniRef90-G1KNF4 UniRef90- U5D5Y3 UniRef90-BOEOLO UniRef90-A1CS91 1 UniRef90-W2TYL7 UniRef90-Q5FVN7 UniRef90-Q9VQA7 UniRef90_B9HEL1 UniRef90_UP100046BECCA UniRef90-M3W8B6 UniRef90-E1FJD7 UniRet90 UPIO002657036 UniRef90-F3X0C8 UniR Ref90-H2STKO UniRef90_UPI000273AC83 UniRet90_A5PAQ2 UniRef90-V2WAC5 UniRef90-F4NZY4 UniRef90_UPIO002B41475 UniRef90-111FL7 UniRef90-G2XN12 UniRef90-UPI0003F179F5 UniRee90 UPI0001925C1F UniRet90 K1WJRO UniRef90_D2SGU1
UniRef90-V9KL04
UniRef90_V5IGD7
UniRef90-K9CNW3
UniRef90-UPI00032A772F UniRef90_UPIO00333E37B UniRef90-UP10002B4AE21 UniRef90-UPIo004420F06 UniRef90_C5XU94 UniRef90_AGGVD5
UniRef90 G7Y4P9 UniRef90 A7RUQ3 UniRef90-M4A7N1 UniRef90-UPIO003B604F8 UniRet90_G3VG09 UniRet90_Q9VFY2 UniRet90_E6R4B6 UniRef90-UPIO0044456DB UniRef90_D8LED3 UniRef90-UP10001CBCOA2 UniRef90-B3G496 UniRef90-B9IM26 UniRet90_F4NS72 UniRef90-K3WFS4
UniRef90 C3ZPE8 UniRef90-UP100042C1D1C UniRef90_U6JK82 UniRef90-RIVMM UniRef90-UPIOOO3F48C12 UniRef90 W6PZQ5 UniRef90-C3ZIM7 UniRef90-M5BQD9 UniRef90-UPI0002B496E4 UniRef90-D8Q6B5 UniRef90-UPIO0032A53EE UniRef90 W5L1E0 UniRef90-A0A059BVD7
Uliref90_A0A017SAQ6

SGC KFEHSGGTLGRLDGENILAAGTAPYPTTTAVFRW AQRQGDCKLIHSGGPYGENIFWGSAGADWSASDAVASWVS NKCRFEHNSCLSDSYRYHPTFQFVGGNDWIFSPKFAVVAW QNCAFEHGQPAEAQNEDDTGQNLYASSTSNVDYESAIQNW ASCAHNTAAGGGGYGQNDGAGAPPSDDPAMITDEMYNGE\| QTCVFEHDLLTPGGGGYGQNLAMWGATDGDSLGAAKAVMWY
NTLAAGCTFSHSGGDYGENLAMGHSSAADLNGWVDSEAQ NLCIYQHDPARRYGENLYRTSRTVDDVTGAGAASEAWGAE EKLAAS SDSDTYSHERGDAENDACLWGSEDTGNKVVQDW NQCSLSHSPPNQREIGQPCGENLYMSTAPSSWSDSUQAWF RSASRRFFDCKMVHSYGPYGENIFWGGRDHWTAAEAVESW TTLRDTRNCNMVHSGNRAYGENLYKWMGSPPNPAEAVKSW DHLAA QPKGTPFRHRPNNKYGENTYFQWSSSPSFMPVDYW SQC ПWEHGPHHFLQHTGQNLSIISGRYKSITDLLVKW DQCVSGHDHNRRTKDFTYVGQNVYTFWSTKPNVKDAVTSW ERCYWGHGQPSRTNPPFKHGGQNLYAYTGHFDPLNGLHAF DHGASTSCTMDHRVEAGRNPANYGENDFWSSPLI WEVRDW EACVFEHTKNNQYGENLUCGQQD TQRQYYGDCRQHSGGPYGENDFWGAGKDWQPVEAANAWVR KRCHFDHNVYLKVHGKVHPNFTSVGENIWTFSVSAATSNW EGYAAKCUWDHNPDLEHLTMGENLFVGTGPFNATKAVMDW KTCQYKHNTTAGGGGYGQNIIPYTNIGYVASDLFYNSEVN FRCILDHSPYNSRVIGGIKCGENDYMSSNPIKWIEGIRKW SCSTFAHDLTAGGGGYGQNLIVAGNSNSAAFTTEAALADA RFQRDKHGCGLVQSTAEKYGENQCWGSGRPMSPTEAVGSW KKCVFEHRNDFCCRLLVLMFEPKKAAGSWDTYGUVDVNDW EGCKWRHSDGPYGENLAFGYADPDTAVSAWGDEGQ
NVLGNTKGCLVHEQPRIYFYFAAKHFPSATTMARMVTQSF QSCIVFQHNPQLHHPNFTGLGENDWLGSLSLFSVRAAILAW NYGLSRNRMEHRQNSGYGENGYM WASGNLKGADAVRSW NECTLSHSPESRRTTTVGCGENLYMSTAPNSWSDATQAW NKCTLEHSNAEDRKTNRTNCGENLYMSSHPKSWSAPIQNW VKLAERGRULFPELQGDGENDRVVEEQTHLPSGAEVTEDW QRMARTGKFAHSGNPKNLFSSTSSGQLDSVSARADDAWYG QEMARTGRFEHQQPQGPARQGENLLWTGTRGAYRYDEMMAH
$H S C R W E H G P S H M L T Q M G Q N L G A H W Y H V Q A W Y D E V R Y Y S Y P ~$ QNCKFEHNPDLINPKKLHPNFSAVGENLWDFSENEATKSW EELARTGRFEHNVPGSPLEGENLWRGTAEAFTPEHMVQRW CNC NYLAATNTLSHSRSGENLDRATGNDNLDCVHGLQTF FAE EVLANAPKLSYSDPRDRPGQGENCSDDGSILSAKEAVIVY AQRRADGCALRHSFPDGQFA LGENDFWGSGAAASWRPGDA KRCVFEHSGGPTGENDAAG YPNATSSVDAW QKWANKCTDEHEDRKTSTKCGENDYMSSDPTAWSNAI QNW KVLSHKGTFMEKSKNAQENIFKGFDRLKFPKTMADAVYFW YNCVFEHDMEQGGGGYGQNLAAYGTTADMSTGDPANVAAD DHLASLPTWPANPHSGVGGENDAWAAPPGSKTPAEFVDQW NECMWEHGPSQLLKSHWGRYRSPAFHDQAWYDEVKDYTYP SY LSKRDDTSDVPHEMDSGVGENDYWMTHSQYAEMAVQYW RQMARTNDFAHSSRATRAVPSGENLWMGSRGLYDYEVMYF NKCLLQHSKAEDRAVGTMKCGENLFMSSDPNSWSDAIQNW MERYEDCKLVHSNESYGENMFWGKKLHWTPCDAVYYWYME QKWANKCTLEHSHPDDRRKCGENGYMSSDPTSWTTADQSW EMWAQ MGMLMKNPFGPGENPYWAYNTAPPNGEDAVKVW DKCSFAHSPVNQRTVGELQCGENLFMSTHPYSWTAVTQSW QSRRGDCALVHSSGPYGENLFWGSGTGWAPSQAVGAWLSE ETR
 KKLIAEDNKDNHASTSDGENLYYSGTSSGHTARCTDAVSAW HAC LDEHGPPHLLRFLGQNLSVRTGRYRSILQLVKPW DDMAAMNRFGHAQQRGVPEGENLWMGYSYSDMVDSWI EKG Q ${ }^{2} W A D T C S F E H S Q R N N R T \square C G E N L Y M S T A P T T W S N V V Q S W$ DNCQFRHDPHRTINRFTMGQNLAIIWSTDDGDFPSRIQSW SSC ATCSMKHSPASSRVISTSGCGENDYMASFKNSWSNA $\square Q A W$ EELTSRQNCGYLLFWDVTAHGYGENDY LCYGAADCMMYDG DGCTWEHGNPDNISPYSSVGQNLWMGTGSEANQPDPTDGW NKLARMNQMVHSRTPNVGENLWMMSSSAKENNDDTATANW NQRRSDCALK HSNGPYGENDFWGSGSDWTPAQAAVAW DTMFRTKVYEHSRPGENGNKAWNMAMTCRSSПQVFFDEYT KTCAAVTAAGDNVHTHAATDTKSVVNSAFQEWAVVAALKV DRCDFDHNAQRA DTFPGSVGENIVVSSGEYTPGDEVDDW KTCQFKHNDYKAHPTFTSVGENIWTGSLHTIFSVTAALTSW KRCKFEHPNWKEYPEYRGI GQNLALSGGSRRNLVAQATGW NRCNFEHFDPKGAGQGQNLFTVSGRAFNVTAADTESWY HG ENC NAGLHTNSGENMASQSGGBT PQQA DDMW SACПWKH SESSYGENLIAYGYQNVSAAVIDW DGC DFAHNSNRGDNYAGSVGENDYAGTGSYTAGSETENW KTCPS GHSGSRYGENLAWASYDMG円GSTVKMW NKC NFSHNQAGQNLYAGTGNPGVAAAVGAW EYGANE DKLLLTKPKVHYGQTLYYISPKPGPDSAQUAVRAW
 RKCLFDHNTHDKEGGRVHPVFSENLWAGTHFSVQGADKSW SQRRGDCALIHSTSNYGENIFWGQGKHWMPKDAVAAWAAE
QQCKWK

## UniRef90 A8N1Y7 UniRef90-C5X8S2 UniRef90_UPI0002C56458 UniRef90_T1FCL9 UniRef90_W9ZAS9

 UniRef90_G2WWV4UniRef90_L8GNV2 UniRef90_UPI0003597AF6 UniRef90_A7SP03 UniRef90-F7A572 UniRef90- W9QBP0 UniRef90_D8R227 UniRef90-V5HIR9 UniRef90_E7EZY0 UniRef90_T1IJR0
UniRef90 R7U3K1 UniRef90-B9H6A4 UniRef90_UPI00037E38D3 UniRef90_F4RH15 UniRef90_A9U5A3 UniRef90_M3JCR6 UniRef90_M7AK48 UniRef90-E7FB91
UniRef90 H2KNL5 UniRef90_F9XEB5 UniRef90_F2Q6E2 UniRef90_G1KNF4 UniRef90 U5D5Y3 UniRef90-B0E0L0
UniRef90_A1CS91
UniRef90_W2TYL7 UniRef90_Q5FVN7 UniRef90_Q9VQA7 UniRef90_B9HEL1 UniRef90_UPI00046BECCA UniRef90_M3W8B6 UniRef90_E1FJD7 UniRef90_UPI0002657036 UniRef90_F3X0C8 UniRef90-H2STK0 UniRef90_UPI000273AC83 UniRef90_A5PAQ2 UniRef90_V2WAC5 UniRef90_F4NZY4 UniRef90-I1IFL7 UniRef90_G2XN12 UniRef90_UPI0003F179F5 UniRef90 UPI0001925C1F UniRef90_K1WJR0 UniRef90_D2SGU1 UniRef90_V9KL04 UniRef90-V5IGD7
UniRef90 K9CNW3 UniRef90_O19010 UniRef90_UPI00032A772F UniRef90_UPI000333E37B UniRef90-UPI0002B4AE21 UniRef90_UPI0004420F06 UniRef90_C5XU94 UniRef90_A6GVD5
UniRef90 G7Y4P9 UniRef90-A7RUQ3 UniRef90-M4A7N1 UniRef90_UPI0003B604F8 UniRef90_G3VG09 UniRef90_Q9VFY2 UniRef90_E6R4B6 UniRef90_UPI00044456DB UniRef90_D8LED3 UniRef90_UPI0001CBC0A2 UniRef90-B3G496 UniRef90-B9IM26 UniRef90_K3WFS4 UniRef90_C3ZPE8 UniRef90_UPIO0042C1D1C UniRef90_U6JK82 UniRef90_ROIVM9 UniRef90_UPI0003F48C12 UniRef90_W6PZQ5 UniRef90_C3ZIM7
UniRef90_M1PB59 UniRef90_M5BQD9 UniRef90-UPI0002B496E4 UniRef90_D8Q6B5 UniRef90_UPI00032A53EE UniRef90_W5L1E0 UniRef90-A0A059BVD7
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VD ERKDYVPGQA S H F T QVVVWKST T R CASVVCN EKQYYNHDTNSCADGKVCGHYTQVVWRDSTAIGCARVVCD




 YEEEK LIYNYS DPKDTPETRP F CQVVWAGTRELGVGKSNTK
 IR EA QFYNPDTNECTPMCGHYTQQVVWRDTLRMGCARMRCL
 Y DERHS FSSYPSRCCSGSVVCTHYTGQMVWAASNKI GCAMKKCS Y DEVERPHIDPFQFSHPA GHYTQLVWAETKAVGCGYVFFN
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 ERQWYRYYSNSCAYNNKCGHYTQLVWRGTTRVGCARSVCN
 Y NEVTAYTEETRHCTRDCGHYTQVVWATSYKVGCADQFCP FNENLDYNYNTNDCDKMCGHYTQLVWWANTTKIGCASYFCD WY A Q G D Y H D F N E S F T Y E T S Y F S QLL I WK G S K N V G F G R A V S E HDEKKNF $\square Y G K N P S N A V V G H Y T Q V V W Y K S Y R I G C A A A Y B$ YP QECN P Y C P Y R C T GP V CTTH Y T QQV V WA T S S R I G C A V N L C H I K E WY Y GVVA S P P Q T V G D F L H F T Q I V W W E S H S V G C A V K T C G
 KYNFK LDPGFTEETGHFTQLLVWRAT YME G GYDYKYPMTYYKTGHFTQLIWWGSKRMGVGVSIVG FEESQYYDFSTGKCKKVCGHYTQIVWADSYKDGCAVQLCP


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 LDERLD Y DYN ENKC DK MCGHY T Q Y NEDK DYDYNDNHPGAMDGHF TQVVWKGSTQVGVGAA KVK Y DE VVKDYS FPYPCYGPMCTHYTQQMVWATSNKIGGCAMVHTCH





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Y A DLVLARHNVHRANHSAPALVWDENLAADARE IG AL L N F H NRVRA GVFPPAMVWDEQLAKVAEAWA
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$\qquad$ DYHNSDR
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 K $\square$ WAN ECTLLSHSPPNRRKTTDSCMSVAPHPWS IVIDQSWYN STCLWEEHGPRQNLSVRTGRYRS LLQLVKPWYDEVKDYSFP ATCCKWGHSMNDNGGGYGQNDNKEMAVAATDMWYNGEXPTY
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 S D DLVVSAF NMVNQARA ERFVGP LDSWSPDDAAAYAQLDA NEVEKAQL VTHHDARENVYPPASNMMSHLEQRADYWA DQQEEMLVVELHNHYRGQVSPSPLKWDGNLKLVAEGYA SALLLDYHNHIRASVHPPAMVWDEQLARSAEAWA $S L S K E V R Q S F I Q K H N A L R S N L A A P P M K Y D C A I E A S A L N H A$


 D S Q F $\square$ E E CVRVHNNFRASVVNPPAMTWDP DVAKTAKA WA

 $M L$ A A L N DRREFHSSPS LK WN A DLA T S A RNMA
 TARNGYAD I AVVSTHNTHRQKHSAPPMSWNADLAGYAAAVA T QYDKT I L DAHNRARQLVA LGK M $\square$ WS E EL A A KA QE WA $T N S G R V R Q K V V D T H N Y F R T Q V V P P A M K W H P G L G K A A C Q K A$ $T T L P K V Q E E V N K H N E L R R A V S P T A M R W S S E A A K K A Q A W A$
 DADKD I I L A A HNHYRSQIA DGNMEWDDDLARVAQA HA SASKQFHNEVLKAHNEYRQKHGVPPLKLCKKLNRDAQQYS DNDF $\square M K C L V W H N D L R S R H Q A K P L R L S F D L C H E A Q K L A$ QEYQLNALNRHNYYRRDHNAPAMQLDKELSRYASTWA MTEEAKTQLLTGHNEHRSKLGATKLHWDDKLAEASE DWA
 S DPRFIDECI KAHNEWRGRVRPPAMVWEE GLAKMARA WA A A $\square$ S E MA Q N F V D E H N K V R NVV GVP Q L T WN P QL DP S A H R L A TTKMSVQEEIVSKHNQLRRMVSPSGSDQLKMWNYDAQVNA MTEKVRQVFLDKHNEYRSLVAMPMLTYDCG\|ESKALKWI


VQREIVNKHNELRKTVNPSARNMLKMWSNASAVNA RQTLAVHNKIRAEVGVAP LVWNKTVAAYAQNYA
 SSRAEQQKLIVDRHNALRRGVKPTASNMMKMWCPAAAENA S Q N D M I A L L NEDF $\square K$ C CVVW $\square H N K F R S E V N P T A M T W D P A L A R I A K A C W G$ SDAFR WVVDSHNKVRAKYGVQP LVWDHQLASSAKACT TTLRKVQQEIV NKHNALRRSVSPSAMEWSAESAARAQQWA
 DPNF ITE E CVQTHNRFRSGVNPPAMSWDPDLAKTAKAWA SENNFVQQDCLFWHNHFRRKHRAPFVQQSHALCDQAQQVA S F S N E L K S $\square$ WI ERRHN Y F R A S G DMRRRMGWD DA L E K S S A T T A A Q N SPQDYL N $\square H$ NKARS QVGVGP
 NEEFIKKCVQMHNKLRSEVNPSSMTWDPDLAKTARAWA H R S P P MV LS H K I N L W A Q A W A
E QKEH VIA LHNQYRSSANMRRMRWDTRREKMARKHA FNQECLDYHNFFRALHNLKPMTWNYK』AGTAQKWA VQRQUL V LHNAFRS QVKPPAMKWDAEASKAAQKLA DEAFSQACVRAHNKFRSEVSPRRAMTWDPA LARDAKA WA TEDLKK WLLHYYNKYRTHHNAGNMATNGELNKAAQKWA TNDEKNEI LKRHNDFRQNVAPPALVWNDELAK $\square A Q T W A$ QKVLDKHNELRRNLAMPD LVWDSDLATKA QA WA

UniRef90_W2TWX2 UniRef90_K7FQF1
UniRef90_M7B978 UniRef90 O18538 UniRef90_D8U8S6 UniRef90-UPI0000521AE6 UniRef90_UPI000359C7D1 UniRef90-E2E4F6 UniRef90_G8JMA3 UniRef90-G1EN92 UniRef90-M1DS61
UniRef90 R1EAF3 UniRef90_B8PPS7 UniRef90-A9VDQ4 UniRef90-UPI0003C8EE0A UniRef90-D8TI88 UniRef90-G1KM75 UniRef90-G9MKX5 UniRef90-B2WID3 UniRef90-A0A016VV59 UniRef90-W2RZ64 UniRef90-UPI00046C2CBD UniRef90_G3U097 UniRef90_K7FNH0 UniRef90-J5JWE7 UniRef90-G5B536 UniRef90_W6U454 UniRef90-H2MWC\& UniRef90-A2A5I3 UniRef90_W2TND4
UniRef90_UPIO002B422BE UniRef90-L7J3B1 UniRef90-F4RNR0 UniRef90-Q6DKY4 UniRef90-H9KL69 UniRef90-M5W1G0 UniRef90-UPI0003C299F1 UniRef90_F9XFK7 UniRef90-Q86FX1 UniRef90-A0A016PIQ0 UniRef90_S6CAL9 UniRef90-H2W3X5 UniRef90_UPIO003F10681 UniRef90_U7PH25 UniRef90-D6W9E8 UniRef90_UPI00021A86B9 UniRef90_UPI000393CE81 UniRef90-UPI0003510200 UniRef90_UPIO003832525 UniRef90-L7MBC4 UniRef90_N1JFF0 UniRef90-F7EB94 UniRef90-UPI00026573FD UniRef90_A7SBE5 UniRef90_V4AG55 UniRef90-L7UN49 UniRef90_UPI00038339A3 UniRef90_UPI00032B0E42 UniRef90-J3Q4J8 UniRef90-Q03401 UniRef90_U6PXL1 UniRef90-M3X0D9 UniRef90-P12020 UniRef90_UPIO0046B0C48 UniRef90_V4M2G8 UniRef90-H2Z4W2 UniRef90_UPIO003337165 UniRef90_HOZSR0 UniRef90_W5KMIO UniRef90 W5K7Y0 UniRef90_UPI0002C55E9D UniRef90-A7KKK5 UniRef90_UPI000332EF68 UniRef90-M3E997 UniRef90_UPI0003511E50 UniRef90_UPIO00386EEFD UniRef90_UPIO002658899
UniRef90-M4BK43 UniRef90-M4BK43 UniRef90-E3M6F0 UniRef90-H3ES37 UniRef90-E9FY20 UniRef90_F7DWI6 UniRef90_V5GUIO UniRef90_UPI000457228D UniRef90-E4X5G3 UniRef90-A0A023FCM4 UniRef90-F1PE15 UniRef90-E3MMM1 UniRef90-P10736 UniRef90_U6IA72

DKCALAFPWVNAGENTYVLDQSKSDPRKSMEEWWEEDYSTS AKNWANQCTLSHSPQEQCGENLYMSTAPNSWSDADQTWYN $\begin{array}{lll}V & C \\ N\end{array}$ LRLAAKADCSTQHS GSRAFGENLYAVQVSPPQNDYTCVRVW NKLAA DNS GLLLHDDNRNGYFMNNSLDMFSPTGAETTDDVWYK QRWANQCSSFHHSPREDRRICGENVLIMSSSPASWSAAA Q S W

 S SRREDCRLMHSFEEGYFKLGENDYWGSGNTWTPTDVNAW K K C V
 N GCVVF Q H S G G T LGP F GE N LAA A G TGGS S Y GI S A A $\square$ N S F $\square$


 NDMAA GQQPFS HAQGSYRPQQGETLGEYQSTGCDAACDNB $R$ SCSS S LGNFGSYGQNMMSFGGSGFPKPEQQ\|RQALNSWW
 K K C T L S H S H Q N Q GK T G S V A C GE NL L F M S S D P R S WS DVVI Q S L
 QKCV
SRCRFEHPD
AKC WSHNK DRGRRGENLIFGIT DE GLDVP LIAVEEW TQCIIWTHGP $\quad$ WEHNTELLEDTGENLFAGTGKLDLSEAVEK W
 EFNA Q GNLLEHFS Y LTH H DGENLAAYNCLQNGDAPDVEDS I S D W KHLASRNQGLEHAKDRDGKGENLAGRDMDGDAMEKASKMW

 D S R $\square$ G DY N LVHS SGPY GKNDA TSSRDLSAMAAVNMFVVSK K K CLIFK HNIVQAHPRFNPVGENDWTGSLSLFSATAAITTSW
 D QCVI G S K K M SELSSRRDNCQYYREELGTNYLSA DLEHFSES LAAAEFWYE G
 S S CDVA HNLGPGGGGYGQNADPNTFDTQADTNDWYDGELA MQCSS YVHDPNRHRGRHYVGQNDATKWSTRAPENYYESQA NRCLGLV H DNGRY LDDFGSSGQNIFDTTRRTUWNFAIRMW NQC GMKVSPRDKRVIDGVACGENVLLSAYPRTWADA I QVVW D Q CK LKK HS DAP YRKNTS CGENLFMSSAPYSWSSADQEWYD
 A HLA AT DHLQHSSGSGQGENLVGCSGGQSDVSFSDAVASWA EALASTR ILK K SPESSRGQCGENLAWASYDQTGKEVADRW NEIA HT DRI S Y QPRSSSKDFSENLYVVKYPKEVTKHWYHR A K MA Q S GTLTR GYR GDVGSNTK IDECDGTQD DGIQVVDSWY NRCVYEHKGRGENLAWNKPPKPFTTEEY\|KDAFDAWY AKCEFKHNTDRGNL GENLYAATPDSKTTRAVVE GWS S AKAWAKKCKFKHNVYLKMPGRVHPTFTPVGENDWTGTSDW NKCQFKHNACLNMPYECYENYQFWLGESKVFSPRDAVIAW A ACAFRHTDNNPYGENDAA GQTSPQEVVSQ QQWADKCTFSHSPRTT NLRCGENLFMSSYLASWSSAMQGW
 K K CLRE HNPHMA HPKFNG\|GENMWDGPENEFTASDAI R S W

 NSMAA D GKLGYHS LKKPSVIG DERWRMQPNNRYNDEAAAAA K K CVVFERNI HMAHPTFNPVGENMWVGPESEFNASIVIRS W QNWANQCTLSHSPPHLRRTCGENLFMSSAPFSWSDVLQAW AEAWAAACI WDHGPPYRYLGQNLSVRTGNYRSILQLVKPW E S C S E D R SLL E E H T GHDG WNVCRSPH GVA S F S DI I N S WF K KNCQFAHNGQLLHSNK LHPNFTFVGENDWTGSDVSIFSVTKW QTCVWKHTSNDVFGENIAA NRCI YGHSSREFRK INDS CGENLYMSSRPDPWSQAM QS W

 NADAHTNDCYYRK LGRD DGQNLGYVQSS YTDENF DVNVVCKRW
 $N Q L K A N C K M V H S K G P \quad Y G E N L A W S S G D \| T G A G A V N M W$ NRCPT GHSGTS GLGENLYWYWTS GSLGDLNQYGAAASAAW E S LDQCQSSKHSRAGDTRPENTGENNAWNPTVT DENMTYDT HNCEFQHDPNLRTMQMGQNDTFNSDRLTTPNWADAAIDQW K TCQFK HNIYLKK P K MVHPSFNIWTGSLSLFSASSAI QKW

 QQCRLLEHDRHWDENLGFCGQNDF ISTQQVPWLFADRTWY




UniRef90 W2TWX2 UniRef90-K7FQF1 UniRef90-M7B978 UniRef90_Q18538 UniRef90_UPIO000521AE6 UniRef90-UPI000359C7D1 UniRef90 E2E4F6 UniRef90-G8JMA3 UniRef90_G1EN92 UniRef90-M1DS61 UniRef90_R1EAF3 UniRef90_B8PPS7 UniRef90-A9VDQ4 UniRef90 ${ }^{-}$UPI0003C8EE0A UniRef90-D8TI88 UniRef90-G1KM75 UniRef90-G9MKX5 UniRef90-B2WID3 UniRef90-A0A016VV59 UniRef90-W2RZ64 UniRef90-UPI00046C2CBD UniRef90_G3U097 UniRef90-K7FNH0 UniRef90-J5JWE7 UniRef90_G5B536 UniRef90_W6U454 UniRef90-H2MWC\& UniRef90-A2A513 UniRef90-W2TND4 UniRef90_UPIO002B422BE UniRef90-L7J3B1 UniRef90-F4RNR0 UniRef90-Q6DKY4 UniRef90-H9KL69 UniRef90-M5W1G0 UniRef90_UPI0003C299F1 UniRef90_F9XFK7 UniRef90-Q86FX1 UniRef90-A0A016PIQ0 UniRef90_S6CAL9 UniRef90-H2W3X5 UniRef90-UPI0003F10681 UniRef90_U7PH25 UniRef90-D6W9E8 UniRef90_UPI00021A86B9 UniRef90-UPI000393CE81 UniRef90-UPI0003510200 UniRef90_UPIO003832525 UniRef90-L7MBC4 UniRef90_N1JFF0 UniRef90-F7EB94 UniRef90_UPI00026573FD UniRef90_A7SBE5 UniRef90_V4AG55 UniRef90-L7UN49 UniRef90_UPIO0038339A3 UniRef90-UPI00032B0E42 UniRef90-J3Q4J8 UniRef90-Q03401 UniRef90_U6PXL1 UniRef90-P12020 UniRef90_UPIO0046B0C48 UniRef90-V4M2G8 UniRef90-H2Z4W2 UniRef90_UPIOO03337165 UniRef90-HOZSR0 UniRef90-W5KMIO UniRef90_W5K7Y0
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UniRef90 E3MMM1 UniRef90-P10736 UniRef90-U6IA72

VGKNLRYTSRLQAKRNAPTRFTQMAWANTYK|V|GCG|I|KRCS EVENF $V$ Y GTGANPPEAVIGHYTQVVWYKSYQIGCAVAYCP Y Y E K Q HY SFP YPRECNPCSHYTQMVWASSNRI GCAI NTCT EQEFQQKYGWATNYFSQEVGNGTQMAWAKTNNVGCGVKNCG YEEVFNYNFYYDNKPNFVGHFTQVVWRSTSFVGCGVATVN EYKNYNFDTGQSTNGQPIGHFTQVVWKATTEI GAGIASDS
 Y E E DK Y Y NF N DV $V$ H G Y DVGGHFT QL V V WA D T T K V G C A V V T C R WYSEDDYHDFTRQYHPNSRHFTQMM WKSTTRAGF GLLAFS Q A DEKK Y Y D Y A S N S CVVQLCGHYTGQVWK STRKVVGARVICD E DD Y G S Y WGK D DVPMSVMHF TQVVWKGT
 WD F HA LT M D DFAP DS P QVGHY TQMI DA D S E Y V G C A FK S C D Y NEVTVDFRYGS GDTRPNTGHYTQLVWATSHQLGCALAHCP Y GEl S D Y NFNTS QPADVNGHFTQVVWRSTS VVGCGLATGN

 $N R V K Q V G M T G N E N R Y T N Q F T F S N M V L A K T T E I G C A B K V C N$
 Y N QVSNFKY GT GK DNAP $\square G G Y T Q V V W Y H S Y Q I G C A V A Y C P$ Y NEVVK F Q Y GF GS $\square$ RANTGHYTQLVWATSHQLGCALABCP

 RDEEKYYSYFNNSCTHDCGHYTQMVWANTKWIGCAMRRCN F LLERLDYSYENNSCDKMCGHYTGMVWADTHRVGCAVVFCN A PKDCTPHCPWLCSGPVCSHYTQMVWASSSRLGCAINTCS RSDMLF TSRDRHRDSNIVTHWSKMAWHYNSRLGCAUHRCK YSE $\square$ CKSSVHFP DKDSNSKDVVLHFSWSSAKS I GCGRAFAD $\square$ DEKK DYK C G DN GNF GK $\square$ G H Y T QVI WP K T T K V G $\square$ A VE WVNGPGEKSDYNPSNPKFSHFTQVVWASTESISCARNSCK Y NEVFNYTYHSRRCSSVCGHYTQQVWATTTEIGCAMQRCD

 GDEEHLDYNWAK QKFSE GAGHFTQQLV WSNTTETVGC GVVVNCT WVELTRSYKNNPSNKYTVVNFTQQLAWGKTYKVGCGUAHCD LNE KKKYK GETDPKFSSYGHYT QCVVWEKSTKVGGAAA QN S
 Y DERNNFEF GK GPTYSNVGHYTQVVWATSSSVACGFSYCS LYPGY GQPTPDMSNFSKWGHFSQLVWWVASTEVGCATHYCP DWTGEA DSK WFDENRFYNFHYTQMV WAETAAVGCGFVYY L
 Y S Q S S N F K Y G Y GA $\quad$ S K N I NVE S Y T Q WY N S Y K V G C GVV Y C P ERENFKYNVGPLSANK PVGHY T QVVAWFS S F QV G C GVVSYC P
 SEKPLYHGEH DP DGDFEYGHYTQI DWPSTREVVGMGMARSA Y NE IKNYNFQQPGFTS GTGECQ $G V R K Y D H S D N P D V L H T Q G N N F T$ QMVWR S S R N L G $\quad$ Q G K A R S N

 $F$ NEDVS Y DF D SNNRCTGMCGHYTGQVVWAESYKVGCAVVHFCN FNESNF Y DFD S DS CTK VCGHY T Q V V WA S S H K V G C A V K DC P WVE GP E E K L A WNP K N P Q D S H F T Q V V W WE A T R E L G C A V T S C P




## 

WY A E GLYYYDYNQPESSTKEHF

Y DEVVKD YVFPYPCYGPMCTHY T QLI WYNSYKVGGGVSYCP G $V$ V E G Q N Y $\square Y$ Q S G Q C R N N G T C K H Y T Q L V W A T S S Q V G C A V R V C R
 Y D E H N N F E Y A V G GP K P T N NVGHY T Q
 YNEVSA YTYATNNCRGACGHYT QDVWATSYKVGCAVMFCP Y SEQ K CYDYYY HKE H TQA SRFTQMV WK S S QK L G $\square G K A T \square A$
 VGEKKYYDYKSNSCGYKCGHY T QVVVWRDSVRVGCAKVKCN EDEF QKYGWNSNLFNTGGGHATQMAWAKTNLIGCGVVDCG
 Y D E V Q Y Y T Y E T R S C T K V C G H Y T Q V V WA T S Y K V G C A V HL L P Y NE $\square$ K Y Y NFRKGGFSGATGHFTGQVVWKAS $\square K$ L GC GWARSC E DD NYA F D S M K C F NK K K C G HYR QVV WA K S ERR G C S F K Y C A


 Q WEDEVTE FNYNSNFRKVGHYTQMVWGKTKEIGCGSDKYN E HVDYDYRTNTCAARK DCEHYTQQMVWAGSTHMGCGKNMCG

|  | 130150 |
| :---: | :---: |
| UniRef90_W2TWX2 | S KTFVVICRYDPPGNVVDKK |
| UniRef90-K7FQF1 | DQQYYYVCQYCPAGNILQGR\\|NTPYQSGTPC |
| UniRef90-M7B978 | NQAVYLVCN |
| UniRef90-Q18538 | K K KVAVVCHYKPLGRYVDQM |
| UniRef90-D8U8S6 | STCKIVTCRYREPGN】ATDMYFLKNV |
| UniRef90-UPI0000521AE6 | HGKYYVCVRYRTAGN TQGQYVDNV |
| UniRef90_UPI000359C7D1 | GQSWYYVCQYCPPGNLVARDYNPYTIGEPC |
| UniRef90-E2E4F6 | NQPVYNVCHYCPAGNVQGREYVPYKRGKPC |
| UniRef90-G8JMA3 | SQYYFVLCEYSPPGNVLDGTPFKEN |
| UniRef90-G1EN92 | DQKAYVVGRYDPVGN K G D F GWNVP |
| UniRef90-M1DS61 | S GDVFMTCNYFPPGNYIGEK |
| UniRef90_R1EAF3 | DG VLATCRYAPAGNYLGE FAANVGELK |
| UniRef90-B8PPS7 | GLA QYYVCEYFPQGNVI |
| UniRef90-A9VDQ4 | N NQRLFVCHYRTAGNVLGQT |
| UniRef90-UPI0003C8EE0A | NKKFYYVCQYCPAGNNIKTRNTPYKKGKPC |
| UniRef90-D8T188 | RGCLSVVCRYMDAGNLVSNAQYLYN |
| UniRef90-G1KM75 | S GTFlYVCHYCPGGNVREFDKTPYAAGPPC |
| UniRef90-G9MKX5 | S YKIY ${ }^{\text {LVVCRFFPEGNIVGQR }}$ |
| UniRef90-B2WID3 | TTVNYLYCYYSFFGNNVATGQFEAQVWA P |
| UniRef90-A0A016VV59 |  |
| UniRef90-W2RZ64 | GGPLLFTVCNYWPPGNVQGQ |
| UniRef90-UPI00046C2CBD | QNKWFYVCQYCPAGNNAANKPYKQG |
| UniRef90-G3U097 | R H T Y Y Y VCQ C P P G D D R T $\square$ K T P Y K R G P C |
| UniRef90-K7FNH0 | EFNYYYVCHYCPAGNYLMKTPYKAG |
| UniRef90-J5JWE7 | S YKIFVVVRFSPEGNVYGQ |
| UniRef90_G5B536 | NNDHLLVCN |
| UniRef90-W6U454 | NPQYFTVCQYKTAGNYHGEWPYKYG |
| UniRef90-H2MWC8 | NNVSYLVCNYFPAGNYDDERPYVEG |
| UniRef90-A2A513 | S QAVYLVCNYA DK G NWIIGEAPYKA G |
| UniRef90-W2TND4 | K TYSVVCHYGPGGNVVGEY |
| UniRef90_UPIO002B422BE | KKCTYYCCRYSSDRNFDSE FETNVKKGK |
| UniRef90-L7J3B1 | GGFVVARYSEAGNMMS |
| UniRef90-F4RNR0 | SMKLLFWACEYFPPGNVIGQ FS Q VVK |
| UniRef90-Q6DKY4 | S L R Y L M A CQYAPGGNYIGEWP |
| UniRef90-H9KL69 | DAGHNYVCNYAPGDNVDGHLPYEQG |
| UniRef90-M5W1G0 | NGSTFIGCNYDPPGNYNGKRP |
| UniRef90_UPI0003C299F1 | K VEGFFlCNYGPAGNY GRKPYQ |
| UniRef90-F9XFK7 | EQGRYLICE |
| UniRef90-Q86FX1 | GGKAFVVCQYNPGGNTMGES $\square$ Y EK GRPCK |
| UniRef90-A0A016PIQ0 | K GAWYTVARYTAAGNVVGKKPY |
| UniRef90-S6CAL9 |  |
| UniRef90-H2W3X5 |  |
| UniRef90-UPI0003F10681 | NQKYYYVCQYCPA GNYVN |
| UniRef90-U7PH25 | A G T WY TVCDYKAAGNVASQ Y G K NVLP P Q |
| UniRef90-D6W9E8 | D GKRYYVCNYGPS GNVQGEVPYEKG |
| UniRef90-UPI00021A86B9 | GGKFMYVCNYAPSGNYKGQLSRPYVAGKPC |
| UniRef90_UPI000393CE81 | T GKYFYVCQYCPA GNNP |
| UniRef90-UPI0003510200 | SQKYFMVCHYCPAGNNLARLPYKQG |
| UniRef90-UPIO003832525 | NYKYFYVCQYCPMGNLVSKT |
| UniRef90-L7MBC4 | SGSKLYTCAYGPGGNVRGEQVYK VGPAC |
| UniRef90-N1JFF0 | S G WT Y I VAR Y S P G Y L S Q P WQ |
| UniRef90-F7EB94 |  |
| UniRef90-UPI00026573FD | EAKVIVVALYQPRGNDAGQ F V D V (VRP |
| UniRef90-A7SBE5 | Y GC TYWVAVYKPPGN |
| UniRef90-V4AG55 |  |
| UniRef90-L7UN49 | KNWQLWVCNYAPPGNYVGERPY |
| UniRef90_UPI00038339A3 | TVENFFVCDYGPAGNYP RKPYK VGQPC |
| UniRef90_UPI00032B0E42 | NPTA $\square \mathrm{FVVCNYG}$ |
| UniRef90-J3Q4J8 | SPDQFWVCEYNPSGNV ETLY $\mathrm{S}^{\text {PKNV}}$ |
| UniRef90_Q03401 | K NRYYYVCHYCPVGNYQGRLYTPYTAGEPC |
| UniRef90-U6PXL1 | NSMTLI GCLYNPRGNDEGE |
| UniRef90-M3X0D9 | RYAAVFICNYAPGGS LSRRPY |
| UniRef90-P12020 | DQKYFYVCHYCPGGNYVGRDYSPYTEGEPC |
| UniRef90-UPI00046B0C48 | SEKYYYVCHYCPAGNIVDRRPYEQGV |
| UniRef90-V4M2G8 | DNEMY IVCDYYP |
| UniRef90-H2Z4W2 | A Q Y AVA Q K L A G N $\square \mathrm{P}$ G $\square$ Y A D NVK P |
| UniRef90-UPI0003337165 | TVGS $\mathrm{T}^{\text {V }} \mathrm{F}$ I CNYAPG |
| UniRef90-H0ZSR0 | A GK Y F Y VCQYCPA GNNPMQDAMPYRS |
| UniRef90-W5KMIO | NMATYLVCNYSPKGNWDGEAPYK VGAPC |
| UniRef90-W5K7Y0 | GGAVLFVCAYSPGGNWEVNGPYKAGV |
| UniRef90_UPI0002C55E9D | TNVAHFICNYGPGGDY |
| UniRef90_A7KKK5 | NPVPFWACEYDPPGNVEGE Y T Q NV |
| UniRef90-UPI000332EF68 | QQKFFMVCHYCPAGNQLRRLYRPYTKGEPC |
| UniRef90-M3E997 | NGWTYVVANFDPPGNWL GRRPY |
| UniRef90_UPI0003511E50 | R NQYFYVCHYCPPGNN】MQVAAPYKSGPRC |
| UniRef90_UPI000386EEFD | TNAAHFICNYGPAGNYPGHPY |
| UniRef90-UPI0002658899 | AGK\\|IVVALYKPAGNVAGE FHNNVF |
| UniRef90-M4BK43 | EGS MVVCEYSPAGN |
| UniRef90-H9BPH9 | DGRTII SCNYD |
| UniRef90-E3M6F0 | R NKVTVVCQYKPQGNYLNQYTY |
| UniRef90-H3ES37 | KPEDFWVCRYADQGNDVGQPIYTDG |
| UniRef90-E9FY20 | D Y R\\|LYV CNYSPQGNFIDQPIYDA |
| UniRef90-F7DWI6 | TNGAHFICNYGLAGNYPTWPY |
| UniRef90-V5GUIO | RDK $\square Y V V C N Y S P P G N Y$ RKKFKKNVLRAK |
| UniRef90_UPI000457228D | QY GNLLVCKYAPR |
| UniRef90-E4X5G3 | VRSTYTVCHYTPQGN\\|IGR F K E K WS P L S K |
| UniRef90-A0A023FCM4 | GGAKYYVCNYCPTGNYQWRR |
| UniRef90-F1PE15 | SDAAHFI CNYGPGQSY RTPYK |
| UniRef90-E3MMM1 |  |
| UniRef90-P10736 | WYTHYLVCNYGPGGNDFNQP $\mathrm{T}^{\text {P }}$ ER |
| UniRef90-U6IA72 | SKVVYLVCNYGP |
|  | EDNMLYTCNYGPAGNWQDGEAYK VGG P C |

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STDNAYQQE IVDKHNALRRGVMPTASNMDMEWSPAAAKNA NEDF DK DCVRF HNKFRSEVNPTAMTWDPA LARVAQTWA
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 $\square Q S Q M L E A H N Y$ F R CLLHGAVAMT TS QTAADDDA DAA $M L$ K M H N RYR RVVHGA G DLVLS GR L NA MA QE WA SVQ ME II NKHNDDRRMTNPTAAMNWNAEVVAKNAENWA LKKWIVHEHNRYRRMVPASDMNWSDELAASAQRHA


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A T T Q D F
``` \(\vee Q \quad\) Q \(\quad \mathrm{H}\) T L R S
QIALSIHNKFRKVHNSPPMTLDNEMSKSAKEYA S D LLK F DE ECVVKEHNDAR S SVVSPPAMTVDEADADTA KA WA T DA QRAQLLDDTHNDVRNKI NMMAMNWSDSSLEAAA QA WA SCKDDRTFVNGHNNRRLMLARGNLTWDHELAAKARKWA
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SKA GQKADVDAHNT LDRSSVAKGKMKWDPTIAKSA AA YA
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A QQYVVPQSHMRA \(\square H G G Q R P L K W S N E L A D Q A E R W A\)
 \(M R D V V\) GMQNEEREALGLAP LAWDDSALA A DAARYA D A WRQLIVKMHNFRRSQLNMMELAYDCQLEADADRYA A G D D A F A Q Q L K A H N R F R C L H G A P P L Q W S D A VVA D Y A Q R WV
 HAHL RARNNVRRPLKYTEEASARAADQWA EDVVS D DCDLS Y H N Y Y R S E Y P L L P L A \(\square\) D QA GRDAVVVYWHNYFRAE LVAGRVVNSLELEKQAQEWA \(T \square S\) DVID D K K F I E D C V A A H NEMRRTVVQPSAMSWDEGLAKTAKA WA FI K A C V D DV H N E L R A K V D P A A M S WD A A L A R T A R A WS
 MT WN NTVASYAQNY
AMTDRARTAFLNTQNRYRSTVAPPAANMDCNLEAGA DAYA TSNSQVQNEDVNKHNALRPVSPPSRNMLMEWSPEAAKNA HNYYRKMHKTPK LIKYDKXXA LRAAQRWA \(L L S L H N K L R S K V Q P P A A N W S E K\) L A Q Q L A Q E RA
D F I N E Y V N L H N E L R G N V N L R F M T W DV A L S RTA R A WG T NS QIN QTLAVVHNMYRKSVS PPAMLDWDEGAELATACS KQNIV D RHNEDRAASNMEKMEWDDSSLGSMAQEWA \(M T\) DAARQKFLDTHNYLRSRVAQGKMVYDCDIEASAIKHS \(M T D A L R N Q F L K M H N A R R S S L A K G K M K Y D C T L E Q G A U Q W A\) A MT QEVVRDKII SFHNDYRSTLAP TAMNMDMALEKEA QAYA

 MGVGGPMTWDNTVAAFAQNYA
NEDFDK DCVQTHNKFRSGVN PA A S DMLY M
\(A V S P A E V D R D V A L H N D L R N D L A S G N M A Y D G E L A K L A Q \square H S\) MT DEVRRMFVDKHNEYRSLVAAPKAARMMKVSYDCAVEE T G D R S DRS R WL A A H N D DR R RYS VP D L VWDPK L E A VA Q G H A A I S T S DREMLTV LTHVSARVGVQPPAVNWSSEELEKHARFWA


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\hline
\end{tabular}
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 QK WANKCTLEHSTPEDRQKCGENLYMSSDPTSWSTAIQSW DT T ERGGCDFQHSGVRQYGENLYKSSVHTYCKDAVALWW NQCKF GHDECRHVDRFIVGQNMAQASSTGKNTATVESMIL KYCDATESNPDERRDANTFCGENMHVASYPVSWSHVDGVW APKATKMSMLTYDCGIESKALKWDKNLVSSLQ\|VGV
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 KKCTLSHSHPNQRKURFAGCGENLFKSTQPMSWSNVIQSL D T C
KKCTLTHSSSS KTCPESDSQPSGENUYFAGDGSTDKNTVDYFGPRSSQVWEE EKITAKSGKFTHSSKEERDGVGEMGCSSKKGQTPGAASVAW KRCDFDHNDYDKDASRVHPTF IWWA MPPSQFNTSKAIKRW \(N N L S Q V M V H S D D K D Y G E N D A E S G W T T Q S D Y D P A S Q V I M W F\)
\(N G C P Y G H S G A K G L G E N L Y W Y W T S G T I S N V D Q Y G A S A S A A W\) GKYKFSHNPDTTVASGRFTTGENDYKVSSTDPNYQDKMDD NTCPKGDSPVSSREGMGEDYQMDADEMADKASWHPDMVIG NGC QLNHAGPYGENAYWSWYYPPTHQPDFTAE GGWAFEA NTCSSEP GQGQPYTQMVENMYMVPKSEAQNPEEADVVA DK QKCTYEHSP IEERNNPDLKKIEVAGRAPQVAFEEDEQFGV NSCKWGHDACRRTPKWGWVGQYKGGSUTTRDMLNSSUYSL
\(N\) QYDCSGELTHSGGPYGENLAAGYSPSGADDAWYREGDSY DRCDYGHSTKEHSKDAGENIYMWYTSGSHQSDDTNMTNNW ARFKGNCAAASAAMPGGVNVFRG\GEAGKAWQPSDAVAAW A LCAPSLALAPQHTRQVGWNVQLLPVGSASFVEVVSLWFA NQCDWA HGMMEDCDGQYAGQNLHLYGNTSVGPPLDVVYSW RQMAQTNDFRHRASRSVPSGENLWMGSRGLYDYEVMVGSF NSCS SSPLPKGNVAGVNITSKSEESDYHGI REAVMSWWRV A RAGFKHSDSYNSPIGQMGENDYGSSGALSGDEATAAW QAQCAYAPFKSDKHYGRNTWGMGDPNYNKTAAAESSVDDW KKCLYQRNTHYESHPVFNGDGENMWVGPENEFTASIA!RS LQFKGNCAAAAPAAGDNVFLGGAGATWDPSDAVAAWAE QSRADGNCSEWGHSNRDLRPYGTFEDPPRCERGVYLWFEE
DKCTYSHSNPYGNYGENFYAYARMDNDSAADEYVVKGWWP DEMSKTVSDDPNSPYSNYTLNWSYDPGTKSPSCKALVAQW QKCYNGFLVLKPLNDYSDTGYSSVGRNTADFGLSEAITGW KKCVFKHNTFAVHPKFRSVGENIWLGGVGKFNPKNAITAW
 ANQRDGDCNLVHSNGPYGENDAWGSGSLTGTDAVNLW QTCCRKESNPKTRPGDGENVIEDNKLYSMPQVAREATALW KAWADQCTLQHSSPEKNTNCGENLDFMSSSPNSWSNADQSW
DHDANTGVVKHNTKGGYGENGYWMTNTDYMPKAKVVVKLW ASCAGAPPHPPPHAQHVGWNAQLLPAGVASFAAVVELWFS EGYAAKCDWNHNPEDEDTGENLFVGTGPLDLREALEKWF L
 ERCVYETGDPQRSNNPYKSPGQ
 NSCPTVGSELSTRPYSGENMELIPSTTAPYDWWTQILSNG AK WAKKCDYDNHSPSTCECGENIFWATFPYTMSYA QD WY QECKWQ HSNGPYGENLAFGYPNVSSAVAAW KNCQFEHNSRDGPPHK LHPNFNDWTGSLSTVSVSSAITNW S HLCDQNSMLDGGHDKC RVSPSFDSVGQNLA WDKMAVKGW
\(N Q R \square G D C A L V H S G G G G K Y G E N L A W S S A D L S G T D A V K M W V D\)
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UniRef90 B7VCA9 UniRef90＿W6UD62 UniRef90＿E9G0Y4
 P PENRIT E A VYYRK GKEI GHYSQMAWQNSYK L G C G I S WC K F SE S KFYNYENNTCS GMCSHY DQLVVWDTSYKMIGCAVIDCP EHQFYNKTANACAPSKLCGHYTQVVWRETTRLGCARVECN Y NEVGNFDYGDGSTTP GIGHYTQQVWYKSYQQGCADAYCP
 ENEF QQF GWPPA GFSS GI GHAT QMA WAKSTKLLGCGMK LCC G YSESSKYF QY GEWTLTDDDDVT TDHYTWATSY LI GCGMS SCH QKEEA GYDYGKPGLSSNTSHFTANVWRLTTHVGFGVVYK G QAANYDWS IKDCKAGTTCKPWQFMVWSQTTKFGCGKAVCG K TMAQPGSSGLDVGVGYYNSYSQ』LWAETTSVGCATATCS WREDKKHGVGP ENMVSK KGHYS QMAWDATYRLGC GVAHCP TKPWADE LSDF GMWGGGKGHASSQILWAKTQSMMCGTIHCT Y NEVVKDFNNNKYEFEPKTGHYTQLVWANSK\｜IGCGKI E YE Y S E V E L Y N Y Y K P GF S T ITTGHF T QVVVWQ G S T QIIG \(\square A E V\)
 Y D E G L D F V Y G VG S K S P T T GHY T QLV WY S S YR V G C G \(\square A Y C P\) Y SEKKNYTQYNSFNYQNFGHFTQVMWANSSGLGCAY LWY NEVNDFNNYEFEP KDGHYSQLVWAKSTKGIGC GKDE G K HS ES K NFKY GQWTSD D DIMT D HY T QWA T S Y LI GCGGIAS CR GQANVFTRDVLYRGAGYYTQMVWQKTRKLGCAVVSC
 A WENEVK DFNPT \(\mathbb{C}\) S WE Q I G HY T QMV WA K T YNE S K G G GIIS S C P HHESQHYSFPHPRECNPCSHYTQQVWASSNRLGCALQACS
 Y DEDAD YNYNDPDSSTVIGHFTQQVVWAASTNLGCAYNVVT Y QESSRFKY GHPDVS DQGIGNFTQLVWSSSSRSGGVGRANP Y Y NEHKNFKYGFGDTQGNTGHYTQQVWATSHQLGCALAHCP F NEVVHNPRCGCNHYKHCCGHYVQVVWAKTNLVGCGFSRCR Y E E L K Y F KYGF GRTNVK I GHYTGLVWP TS H QL G C A L A Y C P
 \(Y N E V C N P G Y T F G G G G G G S G T G H F T Q W K E S T E L G F G S A B C\)
 ESEF QKF GWK S NK LTM MT IGGHA
 F DPNLDET D STMLHLSTA PLDMFTQMAWGATYEVGCGATARCS WNSQEEDDAYVA GDLLGGAHFTGQTVWKATERVVGCCVVGP

 DY AQHDVYNHFTALV WNDT
WDE \(\square K K Y D A S K N P K N 』 M D N H W S Q Q A W G A T\) AEQANYFDFGTGSCAKMCAQFKQVMSKGNTDVGCATVQCA E GQQY NHAAAECTYNAT CTHYTQLLVWATSSQQGC GRTHRCS
 \(V\) TESK DVIFESKYVNTSTAFFTEMAWATNEKVGCGLLA A CN
 WHELEKKSYNF QNDTCENCSHY DQLVVWDNSYKVVGCAVMPCR E E EHYD Y GANSCSTGKACGRYTQMVWRNSKEFGCAVVDCD
 YK GVVHYYSFAK GLVPKKVEPFAKLIWRRSKKIGCAQVTND

 \(V E N E N F T Y G D P N V N L T A V G H Y T G Q V W A T S Y K V G C G L A C C S\)
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 EGQSYDYHAAQCMENATCSHYTQLVWATSS ERQNFDFQNNTCDEDQMCGHYTQMVWADTHRVGCAFHLCN
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 Y D E I Q Y Y D F E T R K C S K K K C G H Y T QQV V WA D S Y K V G C A V Q F C Q NDEKKMMFPFSPP NGPVIGHYTGVVWSGSYKIGCAYVGRR


 WA F GDDE C G S WD P A A A D Y S H F T Q V V V W W K T A A T


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\hline UniRef90－W1Q0T2 & TTAVFINCNYYPPGNY的ESP \\
\hline UniRef90－UPIO0038 & QYKYYYVCHYCPAGNYRNTMNTPYKSGP \\
\hline UniRef90－M3W3 & SHGALFICNY \\
\hline UniRef90－G2J6C8 & KYKVVVVCQYKG \\
\hline UniRet90 H3ENW0 & DKKVLVVCQYRDAG \\
\hline UniRef90－E1BC47 & KGDHYYICHYCHEGNDPDKKNVPYNKGS \\
\hline UniRef90－D8LBB2 & KS TMWVVAYFSPRGNQAGD FARNVLR \\
\hline UniRef90－D3BTA8 & DY TYMSCAYQSPGG \\
\hline UniRef90 W218R5 & GGELVVCEYSPPGNDGKS \\
\hline UniRef90－G4×W7 & NGETMVVCQYHPAGNYVGEPMYKAG \\
\hline UniRef90－F4WJK7 & DPTKWLCCNYGPHGNMIGQKMY \\
\hline UniRef90－D8UHO2 & DRVYVFRYRPAGNVCGT FQDNVLPP \\
\hline UniRet90－HoVsY2 & \\
\hline UniRet90－UPIO004 & G \({ }^{\text {a }}\) \\
\hline UniRef90＿L9K & NQKYYYVCOYCPAGNNVNK \\
\hline UniRef90－UP1000185 & SKCRTVVCNYYPPGNYIGQY \\
\hline UniRef90－UPIO0046B6595 & QKGYLYITCHYCHEGNYPETKNQPYKTGTPC \\
\hline UniRef90－U6NR96 & NSMTLIGCDYNPRGNDEGELTYE \\
\hline UniRet90＿W4FLS5 & N \\
\hline UniRet90－P35786 & DNNWYLVCNYGPAGNFGN \\
\hline UniRet90＿UP1000298C571 & STQYLYVCHYCHEGNDLAKRNEPYNVGTPC \\
\hline UniRet90 F1NWW2 & NRAVLLVCNYADKGNW1 \\
\hline UniRef90－UP10003EA7DFB & RAGLLFVCAYSPGGNW \\
\hline UniRef90－UP10003F09BA8 & NDRVYVACEYEPYGNYI \\
\hline UniRef90 U6IPY4 & S SK \\
\hline UniRee90 UPlooou5E14AF & \\
\hline UniRef90－H2VZ01
UniRef90 F7E1 & 俍 \\
\hline UniRef90－UPI0000220166 & KDKYVVVCHYEQPGNVKGRET \\
\hline UniRet90－E3M6E9 &  \\
\hline UniRef90－K7ZH43 & MKCTYYVGRYKKAGNM』GD FDKNV \\
\hline UniRee90－Wrioou3BD5 & \\
\hline UniRef90－W7XKD9 & DGTYYTVCQYEASGNYLGQPVYVQGTP \\
\hline UniRef90－GONTC1 1 & RNKVTVVCQYKPQGNYLDQN \\
\hline UniRef90－G6DRH0 & ENGYYVVCNYGPSGNYLGQR \\
\hline  & DQEWWFYCDFWPRGNVRG WYGGNV \\
\hline UniRef90－U6PJ73 & NNQWSAVCRYSTGGNRINEQTYEKGTP \\
\hline UniRef90－O16575 & MYKVAVVCOYSARGNMI \\
\hline UniRef90 A0AO16TQD5 & Q TLGVCHYSRGG \\
\hline UniRef90－D7EY & DDKYYLACNYGEGGNVNGWSVYE VGTP \\
\hline UniRef90－U1NWK2 & EGSWFVVCNYLVSGNYFGKP \\
\hline UniRet90－J5QG07 & AEGGMFRCVYSPGGNTVSKEYFEENVGR \\
\hline UniRef90－F2E1J4 & H \\
\hline UniRet90＿UPI0003F1 & VGQAAFVCAYSPGGNW \\
\hline UniRef90＿R7TNL0 & AGYFACNYYAGGNFI \\
\hline UniRef90－F6ETR2 & SYDVLVCRYFPAGNVFGRNPLDRDDGAPSQ \\
\hline UniRef90－B1Y2V1 & LSCNYW \\
\hline UniRef90－C9BIP2 & S MTWVACGYSPAGN \\
\hline UniRef90－UPIO0038BB619 & R \(\square \mathrm{GNTF} \square \mathrm{CNYAPGG}\) T \\
\hline UniRet90＿C5X & SGETLMA \\
\hline UniRef90＿V4ZF87 & NDNNQLFCLYMPAGNI \\
\hline UniRef90＿A7X975 & YKSYVVCOYKPPGNVYTACVYRAG \\
\hline UniRef90－T1KYX9 & NPGIUY \\
\hline UniRef90－F6ZH80 & GPRNLCNYGPSSW \\
\hline UniRet90＿STNQF2 & QATA \\
\hline UniRet90－67FO5 & KNTGIF CNY \\
\hline UniRet90 G4XWY5 & DGSYFVVCYYRPGGNIVNSKVYQ \\
\hline UniRet90－H9NEC9 & NGGWFVTCNYDPRGNYI G \\
\hline UniRef90－A0AO16RY11 & GKYFLVVCRYSPRGNULNNFUY \\
\hline UniRef90－K4P991 & NQKYYMVCQYCPAGN \\
\hline UniRet90－5Hx912 \({ }^{\text {UniRe90 }}\) M7AW62 & YSRUYV \\
\hline UniRef90M7AW62 & NRASFLVCAYYPAGNYDEQRPFVEG \\
\hline UniRee90－G3N5T1 & NRASFLVNYYAGNYDEQRPFVG \\
\hline \[
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& \text { UniRef90_UPIO003F1029F } \\
& \text { UniRef90_FSR80 }
\end{aligned}
\] &  \\
\hline UniRef90－R7T4T8 & SNNTFMLCYYGPNGPVDDQNPY \\
\hline UniRet90＿U6P635 & S FTYAVCQYGPAGNYMNQLL \\
\hline UniRef90－A0A016VRK2 & S EYVGVCRYSPKGNNVGQSVYKIVNV \\
\hline UniRef90－A0A016VFK8 & SGRTVVVCRYKPRG \\
\hline UniRef90－G7X9D4 & PQGWYVVCEYSPRGN ITGKEFFK】NVQP \\
\hline UniRef90－L5JT73 & RVSVHFICNYGPA \\
\hline UniRef90－UP10002657C84 & ADRYWI ACNYAQAGNMVGDNVFTRGSP \\
\hline UniRet90－GOZF & － \\
\hline UniRef90－TONTN2 & RVS \\
\hline UniRef90 B7PDJ2 & GGARYMVCHM G \\
\hline UniRet90＿A6H548 & TDMTYYGCCEYSGPGNWLGSQLYEK GEPCK \\
\hline UniRef90－B7VCA9 & MSYVVCHYGPA \\
\hline UniRef90 W6UD62 & QGRHVLVC \\
\hline iiRef90－E9GOY4 & YVCNYATSGNMLGAAVYK \\
\hline UniRef90－F1L499 & \\
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\end{tabular}

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UniRef90_A8P1B2



DF \(\square\) NE Y \(\square\) T L H NEDRGSVFPGGMTWDVA LS RTARAWG SAKEFSRDMVTAHNLARARPAPKPPDPPLVWSSEAERKA RRVLLYWHNWYRSKTADPPATRMPQLTYNCSLKK MTDEYR TKILNMHNELRAKEASSALAYDYSLEGYAANWG MTDEYRQEEIVNAHNALRRKVSPPAMSWSPAAAANARILA MTREQRQKFLDMHNTYRSMVNAPKAARMKKMVYDCDIEE STEAAEFLR HNEKRRRVQPKALDWDSGARAQARA SGSAAF DADALLQHNAARAAYGAPPVTWNTAGYPSTQTQVV NEAQKRQ\|ITIHNNLRAQENMQELVWDQRLADLAYGHA TTPEEASTLTELHNEI RRASNMEKLKWNSDLANLAQRWV QQFIVDIHNTLRSKINMRKI KWDATLATSAQTYV TPESRNVVLNRHNELRSMVANGELRWDCDMEERAQNWA VRGQIL HLLHNLYRSHVNMPTLIWDEELAAQAGHNA Ql I NAHNNYRRNASPSAMVWNKDAA I N A A S WA SGTDGFSADALTQHNDARTKYRADPVTWSAALYPDTQAY DK LKKDIVENLNKDRKDVKAQNMNWSEKLAAKAAKLV S EFERVFLECHNNFRARHKVQHGVWSDKLTARARLWA
 SNKHKKRLLDMHNSYRRRTPGPAMVWDDELTLMMSKKYA MDDMTRNKSI DAHNYRRSRLAPKASNMNCDLE SA DTSA MHNEFRNKIALGKMEWDDELARVAQAHA AATFASECLSAHNRDRSFHKDTDLDWDEELADQAENHD MT

A K SEAA K K V V DLHNKKRQFVASGKLYWDEELA LLA QRWA
 DEKRVMVELHNLYRAQVSPPAMRWDEELAAFAKAYA TKYDKEALL RGHNNYRAAKNMLEELTWDDEAAQLASSWA MTEEDRQQFVDKHNEYRS IIAA PKAARMDKVSYDCDVEA

SA GPDYQAAVLFHNVFRRDHGVGPVILSDVMNEEAQKWA SDPQARMWLALHNAHRANHNTCSVVWDSSCESNARGAA AASKEFARELLNAHNDYRKTHGVATLSLSSKMCREAQSYA TDNDREDFLDMHNRLRGSIAAPPLRYDCDAESYAQQHV \(M T D A L R D E Y L R L H N F R R G L L A M G K M K Y M C D L E Q G A D Q Y A\)
\(S N D D R Q Y I M D G H N Y L R N K V A P R A A N M N R E L E F L A Q C W A\) MT DEVRTAYLDKHNNYRSSLAKGKMKYDCDAEASADRHA DSSLQA LLDAHNKLRSKVASGQLQWDNELDADAASNA


RNFTADFLKKANELRKNHKASGLVLDSNLTAKAQ HLL ALSASSRVSVLACHNNYRSTGAKGTAKYSTSAETTAQNWA

RQAILDVHNKQRSRLAMPKMVYDCTLEAEAIDE A AMTDEARNYVLDVHNSKRSLLAMPRMI YDCTTEAEAIKYA S SVUSAYEKEVVVDLTNAERKKQGLKPDLTLDEKGSSVARKKS

FASDGVKAANDFRSRHNAPPLKDNAEMSKEAEEWA LLS MHNRLRSRVQPPAANWSESGA QWA QARA
ANDFSRDMVAAHNLARSRAQPAPKPALPPLAWSTQAER T DEFKKVILEEHNNYRNQVAKGELSWDDDLAYLAELNA RNFIVDKHNYYRSWVNPPAMHWDNYYLAKAKEWA A LTRQEDQAI LLEHNRSRKDAGLPPLT WDCDAAAVAQLWA TVLKAWEKEILDLTNSFRARNGLSALSWSDAAGTSARLHS
 TSVDFRAGILNAVNAERVARNLPKLCMNLELQNAAQGHS TRKVQRRIVVLHDFFRTKVVPPAANMSMKWHHGAARSA A DREE L LLLHNKLR GQVYPPAMTWDEELERSAAA WA DLRQQMLNAHNYYRCLHGTKPLVLADDLNNYAQAWA
 MSDEVRKTFLDKHNEYRTLVAQGKAKNMMDYAKECKFAH T WNSEDVAKNAEDWA T DNDKQK LLEYHNKFRQAANMVEDTWDEHAAKQAYKWA A \(\square T E E E K S F M V D A H M Y R T Q T N P P A M R W D E N L A K L A M D Y A\) MT DSVRQTFLSMHNNFRSSVNAPKAAKMLKMVYDCSVEA

 MSDEVRQTFVNKHNAYRTLVAKGEAKNAKEIGGYAPKAA TTNANFVSEVLRLTNEFRAQNGLPPAKSNAELQASAQGHS MTDEVRAVFVYQHNHYRSQAARGQLKDNK GGYVPKAA TFDDKLKKLLLDEHNKYRNQVAKGEMDWDDDLAYLAELNA \(R N F I V D K H N Y Y R S W V N P P A A D M L K M W D N Y Y\) LIAKA MAKMT WNDE \(\square A G\) GVA QE LS

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 WY N
KKCVYQRNTHDDKDEAHPVFENMWGPEEEFTASTADKS TA WAKSCRFEHN PDRGDFGENLAAAATPGAWTTS QVVVS W SS LIK WA H DAQCKMVHSKTYAA GTRMP LEEASNQATWPWAE A L C S A TPNLAS FPRHTPQVGWNVQLLPVGSASFVEVVNLW MKCMNGQE QHSPRQTWPNRASPGENLYSSWDPSNVVKSWWD
 SAMRHAK R CYFA H S P A H E R K D L G E N L

 DACDWNYGTEAAGFETDAGFSQTEYQTTSAPDDDVGGAVNYW
 R S C V F A H D R CR NTP QY PY SMRYY GT S Y T I D DLIAARF IN G W ATCSESHSPSDK RT@P GFGCGENDYMASYPASWEEAVKGW VS CLA GADPRPP HRTAQHVGWNA QL LPA AAASTAAAVVELWF
 \(\square H \mathrm{~L} V A E S R R N G D R T G L T C C T I S A D T R P S M T G M A E K V C G Q W\) KA QNLSSDQCKSEHDEVEQRRMPEFQNVGQTWVGGYTVVRW S M M S WL D Q C Q WG H S S I E DVGGE N IV M T T K T K E NM T V S A I K S

 H QL S C P E D S Q C S Y G EN LII MMEMMLSA DVIP LP CA FA S F Y W Y M

 QECV

\section*{A}
 NMMDYAK QCKFA HNSYK DRNGWGQNL YMTSGRNVNKTARAA
 SRCEFKHY IPPS GA GQ GQNLDVVVSGNAFNVTAAGISESSWYR G





 ANLI AKDGNFSKPTEPGENTFMLDTNYNRQLLASEAVNAW


 QDMKDKNYFDHNSPTYGSPFDMMKKFGITYRTAGENDAKG
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 KAASWAKACKFEHNPDRGDFGENLAAATPGAWTTS QVVKS NRCEFE HDKCHNTKKYPNSGQNIASWGTTGDSYDTMVQEW
 EDMAKNNYFNHT GLDGSSPGDRMKAQGDSYRSNGENIIGG
 \(N D M A V Y N Y M G H T G S D G S K M S G R D E A E G Y H G V A C G E N V A A G\) NGCS GQ \(\quad\) HS Y M GYGENIV DT YGAPSCSSAMTGWF



 RKCAFSHSPTHQRRDSFAGCGENYFSSTAPKSWSHVIQTF SGCEFK HNTPTDKDGNP LGQNDAVKMSTKKSNVDKTGDKW
 TALKKHAQKCVVYQHSASADRPGLGENVYMTSAVNFDKVKAA
 DKCSPNS GENTHVIQSTSVTALDAFKQSMRTWWEQUSSTS K QCKMAHDSCHNTLAFPYSGQNKPDFYEDDTA!QSS IQMW
 QQCGRQMNGWDEVRGENAFYFRTTDGLDVSGAVLKGIQRM R M K KV S Y D C E V E K N M M E Y A K K C I V K H N P EA D R N Y WG Q N L W NKCLFE HDKCHNTKKYP DSGQNIVASWGTSGDDDDVEVQEW



\section*{UniRef90_F6QH26 UniRef90-G4XWY6 UniRef90-T1DEK7 UniRef90_UPI00042AD91D UniRef90_U2S299 UniRef90_A0A016WG26 UniRef90_UPI00038C24EC UniRef90_Q5CRP3 UniRef90_UPIO0038C27CF UniRef90_A0A016SSA4 UniRef90_F6SF93 UniRef90_K1PV07 UniRef90_B0DXW2 UniRef90_A0A044SJG2 UniRef90_R7TEV3 UniRef90-G0P8U3 UniRef90_X1XV93 UniRef90_Q642T6 UniRef90_UPI000388DCC6} UniRef90_B0DCN8 UniRef90_B3A0P8 UniRef90-H2DJY7
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 E Y Q Y Y T Y S S QA CA N G Q Q C G H Y T Q V V WA D S T S V G C GYA DC N
 A DESS DYDYRRNTCGKVCGHYTQQVWRKTVTVGCATVMCN

 Y N E S K Y F T Y GE WP D D F E TS SHY T Q M V WA S S Y LI I G C D DV A S C R
 WF EEGQQQYSHECAHNAT CTHYTQQVVWATSSQQLGC GQHDCS








 FS E A MYYNFNTNI CSSTCGNYP QLVVWENTTDVGGCVVTDCP \(T T A W Q A N D L T D E V F G R G V G H Y T Q M V W Q S S T K L G C G V K W C\) Y HEKKNNYDIT T DTCKMNCGHYT QMIWWWDTNKGLGCASHWC D
 QS D D Y D Y SK S Y A DQ GNDVT QFTQ TVVWRDSESVVGCGRSN R


 MKEMMMKWFD QVNRYEFTRHYTRMVWAKTSKLLGCGYSYYT Y WE LK MF GVPMEVFDRGVGHY T QVAWQS S DKIGCAVVECP ENSSV SA WF SEMMEVFNR GVGGHYS QQVVWQWSK K V G CAAVVWC K

 DF GPYWHQASVVPMSQPIVLHFTQAVWRQTTTVGCAMNNCG YAE \(\square Q N Y N F S N P\)

 Y D E V A L F D S S W


 WWA ELKKQYGDMNQFNK GIGHWSQQAWANTAQLGCAMARCP FA E G Q WY S H S A A E CA HNCTHYT QLVVWATSSSQL GCGR HR C S
 WWD DMKFVRKFNEKA』DQRGFTQMAWARSVKG GCAL QTCS
 EKEFQDFGWSD \(\square\) KFNTG \(\square\) GHAT QMAWAKSTK』GCGMALCQ RWYNEVCDFSRNDKDWNASHFTALVWKGTT DMGLGGFKKQP WF A ERR WYSHECAHNATCTHYTQQVWWTSSQQGCGRHRCS Y E E M E H Y N F S T D K C T G V C A H Y T WDERHFANPK LIDWGKYKALHFTMLVRANASRVGCGMVQYK F NE HVVNWEYAV GTTKEVVTGHFTQQUIWAPTHALLACYVVACY DSERENYNHETNTCNGVCGHYTQMVWRESTSIIGCGVYRGS YGGNALFSSNGWMNSSGHRSNMLNKGFTYGGVGYALGG
 \(Q \mathrm{~V}\) S VE QVVKA WMASPP WNEASHYNYNQPGFQLATGHFTQLVWAGTTQMGCGQATCP FA LLRTWF LEERQNFTYVADVGHYTQMMVWAATHKVGC GLLAKCA Y DEVKKDYTYPAPHECNPWCPERCS GAMCTHYTAPSSRP GS P P TE D K LT GEYPVSMWYS E EVVK WD Y VWK S TYEDLGC GVVA T S Y


 WFNESNNLYEFGGGSINGQQNGHYTQQMVWANTTQQVGCGYASYFK



 FDEYKDADMSYHDRKKVI GHFTVMMTDRSTRIGGAMARYP \(M T S \square Y D N V M T M E V F N R G V G H Y T Q V V W Q W S N K I G C A D V W C S\) QTTPQQVVQGWDDSP GHRANMLNPSFTELGVGYY LSV GDEDA I A G \(\square K N S R Y D S R \square G H A T Q D L W K E T R K L G C A V Q E C P\) ATGARNMSKTHAAESAVAGWDSEVVWWESDKIGCAVVWCP



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\hline UniRef90_F6QH26 & T DA TIL I C N Y GPGGNY \\
\hline UniRef90_G4XWY6 & GNFHVVCHYRPGGNVVNGAVYAKGTP \\
\hline UniRef90_T1DEK7 & SWNQLYVCNYGPGGNVDDNEMYK \\
\hline UniRef90-X6PAN4 & NYAVYLVCNYDP P G N Y I G E Y P Y T K \\
\hline UniRef90_UPI00042AD91D & RHAALFI CNYAP G I ILAARRPYEAG \\
\hline UniRef90_U2S299 & K N S P F WVCNYTPP GNWVGQRP \\
\hline UniRef90_A0A016WG26 & NKNKMVVCHYYPMGNFVNKP \\
\hline UniRef90_UPI00038C24EC & A A METFVCAYSPGGNWDVNG K T \(\square\) AP Y K K \\
\hline UniRef90-Q5CRP3 & S WK T YVI CHYDF GN LGYY \\
\hline UniRef90_UPI00038C27CF & RQKYLYVCHYCHE G N N P D NMPYKEGSP \\
\hline UniRef90-A0A016SSA4 & S M T YVVCQ Y GPK G NWLGDLIYEK G \\
\hline UniRef90-F6SF93 & A GQAVFVCAYSPGGNWEVNG K G T V V Y K K \\
\hline UniRef90-K1PV07 & S PGYLVVCNYGPG \\
\hline UniRef90_B0DXW2 & A GTIYVMCRY T G G N S D G F F VNVGR P \\
\hline UniRef90-A0A044SJG2 & NQGHII ICNYGE G G NQF GKRPY \\
\hline UniRef90-R7TEV3 & SNAILMTCYYGPGGD\AT T EPFKEG \\
\hline UniRef90_G0P8U3 &  \\
\hline UniRef90_F1L9M7 & D GA WYVVCHYYVAGNRFKDQI Y E \\
\hline UniRef90-X1XV93 & EGTVYFVCNYSFT N V V G Q QVY T A G \\
\hline UniRef90- Q642T6 & K Y K Y F Y V C Q Y CPA G N \\
\hline UniRef90-UPI000388DCC6 &  \\
\hline UniRef90-B0DCN8 & A G T \(\square \mathrm{F} V \mathrm{~V}\) CRYS G C \\
\hline UniRef90_B3A0P8 & D MTNMVCLFEEPK G NVRNELPY \\
\hline UniRef90_H2DJY7 & GQVALLIVAFYWPPGNV EHEFKTNV \\
\hline UniRef90-Q1WIQ3 & NFRTVIVCNYGPGGNIPEQRPYR \\
\hline UniRef90_U6PTE6 &  \\
\hline UniRef90_UPI0002652030 &  \\
\hline UniRef90-U6P1W5 & DSNWSAVCHYKPGGNILNEHLYEKGTP \\
\hline UniRef90_T1E6X4 & D NKVLYTCNYGPS G NMGGGTVYVKGTP \\
\hline UniRef90-R7T380 & NETWY M C H Y V IP G N I ENVR SLEE GVVIP K K \\
\hline UniRef90_T1IJJ5 & AKNVLLVCNYGPS G E ELKGEMYKQG \\
\hline UniRef90-A0A016W1C3 & N F YFAVCHYGPGGNDVGQY \\
\hline UniRef90-T1JAR1 & NTNQVVVCNYGPAGNMLEEPI Y Q \\
\hline UniRef90-L5KZX7 & K NDHLLVCNYEPP \\
\hline UniRef90_UPI000457374B & ETMD 1 FICAYSPG G NWE \(\square\) N GP Y K E G V W \\
\hline UniRef90_D1MWD7 &  \\
\hline UniRef90_U6NS84 & T MTLVACEYNPAGNRINHYI \\
\hline UniRef90_W6NGA7 & D MTLVGCEYAQAGNYLGSLI YE \(\quad\) IGEPCCK \\
\hline UniRef90-W2TX30 & GSTFVVCRYYPRGNIIGQNIYA VGP \\
\hline UniRef90-A7SYR7 & Q GRFYVVVYFDPP G NVKT T M K K V V L \\
\hline UniRef90-B2W2Y4 & NAMTFTVCNYAPAGNVGGQ Y A A NVVAP \\
\hline UniRef90-K2RIJ7 &  \\
\hline UniRef90-S4R7P9 & \\
\hline UniRef90_A0A016RYJ2 & S F \(\quad \mathrm{F}\) T SCMYA P G G N V G Q HVY R \\
\hline UniRef90-A0A016TL46 & A N NVYVVCRYRPSGNIVNNNVYQ VGNPC \\
\hline UniRef90-U4UDU5 & H H QLILLVCNYGPGGNYLGNPVYEAG \\
\hline UniRef90_A0A016WY87 & NNFYFAVCHYGPGGNVVNDYIY \\
\hline UniRef90-B0WA83 & EDGWYFVCNYALT N \\
\hline UniRef90_G4ZJT7 & GGD MVVVCEYSPA G NDPSSPWY \\
\hline UniRef90_B0W0J2 & LG GKYYVCNY GPA GNVQGQQPY \\
\hline UniRef90_UPI0002B49B2C & TNCTYVVALFYPPGNI \\
\hline UniRef90_G1JUH0 & S STWWVVCNYNASGNYL \\
\hline UniRef90_UPI0003AE0A84 & GAMEAFVCAYSPGGNWEANGPYRKG \\
\hline UniRef90_A0A016UCN0 & LS SFIVCRYSPAGNVLDQPIYE \\
\hline UniRef90_W2TSR9 & Q S S V V CRYS P A G N V V E Q I Y \\
\hline UniRef90-M5PEC6 & N I W T \\
\hline UniRef90-H3EMK9 &  \\
\hline UniRef90-A7SL02 &  \\
\hline UniRef90_M3YF65 & GAMEAFVCAYSPGGNWEVNG K T I V P Y K K \\
\hline UniRef90_UPI00046276AF & K NMG \(\square\) LVVCYGPAGNYK GTRPYKA G \\
\hline UniRef90-Q1CWK3 & K NSPFWVCNYAPPGNWVGQRPY \\
\hline UniRef90_Q16P09 &  \\
\hline UniRef90_A8WGY4 & G Y N Y F Y VC \(\square\) Y Y P T G N \\
\hline UniRef90_UPI0003799605 & SHGYFLDCTYHNAGNFNNDPP \\
\hline UniRef90-A9KHG5 & S Y G N Y A TQ \({ }^{\text {NF Y }}\) \\
\hline UniRef90-A0A016U763 & SN Y AVVCHYK P G G N R \(\square \mathrm{GEP}\) P M E R G \\
\hline UniRef90_UPI00032A3C08 & \(R N G E L W V C A Y Y P G G N W\) \\
\hline UniRef90-M4B1A3 & DSAYYWTQNFGTSMN \\
\hline UniRef90-A0A059LJT3 & \(\square E\) A Y PSGNKPNQP \\
\hline UniRef90-B0WCQ0 &  \\
\hline UniRef90_UPI0003317D71 & RPEP ARGNWDGEAPYKS GPPC \\
\hline UniRef90_UPI0003F08D81 &  \\
\hline UniRef90-A1BQQ5 & EDRYF V C N Y Y K S TMM NTPYAQG \\
\hline UniRef90_V4A6X1 & K DTTLFACFYYPK G NMYGSYPF \\
\hline UniRef90_U6P0R0 &  \\
\hline UniRef90_UPI00038ECC85 & K Y K Y F Y V C H Y CPA GNNKNTLJT P Y K L G Q P C \\
\hline UniRef90-A0A023FAN7 & WY A GYLVCNYNPA G N I Q D E NPY \\
\hline UniRef90_UPI0003336E83 & NKENLIPKDYSRRGNVVGQKLYE VGPPC \\
\hline UniRef90_A0A016SDC8 & \(T\) F TM MVCCQY GPA G NYLNRLI Y \\
\hline UniRef90_Q8TGF0 &  \\
\hline UniRef90_U6P7M3 &  \\
\hline UniRef90-W2TYS0 & S ETFVVCRYDPPGNILGKTI Y K Q G \\
\hline UniRef90-F5GU27 & \(N G W T L I A C N Y S F T N L L N L P I Y T, ~ V G Q P C\) \\
\hline UniRef90-U6NPH6 &  \\
\hline UniRef90_UPI0003474775 & NYKHYWTQEEFDPSSNIP \\
\hline UniRef90-O76663 & DGQKYAVCKYYP T G NV \\
\hline UniRef90_U6PCJ6 & GMTFVGCEYNPGGNWPGYAPYE \\
\hline UniRef90_B0X6A4 & S GEWLWVVCNYSYT NMDGTPVYTAG \\
\hline UniRef90_F6SXD6 & G Y N Y F Y V C \(\square\) Y Y P T G N \\
\hline UniRef90_R7UB13 & GYGVIVACNFYPGGNVGTALPFEK \\
\hline UniRef90_K3YCZ4 & S GGAVAACA Y \\
\hline UniRef90 A8P1B2 & G G R T L I I C H Y S P A G N M L K ELI Y E L G E P C K \\
\hline
\end{tabular}

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UniRef90-D8U0A0
UniRef90-V4B6J8
UniRef90 F7GBZ1 UniRef90_A0A016VNA4 UniRef90-A0A016VHU4 UniRef90-J1RYX5 UniRef90_F6UVY1 UniRef90-G8LW85 UniRef90-UPI00047BAB8B UniRef90 U6IEZ7 UniRef90-L8H1C9 UniRef90-H3GDN4 UniRef90-E5SGP8 UniRef90-A7RPY0 UniRef90_UPI00035C38D0 UniRef90_A7SNJ2 UniRef90-G0MHP0 UniRef90_A0A022RPE8 UniRef90-E3M6E8 UniRef90-HOUYE3 UniRef90-G9EIS4 UniRef90_UPI00047AE30B UniRef90-V9FNW3 UniRef90-17HKL9 UniRef90-UPI00033334E4 UniRef90-T1DD85 UniRef90-A8WPS7 UniRef90_A8LDS1 UniRef90-M4B314 UniRef90-X1Y1F7 UniRef90_UPIOOO225BA81 UniRef90-D8TI81 UniRef90_UPI0003D71B7E UniRef90 A0A024UV39 UniRef90-UPIO0046B62D2 UniRef90-T1HG53 UniRef90-W4GT52 UniRef90-Q86GK7 UniRef90-W7YTA6 UniRef90 \({ }^{-}\)A0A034WCM9 UniRef90_W2SQ24 UniRef90-B6Z1W7 UniRef90-D5NXZ9 UniRef90-B5YMN6 UniRef90 O45132 UniRef90-A0A024TD96 UniRef90_UPI0003C36122 UniRef90 I3MC37 UniRef90-UPIO0044354A7 UniRef90-W3XN42
UniRef90-X1XY56 UniRef90-A8J935 UniRef90-JONC52 UniRef90_V9FLV4 UniRef90_H1PXB5 UniRef90-UPIO002F6807C UniRef90-I1FWL2 UniRef90-A0A016U062 UniRef90 B8LQK8 UniRef90_UPIO002896DC2 UniRef90_Q6UXF7 UniRef90_U6N1A2 UniRef90_G1P977 UniRef90-K3YW65 UniRef90_UPI0002B8D8B8 UniRef90 U5LCE7 UniRef90_UPI0002FA54E9 UniRef90_G0R994 UniRef90 A5N8P5 UniRef90_C6IWZ8 UniRef90-K2QMT3 UniRef90 UPI00046F1A18 UniRef90-UPIO003595ED3 UniRef90-F3PAJ4 UniRef90-A0A016WCH7 UniRef90-UPI000470422A UniRef90-T1FEA3

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10
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MT DTLRSEYERDHNFRRG|LLINMQKIISYDCG|LIEEGADRWA


QDAREILDQHNDYRREEGAADMHWNTSLQERANTWA MNDEDRQMFVVKHNDYRSAAAMMKVKYSCEVEDCDMMDWLD

EQKRVMLLDTHNEYRQRCAMGELFWDDALLAKMAKERA RLRALHGCNPLNYDADLAEQAQKHA
\(!L S L H N R L R S Q V Q P P A A N W S E S L A Q D A Q A R A\) LLSLHNRLRSQVQPPAANMRRMDWNES LA QL TASLRSLI LDQHNSRRSLI AMPTLVWDDELASQAGHNA
 AVDASAKKEIVDRHNKGRSEVTPAAMVWDDELAKDAEKWA MTDE \(\square R N E\) LLRMHNWRRTKLAKGKMKYDCALLENSALAYA TDEARDEFLKVHNECRAKVAKGGlRMGNGISSRACPYD TAARFAQKIVQLVNAQRAQHGCGPLTVDSHLQTAAQKHS

QFQQRECLASSNYFRS DHGSPPL EWDWQL QRTA QTWA


WL N A H N GKRA QY GVP NLA WS T NL Q T S A Q NYA SFSAEDQA \(\square\) WI DRHNYFRSAGDMRRI GWSSDLAT TAASTA REAILNYHNKLRKAVNMQKLKWSKALAEKALAWA FAK QAL QRHNYYRK DHNAPMMS LDSAMTRSAAAYA
 KMEYDCMLERFAQNWA Q Q E Y LK A H NDLR QKVGVP P L VWSPAALTKHAHA WA

LLSLHNRLRSRVQPPAANMRRMDWS ENLA QL

SGDYYSAMLTAVNAARAKQGVPALCMNKKLQAAAQRHS
DTA AQNEVLVVINNYRQQHGLAPLKMDNRIVKEAKDHS S DS A QDMNTLL EYHNHARATVVYPPAMVWDE QL A WYA KA WA \(T M D S T A Q A Q \square L D E H N K L R N K V A D G T L Q W D S E L A S D A A A N A\) KWDDSLATSAQDYA
LIE EVVT RTNAQRSAAGCPALTVDARLAASAQEHS


IR S EAYDAHNDHRRTWVVPELI ES DELSHDAEEYA S QK T FEQRVIDDTNQERKKHGLSPLI MNSKLADTAKAKA EAVLEKTNNYRVRHQSRPMVWS ETLAAASAQA YA T DPKF \(\quad\) D A FLL \(\quad \square H N E L R R K V Q P P A L F W D Q Q L A K L A K A W T\) NDLKA QIV RQT S II RAGHGLGPVRWNQDLAVKMQTWA
 S DLLKAQIVHQTSVI RAGYGLGPVTWNDDLAKKMQAWA MNNDMREKVTDMHNAYRSKHQASKMR KLVYDCADEK
 MS QRRRQF LLDMHNLYRAAAHMPMLKWDDELEYMASLHV NMNRLRYDCNLENHAIQQA
SEHLRDFVLQFHNDHRANEGASKLVWSKQLATEAYKWT A \(\square\) NE Y R A R H G V A P V A P N P QL N G \(\square A Q R W A\) A Y L N A HNSRRRDWHTRPLKWSKGLAADAANYA

 TWDVELERSAESWA \(M V W N P E A S R N A R S W A\)
\(M T W S P T A A E T A R K \square D A\)
SPELQQF \(\square L N E H N K Y R K A Q K M P T L V W D P E L A S L A D A N A\) LARHNLYRTKHQAQPL AWSTRLQKEA QDWA
 TSSDEY LS A MLARVNQERAAYGLPALCTNKKLQAAAQGHS SAEGYQKTILIKYVNQERKAKRLAPLVMNEKLNKDAVIKA

 \begin{tabular}{lllllllllllllll|llllllll}
\(Q\) & \(D\) & \(Q\) & \(Q\) & \(G\) & \(L\) & \(S\) & \(P\) & \(H\) & \(N\) & \(D\) & \(A\) & \(R\) & \(A\) & \(Q\) & \(V\) & \(S\) & \(V\) & \(A\) & \(A\) & \(L\) & \(V\) & \(W\) \\
\(D\) & \(D\) & \(T\) & \(V\) & \(A\) & \(A\) & \(Y\) & \(A\) & \(Q\) & \(D\) & \(Y\) & \(A\) \\
\(N\) & \(A\) & \(F\) & \(E\) & \(K\) & \(K\) & \(V\) & \(V\) & \(D\) & \(L\) & \(T\) & \(N\) & \(Q\) & \(E\) & \(R\) & \(T\) & \(K\) & \(A\) & \(G\) & \(L\) & \(S\) & \(P\) & \(L\) \\
\(K\) & \(K\) & \(S\) & \(N\) & \(T\) & \(L\) & \(S\) & \(K\) & \(M\) & \(A\) & \(R\) & \(D\) & \(K\) & \(S\)
\end{tabular} D K F R K V MLL
 HA HLRAK N
TQEERGFLTSQHNNYRVQQGANNMTWDNDLATAANNYV SAFEQKVVELTNQERAKNGVPALKLDTELSKVAREKS
 AQADDRSLALGLI NQARAAQGVQPLTWNDNLASYAQYWA

 SAS Q IEKAVLLTLTNAERQKA GLKP L QMDDKLMKTARAKS \(\square N L L L D L H N S Y R R K H A M F R L E W S K A L E Q E A A K W V V\)


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UniRef90-A7RPY0 UniRef90_A7RPYO
UniRef90_UPIO0035C38D0 UniRef90-A7SNJ2 UniRef90-GOMHP0 UniRef90-A0A022RPE8 UniRef90-E3M6E8 UniRef90-HOUYE3 UniRef90-G9EIS4 UniRef90_UPIO0047AE30B UniRef90-V9FNW3 UniRef90-17HKL9 UniRef90-UPIO0033334E4 UniRef90-T1DD85 UniRef90-A8WPS7 UniRef90-A8LDS1 UniRef90-M4B314 UniRef90-X1Y1F7 UniRef90_UPIO00225BA81 UniRef90-D8TI81 UniRef90_UPI0003D71B7E UniRef90_A0A024UV39 UniRef90-UPIO0046B62D2 UniRef90-T1HG53 UniRef90-W4GT52 UniRef90-Q86GK7 UniRef90-W7YTA6
UniRef90-A0A034WCM9
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SQCPTTNSAPSSRNG|VUGNFKTFPATRFTFTEWWKP\|VDVV| RSCVFAHDRCRNT PVYSWS GQNDADSQFYGMTKWWSEYNV RYCDMTESNPLERRLPNTFCGENMYMTSYPVSWATVVGVW
HKCNFRHEHNDDVGENLFFDNDHKEKVLMRGDKAWFV
KKCKYESNPWTWRKWWGQSLDWKTSKLNMNKTQAAKACVRE NGCSMSHSGSSGMGENLYMTSSSTDSEADADKQACDMWWA SACYFGHFNDE \(\square G E N \square S \square Y \square F N P P A S Q Y G A E T W A G S V K S W\) EFLALKRRMVHSNAFDYGENIAKKFGTP
A LCNTSVTPNPRHTPQVGWNVQLLPKGSASFVEVVNLWFAA A QARAALCGMPAPDLVPAPRRTPQMGWNDQASFAGVVNDW RSCVFQHDRCRNTVDFRWDKQFFGQTDTVETVIVNFVRMW
ASCAAKTTTGLNVYESTSTDPSTADEDAVNAWVVEPAKND ASCAAKTTTGDNVYESTSTDPSTADEDADNAWVVEPAKND E E LAA A NQCELEHAPVGGECDYGLASYPKPDWSCKRAVDA W AQCCSAGADNYKGRATKAYPGVGGQNAFDTVTVEVE W KQCQLKKPSNPQNEGENUHSASLNQNRTAVKAWWSQUFKNG CEDEKKAYATASACKSADPETENENWFTTTAATEKDAATK DDMAARNYYEHNTPEGVDPGTRMTNAGFPWSSWAENDFKS NVLMS \(\square\) SPRGPRKPNRHHH QDMDDKGYFAHNSPTYGSPFKMMESFGDRYSAAGENDAMG MDMRDKNYFSHTSPTYGDPFTMDKNFGISYRAAAENIAAG DACKWKHPENTDKEYSGDGQNLAMTTGSTVSLHGMVVKW \(N T D A S G C T F A H S G G N Y G E N D A M G Y S S Q Q A V L N A W V D S E A Q\)
\(A A C S A T T A A G V N V F Q S T S S N S S S V I D E A I Q S W V V E T S M T ~ T ~\) AACSATTAAGVNVFQSTSSNSSSVIDEAVQSWVVETSMTT YKFASYGTDVHSSWQERGGDGENAVVCGDDQSATAAVEMW DDMAARDYYAHSTPE GVGPGER TTAAGYRWSTYGENI FKS DKDASKPKFPAGLVHS GTSDGENLGYSYSGHDCSVTVEAW NKCVFAHSSHYERPNQGQNLYMSSFTNPDPRSLI HTAVEK EHRRVDCNYRSHSPYQFGENUY WESYNEFTPWWFNEYKLY AQARAALCGMPAVDLDASAPRRTQQMGWNMQLLPEGAVWFA DDMATHK DPFGHQNFAKRDSHAHAQDKNSGAGAENVAYNY QDMDNKNYFDHNSPTYGSPFDMMKQFGDSYKSAGENIAMG DDMAKNNYMAHDGADGSTMSQRDTEAGYEWDGCAENVAAG
 \(T Q C D W D H G P L Q M M K S M G Q N I L Q S R P W W R S P S P C L C P H L L P\)
\(R R C V Y G H D T C R N T A S M Q F D Q Q Y Y G M D K T D S Q L I T E F V Q A W\) NTCPESLSQPSGENDYFGYDSTDKNTVDYFGPRSSQVWEE ADMAARNYFDHNGRDGRSPFDRDAAAGYVFSDAAENIAAG DDMAAQDFMAHDGSDGSTMSQRI TASKYEWDAIAENVAAG NRCVQKHDACHNTANHRYSGQNLNHDTTTAPSIWWDEKAD ITHLARNDRVDHLDYPLSEPENDFYTENDCEFDRNECVYYW LDMAKNNYFDHDSPTYGTPFDMMDQFGISYQTAGENIAKG EYLAQRECVLQHSMSNYFGENLMMVWRSSFQMGCGVA
RECKLA HNPCYE CLEDYDF DGENDYLGRDETQPEDVVINW DSCPQRFGGGHGGPAGNQNFAECGNNCMHVPGPAQTWWES ARAALCGAPAPSGASTPQVGWNVQLLPTGSASFVDVVTVW
\(D Q C I V Y A H D D C R Y T F S K T A E S M T Q F W F D E Y L I T P Q S L I N N M\)
 G DYESDTKCEMKPSMEEENVEVIDGNSDDDTVISEAGNSW NDMRDSNYFSHTSPTYGSPHQMI RDFGDSYRASGENIAAG KRCQFAHDQCRNTPRYQFSGQNIGYFWSHAKRFKSFILDW HTCTYTHGARNT DTHAWKNLAADPNRALFTAFSNWWSELD QQC NFEHQMKGRGENLAFDSSAGTDKDLLRSEMQ G D HMAQT GVPAHNPSYLQQYPAGWKEGGENVHQNWRGAS ERLLDT CE ET G \(\square H H D P G I D E Q G E N L A K N K G S G N W G E L Y D A E\) KTCAAMLKRWGNNMHMMSSKANNKTEAAAEADVA WF GDLQQ
 ETCLLWEHGGPAS LLLPSHWGGRYRPPMMFHVQAWYDEVVRDFSYP


 DD QAANDYMDHTGTDGTSVSERDTRSGYDWSAVAENVAAG VDMAKEEKLSHDSKKFGMTFNLIGKENDIKKSAAENIARW EDMYNKKYFSHTSPTYGSPFDMMKKYGITFWAAGENI ARG



 CRMEHSWTGCTVVGPLPT DDPSAWASEAACYRFGKVVNPCT ARCGALDAPSLVPTPGATSQVGWNVQLLPVGAASFVVVWFA A QFKDNCAAAAPAAGDNVFL GPAGATWLPSDAVAAWAE K N CVVAHSVHTSVGPYPTVGEYTTHHEFSRAFDKTAGTEW NDMKTKGYFDHNSPTYGSPFDMMKKFGDSYRTAGENIAMG QDMADENYFSHQSPTYGSPFDMMDHYGVDYRTAGENDAMG N \(\square\) MA A GQQPFSHAQGSYRPQQGETLFEYQSSQCDAAYDTP Q D M
R D N S S Y F S H T S P T Y G G S P F D M M K K F G
 SQCDF QHHSDPEWGENLFRSDHHSGVEDADMRAWHLERYN EHQASADDMDHRPD I F T S A YPA GWT T GSENEVA WR ASCRRTELPAYAT GGHKQNPKAVIHYALSQWWSQLARFGM NDMMTNKY FDHTSSPTYGSPFDMMKKFGGSYKSAGENDAMG \(R R \square A F Q K \square P S K N E K P G V N \square G Y V F H N K S F F K T P C A K T L E N W\)
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UniRef90_D8U0A0
UniRef90-V4B6J8 UniRef90_F7GBZ1 UniRef90-A0A016VNA4 UniRef90_A0A016VHU4 UniRef90_J1RYX5 UniRef90_F6UVY1
UniRef90_G8LW85 UniRef90_UPI00047BAB8B UniRef90-U6IEZ7 UniRef90_L8H1C9 UniRef90-H3GDN4 UniRef90_E5SGP8 UniRef90_A7RPY0 UniRef90_UPI00035C38D0 UniRef90_A7SNJ2 UniRef90_G0MHPO UniRef90_A0A022RPE8 UniRef90_E3M6E8 UniRef90_H0UYE3 UniRef90-G9EIS4
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NYFEKVVVFRPFHDGAP\|IS S T QMGWATSNDLGCS\|VKCS TTQA QL NSYPNNYVGPA IGHFTQMASDQSNKVGCAMQHWLL HSESKYFKHGQWDDGVT T DHYTQQVVWASSYLIGGCA ASCG
 EKELWWSFAMPTCGDAC HYTMMVWSYT DS DGCSAVVCP WYE EVKKYGAP QDFARNDTRFTQMAWQSSYEIGCGVVWC ELKQFGFQSSMAQFNKGIGHWSQQAWASTAQQGCAMARCP YAESNSYDWDMKFCHDTCGHWAQVCHGETRYVGCAVAECN GFKLT GHFT QCVWS DTERAGFGFSKAR

 GNVVVAPA K E G DAVVGA G LVYNAYTQQVIDWA STTTGVGGCADIS S C S Y S EVVK LY DF TA QYP Y D YT GHFVVQLVWRS SAVFGGGVGA A D YSEKKSFVHGKGSKDGVIGHYTQVVNDNAVRVGCGRADCP \(F Q E G Q W Y A Y S A A Q C A S N C A H Y T Q L V W A T S S Q L G C G K H L C N\)
 P K D P A T A M D GWMK S P GHRDN ILNCSYKST Y MEQFDYNKSHPRTSRPVGHYTMMDWKD DTHDGCSYAFGN Q Q T T P EVVN A WMNSPGHRANILSTSTTRIGVGYAKGG NDENADYNYEQSSCSKVCGHYTGVVWASSLKLGCAYKKCD YYNAATKQCSGG VGGHFTQVLWRTTSYVGCGDAR \(L K T L Q P G A V G V D V G T G V Y N S Y S Q V L W D S T T S V G C A T A S C S\) WDEYKYYRYDTRGCSRVCSHYTQMASATVHKVGCAFTVVC YKEVCMYNFNYGGMS GATGHFTQLVWKESTLLGIGNAYTG
 WWQELE EF GTWD LTKGKA DGHYTQQMAWDRTYRLLGCG \(\quad\) GANCP DNETLSSTTCQPERAAGCECGHYLNDVWSTTTTRSGAARRYC Y EQEFQRF GWSSNT FTHANTHATMQMAWASTGSDICGGVKNC G E GQWYSHETAECARNSTCTHYTQQLVWATSSQLGCGQHLCS K DARTVVQQ WVVLPGHKRNIVGNYN LTGIGIARDK
 \(K N\) A Q DVVKN WLLRSPGHKRNIVGNYDLTGVGIARDE


 VNKRMVKSMYDPGRHTMDFHFAVLAADKSNKLGCAVSQWK ASEGAASYGDAKERRTKVEQFSAITWKSTTEMGVGWASKK Q STPE QVVQTWMDSEGHKANILNPEFTH \(\square G V G F S K D N\)
Y NESKYFNFDFNTCSEMCGHYT
E E ELLWDYDTNQD GNWVTTGHFQNSLDPGVTEDACGWSTCF FA EGQQQYSHTAA ECAHNCTHYTQQLVWATSSQQLGCGRHMLCS
 WE EEKLWDYDANKNWMTTGHFQNSLDPGVNEIACGWSTCF WS E ILDDLK GK DVYNSVDNTSEDANMA WESHKGGCAVVVECS
 RNGMPSNM \(\operatorname{CNRAEDQGRVGQWATMAWSSHTHIGCAVARCT}\) WFDEKADFNRNDQSCGMNCHYTQMVWANTTHVGCAADDCP TQEVVQAWHNSP SHRQNQADPGFNQI GVGVAYGA
 \(K\) Y GVVPENNVVFTMNVYTTESKYSQLAWQSSDR\|GCVVVPCW DSEES LWDFTTNQCWADCGHFSNMMSPQVTSMGC GWSECD Y DEVVK DVKM S Y GYS GPMDGHFTVMMADRNVRVGCAAATYD YEHEYNPYCPFRCS GPVFTHYTQVVWATTNRIGCADNLCH
 EVNNYVYYGGEPNLNT QWGHFSQQVWKSSDTVGCYTSDCS
 A WYS EEKVYDYANPQFNAGHFTQMVWQRTY LVGCA DGVCP
 HDTPKFVVMERWMKSKGHRDNILSKNYNEIGIGKAVDK Q ARES FQCWSNNNCQYSSTEDREQLVFYPDTHVLGCGAKYFS FY \(\square\) N QTAAESVP Y L S N N T DS N FANVVA WETH S KL G CA V F K C Y VNEK QYY DYSSNSCAE GQVCGHYTQ

 EGQRRYSHEAAACALNATCTHYTQQLVWATSSSQLGC GQBPCS
 QRSPEEVVKAW MNSEGHRKNVMNANFTHVGVGHVAEG

 A A GY LDDA DDGHY GWLNSWGHRENML EPVFTMLGVGAVSSS GKATPDSMVRDD GRWEKYGHFTQQLI WASSAKVGGAAABCS QRSAEEVVKGW MNSPGHRQNILTPGFTHIGGG
\(\square Y\) D RE E GLLDCCTRTKDTCCSTS QIIIWGSSRFVGGCA \(\square R S C D\)
 RSNMMFYQSEYHRRARNVLKWAKMAWWNNRKVGCAVKK CG

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\hline UniRef90－U6N & NDMTFAGCEYSPFGNMVDDT \\
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\hline UniRef90－D8U0A0 & GGCKVVVCRFQ SGFKASNSQFQLNVFP \\
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\hline UniRef90－A0A016VHU4 & NDWH VVCHYGPGVGRLGSPLY \\
\hline UniRet90＿J1RYX5 & NGPWWT \\
\hline UniRet90－F6UVY1 & YVVMYVVITHYGPGGNV \\
\hline UniRef90 G8LW85 & NGRMYW \\
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\hline UniRef90－U61EZ7 & QSAFFLACQYSPAGNLIGAKPY \\
\hline UniRef90－L8H1C9 & \\
\hline UniRef90－H3GDN4 & GGD LVVCNYSPAGN \\
\hline UniRef90－E5SGP88 & GRAYFMVCNYGNGDNWSN \\
\hline UniRef90－A7RYO & WPCTYWVARYREHGNMSGQ \\
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\hline UniRef90－GOMHPO & K MSYVVCHYGPAGNRKNNKDYE \\
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\hline UniRet90＿E3M6E8 & YNRAIVVCHYKSSGNILNQQI \\
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\hline UniRef90－V9FNW3 & D TTY \\
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\hline UniRef90＿A8J935 & D \\
\hline UniRef90＿JoNC52 & \\
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\hline UniRef90＿Gor994 & S \\
\hline UniRef90－A5N8P5
UniRet90 C6IWZ8 & NGTPYWVQMFI \\
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\hline UniRef90 UPI0003595ED3 & DAIVFMACYYYPR \\
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 TNGLRNLFLHMHNRFRSNLAAPPATLMYRMESFAQQHA VT A QTWDCCKLE N S A Q K WA STLSAYEQKVVELTNAERSKQGLTPLKVDPELSKVARMKS KA AEHDVVQLCNQERAKHGLPALTPDWQVARVARHKS STSESFQKEVVDLVNDERAKAGLNPLTDDSSISNVATKKS

LLEAHNKYRNLIGQPPAQNMRTWDAYAEERA TAADHARRVVD LVNAERAGAGCPALRVDDRLQRAAQGHA MTDVVRANILQMHNWRRSQLAPPASNMDCNLEKNALAFA MDSKLKT IILNTHNK LDRE I AMPTLVWDDELAH \(\square\) ASFNA

TERMKKAFLNAHNRKRRLVAAPNLTWNDALAK LDAEYNV STDADRN IGLNLLHNEHRSNLAMDKLTYDCAAERTAFA WA D D T A K QTI HL VNLERAKAG LPALAADAPDSK GATVKA TAS LQSSLLDLHNSRRSQ DAMATLQWDAELASQAGHNA

EVIRLTNQERAKNGLSPLKADWQLSRVARYK S
QQQ LDDGLNRERAK \(\quad\) GAPAVSLDDPTLGAVAQDWA A DAEVKDTFLHNHNAVRGQYNLPAQKMNPELTKAAQDHA DKREMLKLVNEARRQEAVPPLQWNAKLAKAAQKHA A YEMKIVELVNAERAKLGLRALAVDAKLSQVARLKS SANGKSA ILKVHNHLRSAANMRKMKWDTVIAASAQKYA

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DNRLRNLFLDMHNRFRGNVAAPPATLMYRMESYAQQHA STANAVEAEVLKLVNQERAKVGCTPAAANPKDTEDAEAFS S LT NAMRDDFLNYHNDKRGSLAAPPMKYDCNAESYAQQAV

SQELEKGDLVALINQARQKVGQAPLAWDDALKQDA YVWS
 SLTNGLRNLFLDMHNNFRGSLAPAALMYRMKYTCDAESYA
 A AE QEMARDVLDRVNDERAERGLAPVVWDEELAAVARSWS

 SQSSDFHSEMLARVNKERAAEGLMPVCGNKKLLSSSQRHS S QS S DF EN Q VI K LVVN QA R V N A G L L Q P F T S N WE L S R VA R Y K S TAPTDF DNQVLALLHNAARTEYGGQQMLTWSNDAAAAAAQRWA QYANTIL \(N\) K V N E LLRRK L N L Q P V T R Y QEFD A VA Q D WS


 T DASARSEVLA LVNEERAKVGCSPDLSTSAPLTSGAQNES SAEEQAVL DLLTNAERAKAGLGPLQFDATLQKSAKQKS L R WN D IL A N N A QQVAA
DEVVDLTNRERTRAGLPALAVDPRLTAAAQAHS QVVALVNKERAAAGCGPVTEDPQLDKAAQGHS \(T A Q N S E Q D F V D A H N A A R A D V G G G E V T W D A A T V T A A A A Q D Y A\) T T QS QVQREIVNKHNELRKSVSPPASNMLKMWSREATANA A A D A AFREKILDDRNYLRSRVYMNRLVYDVGLEAYARNYA
 SFEREVVFDLAN TVVRARYGGDMPLEEWSGAAARASKERA SVE QEVTRLVNVERANAGLPALVWDEQLARSAEAWA \(T L T D Q F D Q R \| L G L V N Q E R A K Q G L R S L S L S Q K L D A A A D C H S\)

TTMLTTTHNRLRSQVHPSAANMQRMDWSESLAQL N QFE R QQV V A
 AKKCVFAH SESEFEQRVIELTNQEREQAGLEPLKPYSELSDVARDKS PEYRA QL L E F H NRLLRN N L A C G E L SFA QDS DK DFVDA HNAA RA QVGVGPVHWNKTVA DYA H Q Y A QELAAATNRYRAAHGVPALQPNPRLSEVAQTWT NDH DQLI LQQLHNERRSAVRMGTMS WDQTL SEEAA A YNA MS D R R K Q L L L D M H NLLAR S K I H M P L M R WD S E L E Y L A G L H A
 SFEQQI FDLANAVRVRNGKKPLQWNDKIAGTARKHS
 \(T \square D A T \square R G L I V S E H N R L R S A V R M P T L A W D D T L A D Q A G H N A\)


QDEVVVRLTNDVERQAAGCGPLAVDASSLSAAAQA HS D D DMREMFTELHNGYRAAFARNYKTSKMRTMVYDCTVLTM T D DEK S E I LAA KHNQYR S EVQPPP LQQWNDEDA KMS QS WT



DEALLA ISARAWA

RTCKF A HDQCRATK \(\square\) CRYAGGNLGQMQSFPEFLNTNUA IVK GSCVARHDPQHAMPGYKENDHDLRNVQTTREGAIQNATSW D QCAFRHSSENQRDVGDGENDYTGRRDSRSVES DSTTUI QDMHDKHYFDHTSPTYGSPFDMMKKFGISYKSAGENI AQ G Q D M R D K R Y F S H T S P TY G S P F D M L K A Y N I R Y R A A GE N I A M G
 THWASTCKLRTARDKNKYNHTMGLDNLYAKTSTKLQDDVNTTT D DMAARDYYAHDTPE GRGPGDRIGAAGYRWSTWAEN I HR G S R CTMTSSSPPAS RPD Q G Q NVHVGP LTT T DY L LTTGQNAVVA W RKCAHDKCRNTRQFKFSGQNLADTTFYGFNFQAGDRAENF WMK D S LVK G W
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 GDMAARGFFDHTDPDGKSPWDRAAVAGDTNLGGENDARGQ NTCRRTKQNLF ILNSPHVSPNEAIRY ALS QWWS QLARFGM GNLAADNKLEHAPASERNGAGELLSMFRTEDHNSVQMTRP
 R H CVVF H D K
 H Q H A S S C V T T P L P A Y A M P G Y K E N A EMARTTE QLLRHQDMGALLDAREEGSDLLQGIGENVFQSTGAV QDMHDNHYFDHNSPTYGSPFDMMKQFG\|TYKAAGENIAQG DEPK GDCDLERSGGPYSKNLMWAGEK DNYDYCSNSCV
KD MYNNHYFDHNSPTYGSPFDMMKQYGVRYSYAGEN I AK G DEMA Y S K K F S H F R P D G N M C Y S V I G D L D D S A R S L G E NV A A A A A QDMANKGYFDHTSPTYGSPFTMMQNFGGKFTAAGENUAMAG EGCWRDHPQTRYPPELEFDMKAMWHAYEAFKAEEQSYDFT EHQAETETMAHRPEFYNSYPGYKTDKNY TTVSENVAMR DSNPQKNGGGHGGPPGNQNLAGFVVCNNDCMHTEGPAWNW RKC CIFAHDKCRNTREFKFYNFQAADRAENFTQEWFNEHKD D GCAKDNSPGALF GLYSEWKSSSSVVSFSLNKTLKSVIDLA
 A D MAKNNYFSHTSPTYGSPFDQMKMNGITYRKAA ENDA Q G NKC D L N F DLVNDKLLEHFES SGGNVAES DTIKNAMENW A D MVIARDFYSHTDPDGGRPWDRAAAAGAARRTVGENIACG D DMAARGFFDHTDPDGAGPGERITAAGYRWSTYGENI AK G DQRRGDCQIHTPDGRPYGENDYGGGGGGTEWTATAAVNSW QKWANKCTLEHEDRKTSTKCGENLYMSSDPTAWSNAI QNW RHMCSTGKWEHRGENLYTNSVDYSSTPSRNFDSAQDVQKW

 EDMVLNNYFSHTNLQGESPFDRMKKAGDSYSSAGENIAMG T QCIWWAH GPS QLMKYVGQNDS DHS GRYRSWSEEKRYYSFP QDMHDKSYFSHTSPTYGSPFTMMKNFGDTYKSAGENDAQG GRMANGDFFSHVDPGNGSRPSDRATQAGYRWTTVGENIAA MSRRA QHDWYDEDRDYDFNKGAGKDMWSVVLDFTQVVWRD A QARAALCGTSATPNDVGWNVQLLPMGSASFVEVVNVWFA EDMAENNYFAHQSPTYGTPFEMMQEYGVQFRMAAENI AAG K DMATNGYFSHTSPTYGSPFNMMQQSGVNYRTAGENDAKG
 EDMRDAGYFSHNSPNYGSPFDMMDTYNDEYQGAGENDAAG RTCSFEHDECRNTRRYRTAGQNLADNWFYFQRHWF LEYRK KRCQFA HDKCRNTPRFKFSGQNIGYFWSHSRRMKSFVVINW NKR DK DCNLVHS K GPYGENDA WGSRNDA DVWPDLHS S GV ET QQMADR
 K S CQFQHDECRNTNLYRQAGQNLALGYYPVPTDDFDI NLW GDMGERSFFDHNNPDGKSPFDRIKADGIIYKSAGENIAAG
 E DMAAHSNMSHTGSDGSSPGDRIERAGYSWSTYGENVAYG R S CVVF S H DACRNTAKYAYVQSFYGQTNAPTSVVRNMVATW QDMQSNNYFSHTSPTFGSPFDRMKALGDTYKSAGENIIAQG A DMA A NNYFSHSGGDGTSAGDRARAAGFPSTYVGENIAAG

 EDMARRRGFYA HRSSPERQDIGGDRYQANWSVI GENDST CDNC

 K GCEMNHDACHNTQTFSASGQNGARMN N W
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\hline UniRef90-A0A016 WBzo & \\
\hline UniRef90-A0AO44VCHO & \(V \mathrm{GCGVAMHC}\) \\
\hline IOU9 & \\
\hline \[
\begin{aligned}
& \text { UPI } \\
& \text { U1 }
\end{aligned}
\] & \\
\hline & QATAQEVVKSW MNSEGHRKNILSRNFTH GV \\
\hline UniRef90-T4 & Q PKMPKEVVINAMNSEGHRKNIMNPNFSKIGVG \\
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\hline Q5 & \\
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\hline & , \\
\hline UniRef90-A0A016RW14 & GMSQSDLIRFHSNSHYARM \\
\hline UniRet90_S2X & EVVT A W \\
\hline W5 & \\
\hline Ref90-A6CPK & \\
\hline iRef90-K1Q212 & KDFTLGGNNDLIMKVGHYTQV \\
\hline UniRet90 A6W & GLENGDLIAVDT WMKSDPHRAVLQDRTYS \\
\hline & \\
\hline UniRef90_UP1000237D56B & \\
\hline B121 & \\
\hline E3NE19 & DYGWSKDT \\
\hline A8WPT3 & ( WMGFTMDDNASNKDATQMAWA ETGLIGC \\
\hline UniRee90-A0AO16V1 & EMNSTPMVARRGARNV RSWSKMAWWNNMRVG \\
\hline niRef90-V6k & ANSNCMW DFKT \\
\hline UniRef90-A0A016W5F9 & RSNMMFCQSEFNRGSRH \\
\hline UniRe & \\
\hline V3Z1R1 & \\
\hline UniRef90_Q1717 & - \\
\hline P100035 & \\
\hline & WS ELARFGMRSNMMFYNVMSWSKMAWWNNTELGCSVQNCG \\
\hline UniRet90_AOA & VSPVKFFGKNDPTNEYEERFCPFANMANTTKVGCSMKRCG \\
\hline UniRef90-UPI0002E24EC2 & AEVMKA WMNSPGHKAN \\
\hline & \\
\hline W2 & QRTPQEVMKSWUMNSSGHRKNMSANFTK GVGYYN \\
\hline UniRef90-R6H44 & E \\
\hline & DVAVMDAW MHSPEHRE \\
\hline UniRef90 U5RV & RKELFSRGEDYFEKVGHFLIMV \\
\hline iRefo- 1401 LK8 & \\
\hline UniRef90-ToRIG9 & EEKLWDYNSQSKDGNWMTTGHFSNSMDPGVN \\
\hline UniRef90-Q17N78 & CPKSYVDSYPMSHSGPQTGHFTQMVNDRAWKMGCSMVHYK \\
\hline UniRef90_F40244 & \\
\hline & \\
\hline & QRNAQEVVTAW MNSAGHRQNULTPEFTHI GIGYDANG \\
\hline UniRef90-G4VLG2 & FREYHNYNYETDKCNGSCSNYRQMVWAKTKHI GCGL \\
\hline UniRet90-UPIOOO2E2
UniRef90-H2JWQ1 &  \\
\hline UniRef90 W WFE45 & VSEKQYYDHDSNTC \\
\hline iRef90_L5JL & \\
\hline UniRef90-V4Z: & ERQYFDWHAENPSQMVGHWTQVVRAEA \\
\hline UniRee90-K9XL89 &  \\
\hline  & Q \\
\hline UniRef90-E6 & QTEADFAHEGW MNSQGHRLIILGNFERLGVGVYIGN \\
\hline UniRef90-UPIo0038BF & APKDCAPHCPQLCRGPVCSHYTQMVWASSSRL \\
\hline UniRet90 & QAW MNSEGHRAN \\
\hline & MQA WMNSSGHRANILNPNYTH \\
\hline & MWSVVLHFTQVVWRDTTE \\
\hline UniRet90_MORCW & EGLQYRHGSAECAHNATCAHYTQLVWATSSQ \\
\hline ef90 UP10004 & KAVEGWMNSEDHRKNLNEDLI H GIGYEENG \\
\hline ef90_W4VJ72 & TPERDWMGDAMMRDNLLDCNGDETA \\
\hline UniRet90_UP100037595E2 & TVVRDMGDAMHRDNLLDC \\
\hline Unireft9-AOA
UniRef90 UPIO & S \\
\hline & \\
\hline UniRet90-Q9V & FREHQDANQSFUDRYHPHGHFTLLVSDRVNRVGCAGVRSN \\
\hline UniRet90-B2ZP3 & \\
\hline UniRet90_K6V359 & A \\
\hline UniRef90 B3MPU & NRDATSAD ENYQMIGHF \\
\hline UniRef90-B4N & SFIDSYHKGHFTMLVSDRAHRVGCAAVHSN \\
\hline UniRef90-A0AO23EQR5 & NATIGHFTQMVSDRTTKIGCGVVIVP \\
\hline & SP GEVADRMHQGWMDSSGHRENTLRPGYTHMGVGVGHHP \\
\hline UniRef90-G2P5D2 & PKSVMEGW MSSPGHKANILNCDFKEIGVGVAQPG \\
\hline iRef90_W5JK28 & WSEYKDDHFPSNYTGPPDGHFDQMASDRTSLI GCAMQY WL \\
\hline niRef90-B1HZL2 & G \\
\hline UniRef90_D30 & \\
\hline & D \\
\hline iRet90-Q96 & WDSHDKLGCAVVDCS \\
\hline 趐 & \\
\hline - & \\
\hline eef90-Q11-C11 & \\
\hline UniRet90-R7P340 & \\
\hline & EAVPGAVRGWMESGHANLLSAEF \\
\hline Ref9 & Ster \\
\hline iRet90_UPI0003B6F4C3 & \\
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\end{tabular}
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