


## QUERY UniRef90_A0A026W4G1 UniRef90_D6WJY1

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$R K$ GV F VT G N A N K L K E V R A L L S S S Gll QV S S Q S
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$D G A P G V R T A D W A E T P S G R D F M V A M T A T H P E P W T A R F V S V L$ NGAPGLYSARYAGGHGDSAANNDGMPSDQRRAFFMCALVL NGEPGVYSARYAGADNNQKLLNRGQGVKERTARFHCVLVY A GLPGPY DKWFDAD DGHEGLNNLLAAYPDKSAEAVCTFGY



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$G G E P G L Y S A R Y A G V D G D D A A N M A N V A D E N R T A K F V S C I V V M$
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E GRPGI Y S A RYA GEHKNDKVLF ELLKDVPE E ERKARF Y CA L


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DEAPGVVKSARFGDRKNMAKVLQLLKDVPKEKRTARF V CHEL

H GAPGVYYSARFADRKNNEK LLS LLEEGLPYKEKKARFVVVI


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$N G D P G I Y S A R W A G P D K D F A M A M R T V A T V$
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UniRef90 R5PGX4

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VLA WPD G E H|L|FE GVVEGRJVEREGAE GFGYDP|L|FVPD GC
 T LM F P D G E T V A R GECSSR I GA EA GENGFGY D P L F VP D G Y MRHADDPTPLI CQGEWHEI ALLKRHGDGGFGYDPVFYVPS Q

 ALVTPE GEEVVVEGRWKSIARDPAGQNGFGYDPIFVPRGG A AVLP DGKVL HTE E SMERLAADRPA GEGGF GYDP I LYYLP E W MRHADDPTPV DCQASWEGRDTEQQGDQGFGYDPVEWVEAT

 V K G T E

EFTF E GVVK E LT SKK GEK GF GY D P V F RP Q G Y $V L A W P D G H T E G F L G E A H G T W I W P R G E A G H G Y D P I F V P A G E$
 V R DAEDTGPLI AE GCWEWDGENRRGS GGFGYDPVFVVPGT


 VRSEDDPQPIVADAMWPEILTAPRGDGGFGYDPLFWLPDH







 ALIDE Y GTHFFEGAVNGEI TLLERSGDHGFGYDPVFRPEGC
 ALLHYPD GQEKIMEGRCDGIAAHKTAGSNGFGYDPIPYDPHY
 L CKGPGHE

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## V

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 VRHPNDPQQPI IA E G DWRQWQPESA GEHGF GYDP H FYYLP K H CLAWPD GTYRMVHGRCETVSFPAQGEHGHGYDPDFDP
 AAAFPDGRTEVVRGTMEGIIHEILGENGFGYDPIVY LPEY
 CLVVDEN GTSSYF E G K V VH G H L L E E D R G H Q G F G Y D P T MVYP D GRK K V A R GECYH LS EPM GDNGF GY DP L FVVPE GY


 $V L D M D N D R \ I K V Q G E \emptyset E G Y I R E N D G K G G F G Y D P L F W V P E Y$ CAGPGHE P LVQGRCKGKIVPARGPPVFGWDAVFEFED L R H A D D P A P L I A E GRWHR VLTTEERGA HGF GY D P L F LP D G E VF A A P K K P S L V VEA QWP RI GRDPK GENGFGY DP L F V V D G L S S GKA GTEPVVFS GATEGKIVPPRHSPNFGWDPIFEPAGF


 $V L V L P D G R E F V R E G V M E G T R Y E P C G D G G F G Y D P I F Q P D G Y$













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D GAPGVVYSARYAGHHGDDNANNEKLIREKRDRTGHYVVALL $K G L P G P Y D K W F L E A L G H E G L N K L V D P Y D D K T C E A V C T F G F$
$D G R P G V L S A R F S G E E G N R K L L E E M G G M P P Q G R G A A F V C A V$


 DGAPGVYSARYAGENASNADRMQNVEADDRGANYHCILALL N NRPGIYSARYNEPKKNGFPYAMECLNDSQDRSAHFACAL $N G E P G V Y S A R Y A G P G H D S E A N M N M D H E D N R K A H F S T V I A L$
$N G M P G V L S A R W S G R F G D D L L L D Q L G D V A D P H R G A Y F V A A A$
 NGEPGVKSARYAGEQNDDKLLLNMQGIDQRNARFRTVI SL GGAPGIVSARYADK DNNDKLLLDELAGVPRRTARADCV VMM RGMPGVLSARWAGRFGEGDQDRANADTPDERRGAEFVCAA DGAPGVYSARYAGDEHNAKLLHELEHVKNRKAQFRTVIIL

 GGAPGUV Y S A RWA GP DKDFGAAMQKVHDEMQQ GAAHFTA A L


N GGAPGVYSARFADAANNARLMDELRGVADRHAYYYCVLVL RGAPGVHSARYADAANNAHLVAQLRETDDRRAYYYCVLAL QGAPGVYSARYAGKENNQKLLTALQGQPNRNAQFRTAICLI NAMPGVLSARWSGTHGRDDANTQLSDTPDERRGAAFVSAC SGAPGVYSARYADAANNDKLLTVMAHVPEGDRTCRFVSVV

 DGRPGVYSARYA GDDKDDKANNRKVLKEMRSARFKCVLAV QGAP G V V Y S A RYA GEGK G D Q A NMANNAPD D D Q R S A R F H C V V L V Y




 GGNPGVYSARFAGEDNNVKLLQLMDGIPADERGAKFVSVII


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$N G M P G V L S A R W A G V H G D D D A N G Q L A D V P D E R R G A A F A C A V$
 G G A P GVVSARYA G E P S D D A A N N R K L L



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UniRef90 R 5 CDU 3 UniRef90-R5CDU3
UniRef90 A1HQF7 UniRef90-S9QQY9 UniRef90-J1QKC2 UniRef90-UPI000361598E UniRef90-UPIO004714B31 UniRef90-D4YTV2 UniRef90-B6JCH8 UniRef90-UPIO00477DA40 UniRef90-AOLVJ5 UniRef90-R9XBV2 UniRef90_UPIO0036370BF UniRef90-Q5QY51 UniRef90-F4A1Z6
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10
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 MKPEVVATRNAGKVAEITAALADLPVTLRSLRDF MQKVVLATGNAGKVAELSAMLAPFALDIVPQTAL MREIVFATNNQHKLDEIRKITGGRLRILSLADHE MTRERLEATNNQGKVKELKEAFKQAGVDLGVKTDA MATSSMRPTVYVVTKNTGKLVELQDLRPFGLEAKSNYDV MATSSAR LVEVTGNNNKLREVRQLLAAALPFPLVNEPL MTAHRLVLATRNQGKVTELHALLGEAGVDAELLGAP MSQNTLVLATGNAGKVAELRHMLSQADWLVRPQSEW MK【KDIIIASNNKGKIAEIKHVLTPGGNN CSMQEK MTKATIVLATRNAGKVAELARALRAYGLDVLGLDAF MKKEVIVASNNKDKI REIKEILKKFNIDALSMKDI LIVATGNPGKLKEMQAYLADLNWELLKPNNL mSRTLAPGKLVIATHNKGKLREDQALLAPYGLECLSAGEL MTEQAVLASKNAHKLEELRRVLAAQVPEELLPYDG MNRELLVATTNPKKGREMLQLLGSYCPELTLLTLN PALGKTVIVASGNKNKYNEVAELLAPLLKDRLVSYASL MMSKKIVEATHNEYKLKEVAEMLSPAFDVLDGGCTE KQKULATGNQGKVNEMANVLAEFGFEVVAQTABL MTNQRLVLASNNAGKI RELGELLAPLNLTVESQASL MQKVVLATGNAGKVRELADLLEGFGLNVVAQTEL VATHPGRREA Llather

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RVATGNPG
MID R VLATHNAGKVR
MARRILLVTGNRGKLE MWDDTILI ATHNKGKTKEAREVLREYGVEVEQAQAW

KLVFASNNKNKDAE AEGGQLGYVQDLNDF
MSRRFGGG KLVA
K VEA
RLL
Q A
MSLLSKLN ${ }_{\mathrm{R}}^{\mathrm{R}}$



PR KLILATGNPGKVREDQALLADDPDALMTLDAP SRKLQPGRLVAATHNQGKVRELKDLLEPLGFEPVSAGEL MKKVIFITSNDHKVSEARKIFEENNDEMEHRNV MNRIVLATSNRGKLAEMQPLLADIGLELVTQGEL KLIIASGNAGKVREYKALLAPLGFTEVLSLKD MKKLVLASNNLKKIKEDKELLSGLEFEVYSLNDD
 MRQQVLATRNAKK円TELQRGLLAAGLTDVELAGP
MKKTI WI ATSNAHKVEEFQTMLKDCDVLKDLDHTD MKPLVVATGNLGKLREMQAYLTDLGWELLKPAEL
RK RIVASHNAGKI
MN
MK
MS GR $\square$
$\qquad$ KMVF FATNANKLS VATHNPNKFREIKSLVPKHTELLSLSDNE KLVLVTRNTKKV K T TFIT KLLFATANKNKLREAAEILGDMVHVISPSENA KIVLATNNPGKAREFAALLANLAVEVVPQSAF KLLLASNNPKKAHELRTILANSGLELLTLADV MVNKLVLATQNPGK RELSALLAEMPWEVLPADAP MD T VLATNNKGKIR KIVVASHNKYKVD EVIVASHNKNKIKEFKSTLGNEYNIEDLNDFE KLVLATQNEHKVHERRQILAELGLEIVGASDF EWVFATRNAHKVKELDA:FSVLGMHVVGLDHF


UniRef90＿N9CTF6 UniRef90－UPIO0028942D1 UniRef90＿G8PK61 UniRef90＿UPI0002E93487 UniRef90＿B1VVV8 UniRef90＿L8M2Q2 UniRef90－R5CDU3 UniRef90＿A1HQF7 UniRef90＿S9QQY9
UniRef90－J1QKC2 UniRef90－J1QKC 2 UniR 90 －UPIOO0471598E UniRef90＿D4YTV2 UniRef90＿B6JCH8 UniRef90＿UPI000477DA40 UniRef90＿A0LVJ5 UniRef90＿R9XBV2 UniRef90＿UPIO0036370BF UniRef90＿Q5QY51
五 UniRef90＿F4A1Z6 UniRef90－LOJ0M0 UniRef90＿Q726F4 UniRef90＿B1INF2
UniRef90＿K8GRU9 UniRef90＿UPI0003B7B45F UniRef90＿UPI0003806B6E UniRef90＿S0EV49 UniRef90＿UPI0004647A27 UniRef90＿A7TE20 UniRef90－UPI0004779C42 UniRef90＿K9Y7G2
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UniRef90＿R5BXW9 UniRef90＿W6LYP2 UniRef90＿E0DGX8
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UniRef90_R5BXW9 UniRef90_R5BXW9
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 $N G A P G V R S A R Y A G E A H N D A H N N A K V P Q A E R T A K F N T T I V V$ EGQPGI YSARWAGPSKDFMLLQERDATEPAQRKAHFVSAL
 $G G \square P G A Y \square K W Y V K A M S L P D D V A M L D A F P S K A A R A B V T T V V$ GGAPGDFSARWAGRHGDDAANLALLDDVGPEHRAAHFACAA NGAPGVYSARYADSDNDNKLLKALEGVEQRQASFHCVLVY GGRPGIVSARFADEDNRRKLLDMMRDVVWDKRKAFFYCCV
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 DGAPGVYSARYAGQGRDSNDNMDKKVKSDRSAQFRTVDAL NGAPGI YSARYAETDDQER DARVLRELGDTPDRAAKFVVACV





 D GAPGVHTADWAETPDGRDFEMAMTRVWPEPRRAAFRCTL
 NKEPGVYSARYMGEDKNKSLLDRRLADAKGSERSARFVCAD NGFPGPYSSSYAYK T $\square G \square P G V L R D L E G A A D R G A C F K A A V A Y$ GGLPGVWSARFSDKNNAKLLDHELAMVFDQKARSAQFHSTL QGEPGVYSARYA GEQKNADDNMKLENKTNRSAQFKTVIAL


N GA P G V L S A R Y A D A N N N A C L L L G GEP G V Y S S R Y L D E D N D NGRPGVRTARFAGD DNKRHLLSVMDGVTERAARFRTVA



NGAP GVVYSAARYA GE H GN D KLL L K E M K N A D S K D R S A R F V NGEPGVYSARYA GEEKSDDANDEKVEKNADDRSAAFVVCVM $\begin{array}{ll}G G Q P G V Y S A R F A D A A N N A K L L & H E \\ N G M P G & L \\ N\end{array}$ DKKPGVVSARFLDTSYDIKNQY II DQVQGKVRTARYVCVI GGAPGVVYSARYGDSERDERLLDREGDNQNRQAQFACAVALC





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NK E P G I Y Y S A R Y L L G E N K N A N L I

E GKP G I R S A R Y A D K E N I T K KL L E A L M G E T N R KA H F Y C S M V F






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## UniRef90 F4BN14

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,
,

D GAPG|V|FSARYAGEFNNAK|LL|HE|L|TGVAKGDRTAQFHCT|L|


 A GAPGVYSARYAASDADR DERLLQELLKGIDDRAAHFSAA L A GMPGVRSARWSDAANNALLLAAQLDDDVDEERRGAAFVCAA
 E GSPGVYSARWAGPSKDFMAAMRKV E ERDLEDRSAWF T S A L GGAPGVHSARYADSDGARILAELKAAESEPGRQARFTAALL
 NDMPGVLSARWCGRHGDDAANTQLDKDVPAERRGAAFVSVC NGAPCGVYSSSRYA DEANNRRKLLAAALEGVVPMARRMARFRCCVI




 D GAPGI YSARYAGAAAS DRAEMASVSDERRGAKFYAALVV



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 $D G A P G V Y S A R R$$D G E P G V Y S A R Y A$
DGFPGVHSARFMKKEKMQFLLQMLETKQERVARFVCVAAY DGKPGVYSARFAGEHGNDKKNNEYKGYEDRKAKFVVCAIT L

 NGEPGI RSARYGAVNGEHKVLSELKKDVKNRKABFACCCMV
 GGAPGLYSARWAGPDRDYQRAFDRDAAEMEGAAAAFVCVL K GAPGIHSARYAGPHADDQANCAKVPQGHRQARFQCLLVY



 NGKPGVMSKRFTNEKNNEKLLLKSLLMGLTLDQRTAKFVVVI
 DGAPGVYSARYADTANNAKLVSELAARGEENAAASYRCAL RGAPGVYSARYADAANNAHLVDQLRDAADRRAYYCCVLAL
 RGMPGILSARWSGAHGDDEANNRDTPDERRGAHYVSVCVL



F

AGQPGVYSARYAGDHDDEANI DKTKLSGEKNRTAHFNSVL
E GNP GI Y S A R F S D K G D D D K L V N E M DK K GF N Q S R A H Y VA A I D GDPGVVHSARYADAANNAKLLKEMQNKANRDAYFESVVIVY
 NGMPGVLSARWSGGHGDDKANNQMGDVPDERRGAHFVAQV $N G M P G G V Y S A R F S D E K N N A D L I D E K L R G G V E D R R A A H Y D C V V A Q V A$ Q NFPGPYTNFVKNTDGLKGILKLLEDLKDRSAYFMTVLTF K GQPGVYSARYAGTHGNEKLLDELSGVPADKRDAQFNCHVL NGQPGVHSARYAGDHNNDKLLKEMQNKTDRTAYFESV DKAPGIMYSARFMGTDKNQA L DADKDKTGDERSAREACA I NGMPGVLSSRWQDGRNDDLLLWQMRDVPDVHRTA HF VCS I $K G A P G V R S A R Y A D E E N N E L L L A N M K M Q V R R N C R F F C A L A V$
 D GEPGVLSSARYADAANNRKLLDEKLKGVVYRDAAFVCDMAC





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UniRef90-D2RFQ4
UniRef90-W2BTZ4
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UniRef90_DOJA30
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LRFVTTNDGKWLEVSSLTSAYG\|SVERTNAK KVYFVTSNEGKFREVREIGKKYGIEI DWI RRK MTSKVLLATHNDKKVVELRRVEEAGLDVEVSLH
RRDDGKRLIVATHNNGKLREFYFLLGGLSTELVSAGDD MPAPGGADMLRYVTTNEGKVREALDYLDD
$\qquad$ ELVLGTHNKKKGAEMAKLLA
RLVLGSRNKKKGKEMVALLGB
MK K RLLVATTNRHKLDEYRALESKEKDEVISQKNLL VIMANNPNKVREKRUYEKFFTLKEKNLTC KLIVVTSNVHKAGEVAAFFS G AEVEHVSL KITFVTGNRHKVEEAVAVCAPRG:TVVQNDC MAPK VIAT GNKNKLAEVKALLGDT
R FLATGNPGKRAEFQALLSGLQLELHPLDPD
MK K
MMSP YICSNQNKINETNSFFEDFQ FKSPVD DS
SKT:VIA S
MAVRLLVASRNAKKKEE

A A ARQDR
的
KLVLATSNKGKVREIKALCKEYEVVSEFPELT
MK A $T \Pi Y$ YA KRIIVASGNKG

QLIIATGNPHKVEEFEGLLEGLGFDVVSAKMP
MMMKRAVLATGNEGKRAELEAILSRPGMTVVTSSAL VMMLITNNPHKVAEISMIFSEGFECKPQQSFF MKKLVIASNNRNKRREAAAYLEAQGFTVVPSESV URFVTKNPHKAREVETLLGD LG VSI VDVHL RLVLATRNAGKLRELRELLRGQDPGLDVDGAP TILATGNAGKAAEYAHLLR WSVAPLPDNV LASNNAKKLVELRRTFEAAGTDVDIVGLA P LRSSRLLVASRNAKLAELRRVLDAGLSALTLSL MKKLVLATSNKGKVREI KVLCKEYVPYTDIISDAF ADRRLVLATRNAHKVTELRELAEAGLELVGDEF
 KIVIASSHGYKIRETKTFLKRLGDFDIFSPDY MEKVIIASNNMNKIREFSEMLGKDVRVLSLCDDS ARTVVVATGNPHKVIEIEAGLSRFVALGELGDFP LVLATHNKGKLRELRELLRGQVPGVDVDGAP


MSRR
GERKVVTGNSHKFQEFQVIAGDK
MKGEIKLVTGNNYKFMEFRD LAKDKISLISMVNY RLVLASNNAKKLKELGTLLAPAGVELVTQGSL VVI ATRNKGKVREFAHYFARFGKEVRSLDDF
 KLIIATHNENKVNEFRKLLNEKVTVLSLNDFE MDKKIIVATNNKNKAREYQAILKDWTVLLDLPEYN MKTVVIATNNAHKVSEDRSALDFEGWEFRTLAEA








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UniRef90 L7JTV2 UniRef90 - 13 TDZ2 UniRef90-Q8KFJ6 UniRef90 E6X218 UniRef90-UPI000467AC6A UniRef90-U1NGQ7 UniRef90-H9KJU6 UniRef90 UPI0003797B96 UniRef90-F2KNA4 UniRef90-Q018Q0
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UniRef90
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UniRef90_L8DUQ9
$\qquad$ RIVVATQNNGKTVEFRHAFAKLGDQVQSMADY
 ASRNRGKVRELASLLASGPWS LQSLDDV RTYFATTNLKKLKEIRSLFEA B DIVHMND TLLIATRNAHKVEEI RAILTDRFRYLTLKDFS RLILATSNADKI REIKEIYSPLLDLEILAWDF LVTMTLYAATSNPGKLAEFSTSASSAGIDVLLQSMP RLGLATSNADKLREMKEVYAPLMQDSELLEPF K YFVTSSLSKFEEMRTLL TDVLATGNKDKVRELKEALDASG1GHVRSLHDDCD QWVLATGNRGKLREFREALGKGGMDEVLDSVP AGSVSGDTLRYVTTNSGKVHEAQSYLDSDVVESLSYDYT
MHTVHDASTNRHKDKEFTRLFGSSFTLLAPHHAS
ELTFITSNEGKFREAEQ\|AAKYG SLKWKKMS
KLTMASNPRKVAEDEAMLGPGPLKVVRQPEL

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\begin{aligned}
& \text { R LLLSTRNDHK } \square R E F T R \square A G G R \square A V D P L P A E V
\end{aligned}
$$

DIFASNNYKFDEMESDKPHQTLLKDFQD KI RFLSANELKKAEVRTILEPVGVEVVPDARR Ki VLASANKGKI EEFKKLLPNDEVVSDTLGKM


KLRFITKNDCKTEEVNKLLDGIGVEVVAAKH KI TYGTSNQAKIAQVKDYLKNI DVEILSLKDI MPQSADNR\IVLATANRDKVKELRPLLEHISPLFTVHAEV MKKILIGTHNNGKFKEIAYYL PKIYKKISPLKK MKRLLLASNNKKKDKEMKDLLKEL K1 FYITGNEGKFLEVKNLMPS mDKDLKHKKITFWT TNPHKLKEMRAILNDDLIKIDKAYGW MUKDLKKKKITLITSHQGKADQVSKMLS YMVSHKSL K LVAS GNKNKVKKEKKEFETGYDVCALSSLQPF TL FVV VTSNPGKLRDFAAAGEPLPGLKEIPA
KiVLATSNSDKVREDKDFLKDYE
T IILATANPDKVRELRPLLEGDDPCVISLAEV SGNAHKVDEVQRILAPAGVDIVPVSR LTDAS GNPKKVSEI FEMLDVLSLEVKKQEYL MSENRIVFATGNAGKMKEIRLILADLGMEILSMKEA KI LLGTKNDHKIIEMTRIIKEI FSLKDFDDRD TI VLATNNRDKVREDKPLLEHI AP HISVNSLA
 QI I L S S N NPKKI QELLQA L L E GMEVYYRTFLENI

MS PRA ELLVGTWNQGKGKEMREACVADVGDQ



## K IVTTGNEFK LKE LDHYMAGTG VVFES REST

MTVDWLIASNNVGKSRDLQACLAYAGVTAQPYFND WLI ASNNKLKTLDLQKDLAFYGLKVEPYDNV RIVIASSNPGKLKEIADIL PTGLEAIPQSTL


MVKELYYVTGNQGKFEEVDDFFKQHTNFQVKHCAL MSKMPVITGNQHK AKEADYLSRQLGISLEYQKV


PWDESGSTYRANAA $\square$ KAEAVCRGTGLPALADDSGDELEALL PMVEDQASDER VVDHKLNQVVPCDGEAVIVDDTAVAFEGL


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D P E D E P T F
$D V$ G A T F
$D$ DE ETET TLEG

K V E Lid


GLE E T G NS F E D N A A A


FPAETTTSYVDNATAK ARFGA S QLGGVPVIA DDS GDEDPA L
 DVEETGKTF DENALDKARNAS LH SNLPALADDSGLEV D Y L L


 $D$ IE E TQ S LD QVVVT DKVKK AFA A A QI K Q P L L L D D G G I F F E A Y

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UniRef90_Q7MR19 UniRef90_D0JA80 UniRef90_F1A638 UniRef90_B3L098
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UniRef90 UPI00047 UniRef90_U3GT39 UniRef90_L7JTV2 UniRef90-I3TDZ2
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UniRef90_L8DUQ9
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 NGKPGUYSSRYSKTKNSMDNMMKSNMDKDTS RKAEELFSVF $K G L P G P Y V K W F L D K L Q P E G L Y Q L L E G W T D K S G Y A L C N F A F$

 GNLPGVVSARYADQENDEKML KNLSNE ENRKAFFKTVIMF DGAPGIYSSARYGPT DAERDARVLQQEDGSTRSRRARFVAVV GGFPGVRSARWLGDDATECARVADLAEDAR GAREVVCLALL

 NGQP GVVRSARFA DD L GF E PGLGTTKDERNNRCRTARFVVCTL

 RGFPGPYSSFVYRTIGDQGVLKLLEGTSDRRACFKSVTTV


 E GK P G V L S A R Y A D E E N RY K L I N E L


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 | $N G E P G V Y S$ |
| :--- | :--- |
| $P N R G L$ |


 GPY IK WF ME G DGLE GLY KLVE P Y QNK MA S A I C I A N $\square$
 SDELGGVTTKR DLHKD DNQTLL S WLLK DVVEDQRQAKMIAYL GGSPGVYSARYAGPDNIDKLLHQLEDVQDRSARFHCAIAL




 GD LP GPY DK WFVE HAGEEACCRMMLDGE D
Unepopleg

|  |  |
| :---: | :---: |
| UniRef90＿R5LGE6 | H D T M A S $\quad$ S A E EK N G｜I S P R K $\square$ ALLS K L N E F L K |
| UniRef90－H5S9F6 | GKTFAELTRAEKCAVSHRGQAFRQLRDFLQQHLS |
| UniRef90－Q7MR19 | NRTLGEMEESEKNAI SHRAKALKLARKLLQSLLT |
| UniRef90－D0JA80 |  |
| UniRef90－F1A638 |  |
| UniRef90＿B3L098 | NKTFSEMSLLDEKKESSPRFKAFVQMKDFLKEL |
| UniRef90＿Q3KL90 |  |
| UniRef90＿UPI000377C093 | GKTVA QLTK D EKQQI GHRG |
| UniRef90－S5DLX3 | $T$ L A ELSFEEK TEEI SHRK $\square$ A A K K M C |
| UniRef90＿C7M108 | DRTFAELG E WKDALSHRRRALVGGADWARAFA |
| UniRef90－W4YFH2 | DQTYAEMPNEEKNKI SHRGKALLKSLAEYF |
| UniRef90－T1BVM4 | T V T M A EMPRAQK DRLSHRGRAARAL $\square$ R |
| UniRef90＿Q8SS24 | S MCLLGDMPVDEKNRI SHRR】ASKKL AD Y M A SVVG |
| UniRef90－B9XNG3 | QQSFAELGEVTKNQLSHRAKALAKLRQRLDS MSA |
| UniRef90＿C3XL39 | NKTLAELSSNEKNAI SHRTQALTHASY L L R VLS |
| UniRef90＿G8NYZ5 | $N L T$ A ELS REQKWQI SHRGNAFRDLLAQLQE |
| UniRef90＿UPI00047BD3C8 | TQTLA ELS GEEKNSI SHRK】ALDENAHY $\square$ L L A L |
| UniRef90＿U3GT39 | PRTSAELSAEEKDALSHRGK |
| UniRef90＿L7JTV2 | NKTFSEMTMDEKNQVSHRGMACKAMVEY L |
| UniRef90－I3TDZ2 | EKT F GEMSLEEKNRYSHRAKALSKLKKMME |
| UniRef90＿Q8KFJ6 | D RTFA QLGUDEKNADSHRGRAVVAAAKR\GE |
| UniRef90－E6X218 | D R T LGELDDESVKA GUS HRAKAI TLLARPVLE |
| UniRef90＿UPI000467AC6A | TATFAEMAPEEKDRHSHRAGAVARLL L T S L S A |
| UniRef90＿U1NGQ7 | MTLAERDAADKND\SHRGRALKSFAEWFQT |
| UniRef90－H9KJU6 | NLT A A Q M S Q EKNRIS HRAQAL N L L M K L R |
| UniRef90＿UPI0003797B96 | TATFAQMTPAEKDQYSHRARAVAQLLR |
| UniRef90＿F2KNA4 | RT F A EMGEEKNAVSHRRRALEG |
| UniRef90＿Q018Q0 | RCSYGELT T A Q L S RLGSRGKA ARDMAPRLR |
| UniRef90＿V8C7A0 | DTTLAEVAPEVKNTLSHRRKALEQ |
| UniRef90＿UPI0003196066 | A LTAA ELG P ERKNAI S H |
| UniRef90－E0S6S0 | $N \mathrm{GV} \mathrm{L}$ K N MP T DEKNRI SHRG $\square$ A S R S LAA Y M A S |
| UniRef90＿V5WKZ1 | ECTVA D I S A EEKRLLSSHRGKAARAIA A ML |
| UniRef90＿G3D519 | A M T Y G M T P D Q |
| UniRef90－Q7RNT9 | DK T F GEMSFEDKK NYSPRFKAFYKLKVY |
| UniRef90＿E4X333 | GHT FAEMDKNVKNG\SHRSKALEKVINYF |
| UniRef90＿D3F313 | GRTMAELSDAEKDAI SHRGRAVRMLLHWLA A |
| UniRef90－B9YCE2 | GKTLAEASEEEKNQVSHRGQAMRLLLMEYL |
| UniRef90－A9NGK2 | QETLGELGSTYKDEHSHRRHALNNFLE |
| UniRef90＿U3U0N7 | TQTEAEMG E L K NE $\square$ S M R R L A L D R F A T F L |
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| UniRef90 R9ABT4 |  |
| UniRef90－N1VMB1 |  |
| UniRef90＿UPI0002D59C22 | NLT FSEMG DKKNEI SMRKLAFDKFKEFLQK |
| UniRef90＿R6C088 | DKTMNELTEEE L G V T HREKALKQ L L N Y L K E |
| UniRef90＿A1BE94 | GKTYAEMSTDEKNTLSHRSLAVQKAITELLRND |
| UniRef90＿UPI0003B6BA78 | K $\square$ T F G Q M T K $\square$ K K M RMD HR F L A Y K K L L K K V K |
| UniRef90＿G7LXR5 | NKTFGELSPEEKNE\SHRG |
| UniRef90＿D6GWK6 | N $\square P \mathrm{~F}$ A DMS LD R K N RLS HRS $\square$ AV |
| UniRef90＿R2PRW1 | GKT LA QLP L E ERNNYSPRVRAL R E MVD Q I L S M G A |
| UniRef90－K2AYI6 | S K T FWEMTEYEKNQDS MRKLAL E D F ERNLR |
| UniRef90－K2DV32 |  |
| UniRef90－K0AXC9 | DKTFGELDS K I K |
| UniRef90－C8PH94 |  |
| UniRef90＿UPI00047EC90D | GKTMAELDASTKLAFSHRGRALKKLLTELL |
| UniRef90＿B9CZL8 | T Q T L GELD G D T KLK\SHRSK GLELLIVYVLKS L |
| UniRef90－E3CA72 | PRSMAELTPAEKNQISHRGRALRAFMEQFA |
| UniRef90－A4SDF6 | GKTYGRMS GTEKNSLSHRALDATKKA |
| UniRef90＿K5YJN6 | A QTFAEMGKA KDEI SMRRKALDQFAAYLNS |
| UniRef90－A2BVL0 | N C V Y G E LS H S QLIK L G S R G K A A K N $\square$ S P F L K K |
| UniRef90 D3A8Z4 |  |
| UniRef90－R6TJ09 | R K P L G L A S E EK DLVSHRGKALRQLFD D M K |
| UniRef90－B3ELU4 | QATFAQMSTEEKN RLSHRSKAVKKAVEKLR |
| UniRef90－B4U8R9 | NT T LA N $\square$ E NKDKI S H R R Q A L E A V F F M L K K M |
| UniRef90＿R5J223 |  |
| UniRef90－E7ACD9 | T L S D R $\quad$ QEKNAI SHRFLLALQKARHFLTS L |
| UniRef90－Q30UH9 | D K T L G L D D D TK K NI S HRAKAL S L A K I I L Q T L |
| UniRef90－R2SMF2 | GKTLA QLP T S QRNALSSPRVQALQELIPPQIKEVS |
| UniRef90－H3F8X0 |  |
| UniRef90＿K2CUW0 | T K T F SELGVDDGK Q WY D HRSKA】RKFARYYSK |
| UniRef90－F7T768 |  |
| UniRef90－UPI0002193D96 | D K T F A Q LT A N EK |
| UniRef90－K1SXG9 |  |
| UniRef90－E3YPJ3 | GLTMAEI P A EKKNEI SHRANAI K QLEKDLT EVV |
| UniRef90－U6B6M4 | YLTFGEMTEEEKNSLSHRSRAFKLFINN |
| UniRef90＿R6WG13 | K K T F A E A S FVEKQSVVSHRLLQAVS DL |
| UniRef90－B1MZ40 |  |
| UniRef90＿V7BHT7 | DQTYA QMPKEEKNK\SHRSKSLLALVKSHFAE |
| UniRef90－R9AM39 | NKTYAELGS EK LEISSMRKHAFDQFKQF\ES L |
| UniRef90＿UPI0004731621 | RLLT F A EMNND】K D S CSHRGKALKK】IP DL |
| UniRef90＿E9KZE1 | R RTFAEMMDEEKNMDSHRFRALS LVRDFLK |
| UniRef90－I9KXN9 |  |
| UniRef90＿UPI0002492FAE | GKTLAELPDSQRIELLTHRGRAAKKLVE |
| UniRef90－X1DY14 |  |
| UniRef90－IOIH21 | GRTAAELEPREKDALSHRGAAARSLLGRLN |
| UniRef90＿UPI00020D9D71 | GLTLLAEMPMAERVHYSHRGRAAKQLLEKI |
| UniRef90＿S4XUA6 | ARTLGQMHREERLRCSARTEALRAFR |
| UniRef90－C2MB13 | DKTFAMMSPQEKNADSHRTRAVDQLRTY |
| UniRef90＿I6ZI36 | K A S LK S M S IDEKNCI SHRRDA TENLT D Y MVS $\square$ G |
| UniRef90＿UPI000289DC2B | GKSMAELLSLDEKNRISHRAEALRKLLAELA |
| UniRef90＿UPI00029A2635 | DKTLA QLT P E F S Q Y S FRQQALQKFI T WY |
| UniRef90－R4PXI7 UniRef90＿L8DUQ9 | D $\square$ T RAEMSQEENERYA QLMKPFSQVRKFVESLQA |

## UniRef90_W9J4A6

 UniRet90_UPIO003684244 UniRef90-A6GIL7 UniRef90-C7XWW2 UniRef90_UPIO00308E3C5 UniRef90-D5GXU7 UniRef90-U6HAB3 UniRef90-A8PLB4 UniRef90-E3NX51 UniRef90-S6EWG4 UniRef90-R5IXT6 UniRef90_Q9L4V4 UniRef90-R7F184 UniRef90-J9FT47 UniRef90_R5YT24 UniRet90_Q9KDQ1 UniRet90_RTKBQ7 UniRet90-XOYAV6 UniRef90_ROFB22 UniRef90-W7K8D4 UniRef90-R6NCG7 UniRef90-UPIO0020D9B12 UniRef90 K8ER74 UniRef90-W4TK88 UniRef90-L7UB85 UniRet90_R7MEH4 UniRef90_13ERN5 UniRef90-GOUFR3 UniRef90-UPI0002490E76 UniRef90_K7SQ76 UniRef90-R5H2P5 UniRef90-D1ARV9 UniRet90_R6EL12 UniRef90-T1APA8 UniRef90-Q4YU57 UniRef90-A9G199 UniRef90-R7KBP3 UniRef90-RGGIR UniRef90-17AED4 UniRef90_UPI00021928A6 UniRef90 T5J1L8 UniRef90-R6BTN5 UniRef90-S0J8R6 UniRef90_J6DT57 UniRef90-xow1U3 UniRef90-A4RZK3 UniRef90_R5H1G7 UniRef90_K4M6B6 UniRef90_N1JTM3 UniRef90-M7AMN2 UniRef90_Q4XX99

MSSK LSQGT VLASNNKGKDAEFEKDFAE DPVEVIPQGRL MRKI TYLTTNSDKVREAQRFFGEKLGIDIEMMNF
 K LFATTNPAKVKKYKKALEEKGLELDTLKDL CAATGNAKKREDRRILEPRGYQVKSQKEL MNEIVFVTHNKGKIAEAQKVLKNDNLEIFEH
MHKLVIATWNKEKRDELSRYFQDVSIQSLRGDDP MTEDELIFVSNNYVKLKEVQEK LATLDVNVISKNYR
AAVVLPRPVTFVTGNAKKDEEVKADIGDSDPFKS K L VTGNMNKKEEFLLKMMDEELNVEFV
MKEVLFATTNPAKDKSYEGKDKEKGIIKDLNDNI
QLVLASNNTVKTQEIASMFAEYQVDVILAEQV
MNRALLVTGNRHKADEV\RLLAGLDT TWQKL LTYITGNYGKYVSVKEKFENAGIT DDYFKC ITTVTGSARKRQEINEYDDNRTQYQFDEQDL MDERFVIASNNTHTDEMVSYLSVLGLKGANYRQL VIASNNRAKTNELINCFAYEGUTAISYLDL MMMFTMMYTGNPAKRDSRNSLSGTGRDIGLDM
 ETYGVTGNENKRNEFSQMMND EDKVQFTD MKTVTFVTGNGWRHDEAKRLLSGLHVERITLAKG


MNKVRLVTSNDNKLKEFRLSGGDDVDQHGA KLLYGTTNRAKLDAMKKALAGGRLELGGLGDLL


MQKK LIYGTGNAGK LDLMRHY $\square$ STLQE TRLLGDKD

E $\square \mathrm{Y} \square \mathrm{LV}$ T GNETKR $\square \mathrm{EFSKMMNN} \mathrm{\quad E} \mathrm{\square KVQFVD} \mathrm{\square}$

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## UniRef90_W9J4A6

 UniRef90_UPI0003684244 UniRef90-A6GIL7 UniRef90_C7XWW2 UniRef90_UPIO00308E3C5 UniRef90-D5GXU7 UniRef90_U6HAB3 UniRef90-A8PLB4UniRef90 UniRef90-E3NX51 UniRef90-S6EWG4 UniRef90-R5IXT6 UniRef90-Q9L4V4 UniRef90-R7FI84 UniRef90-J9FT47 UniRef90_R5YT24 UniRef90_Q9KDQ1 UniRef90_R7KBQ7 UniRef90-XOYAV6 UniRef90_ROFB22 UniRef90-W7K8D4 UniRef90-R6NCG7 UniRef90_UPI00020D9B12 UniRef90 K8ER74 UniRef90-W4TK88 UniRef90_L7UB85 UniRef90-I3ERN5 UniRef90_GOUFR3 UniRef90-UPI0002490E76 UniRef90-K7SQ76 UniRef90-R5H2P5 UniRef90-D1ARV9 UniRef90-R6EL12 UniRef90_T1APA8 UniRef90_Q4YU57 UniRef90_A9GI99 UniRef90-R7KBP3 UniRef90-R6GIR5
UniRef90_17AED4 UniRef90_I7AED4
UniRef90_UPI00021928A6 UniRef90 T5J1L8 UniRef90-R6BTN5 UniRef90_S0J8R6 UniRef90_J6DT57 UniRef90-X0W1U3 UniRef90-A4RZK3 UniRef90 K4M6B6 UniRef90_N1JTM3 UniRef90-M7AMN2 UniRef90_Q4XX99


DLPELQGEPEDTSKEKARDAALQVNGPVLVEDTCLCFNAL NLEEIQAQUVE』NEHKVKTAYNILKKYVITTDDGLETSKL



$D$ LVE DQSNDVEDNEGKAKAAYE LKKK I ITDDTGDYMDCF D SEKLEEIATARVLDAFRQLETPCFIENTGMYLESS DVVENGRNAIENALIKARSYAKEIDDPVFAMDDNLYIEND RVEEDGNTPLENARLKAMVYYEAFQUPVFSCDSGLYFDNV D $\|$ KE $\square Q G S K E E \| I M D K \square Q K V S H L V T E \square T F D D D T S U H M S G L$ D $\square K E V K S$ NS $\quad$ KEVA $\square Y K S \square E A G E G A M D D T G A Y F A A F$ K I E E DGATPLENAQRKALAYYEAFGIPVFSCDSGLYFDEV
 E E P DE DDLEAMVRHKARSAYKK LLAPCIVEHAGLILDKD EDATTFEGNAKLKALHYARFAGCWTLADDSGLEVDAL

E I E ECGKDPLENARQKALAYYRDCGQPVFSQDSGLY IVGL DI QEVNHPSVDVV AMYKS DEAGAMRI IDEDALYi EGE EVEEIGSSPLDNARAKAETYYRFFASPVFACDSGLYIEGL


[^1]|  |  |
| :---: | :---: |
| UniRef90_W9J4A6 |  |
| UniRef90_UPIO003684244 | GGWPGPMVKQLVTAVGARGLTHLADLTTGRACS |
| UniRef90-A6GIL7 | DGAPGVYSARFADADNNAKLVAELQARGLEESPAGYVCMLL |
| UniRef90_C7XWW2 | P AKY GVQTA RELEVPDGQLNRYLIQLVNGKSRKFTMK |
| UniRef90-UPI000308E3C5 | NGFPGPFDKFINQCFSAEDYMNLMKG |
| UniRef90-D5GXU7 |  |
| UniRef90-U6HAB3 | K GLP GPY |
| UniRef90-A8PLB4 |  |
| UniRef90-D6FRW9 | GGMPGVLSARWS GRYGDDALLA QLCDVPDERRGAAFVSAC |
| UniRef90_E3NX51 | GGAPGIYSARYAGEHGDDAAN |
| UniRef90_S6EWG4 | G GLP GPYSAYFDKQ |
| UniRef90-R5IXT6 |  |
| UniRef90_Q9L4V4 | EGRPGVYSARYA GEPKSDAANN |
| UniRef90-R7FI84 | E EQPGTHVRRDNGKET DEEMDEYYTNLVKKHGKKDTAKWV |
| UniRef90-J9FT47 | NGAPGVYSARYAGGHGDDAANN |
| UniRef90-R5YT24 | NGFPKAFVNFSLETVGDNGILKLMEGKDNRACRFDECLSY |
| UniRef90-Q9KDQ1 | D GFPNVRTARFMEGTDDEKVLQRLGDRPMSERTAVFQSAV |
| UniRef90-R7KBQ7 |  |
| UniRef90-X0YAV6 | GVYSAYVFNTIGCKGILRLMEGIR |
| UniRef90_R0FB22 | G LNNLLMAYEDKSAYALCAFSF |
| UniRef90-W7K8D4 | NNFPGPYDK WMQKALGSKG】AD |
| UniRef90-R6NCG7 | EKQPGTHVRRDNGKYLT D D EMDEYYTKLVKEYTAKWVYGM |
| UniRef90-UPI00020D9 | PDQFGVTTSRDFKTENENAYIAQLY D NPA |
| UniRef90-K8ER74 | NGFPGPYCKPMLET $\mathrm{C}_{\text {GVVEGLANYDEEKGERNAMATCVAFK }}$ |
| UniRef90-W4TK88 | WS GPHANDERNLQLLLDQTFDLPDERRYGRFVCAM |
| UniRef90-L7UB85 | ESFSGARFKQELQT RGARDFFAEHGGRRGRTRVAVA Y |
| UniRef90-R7MEH4 | PDYPGAFVKRSGVSSNVSKLLETMKDVTDRSCYFLCLT F F |
| UniRef90-I3ERN5 | CGFPGPYVKSVLRNGELSKIVNNLAPLGEDKCTAECLYGY |
| UniRef90-G0UFR3 | PDHFGVTTMREFKAHDEDNQYVLQQLPAGASREAYLLADF |
| UniRef90-UPI0002490E76 | PGKLGDQTARQLKDYSNEEHQLNQRILDQKSRAVTMTTTL |
| UniRef90-K7SQ76 | GGEGASDRDNLLK LVKS LKEKNFQTSPAHYTAA |
| UniRef90-R5H2P5 | E EQPGVHVRNI NGRRSDEEMTEYYRGLARRYARYLNAVC |
| UniRef90-D1ARV9 | DEQPGVHVRRVNGDYMSDNEMDEYYKCKARYRNAIC |
| UniRef90-R6EL12 | PEAVGVYLTDEQMLEHYDGLVRRYGRDTAKYRNA |
| UniRef90-T1APA8 | GPYSSYVNTTIGYEGLQRLVAGKDS S A Y F KTVVS |
| UniRef90-Q4YU57 | NGFPGPY |
| UniRef90-A9GI99 | EAFAGAQVKQLLQELGPAAFTARFGGLRGVTR |
| UniRef90-R7KBP3 | DKQPGMYVRRVNGK RLLT DEEMDD Y Y S NLA HTY S A RWVYG |
| UniRef90-R6GIR5 | PDQPGVHVRNVNGKCYYS GLVKAYGNLVARYRNADCFVMD |
| UniRef90-17AED4 |  |
| UniRef90-UPIO0021928A6 | PERFGLTTSRELKALGLKS I HEEHLYNSDVTRSAYLEALLF |
| UniRef90-T5J1L8 | E IT DIRYRLSELSQLADSNDCKLEW |
| UniRef90-R6BTN5 | QPQPGIYVRRVNGRELNDEEMDWHHGGQLTARYKNAICLI |
| UniRef90_S0J8R6 |  |
| UniRef90-J6DT57 | A GFPGGLTQPMWDHLQPQGFDDR\GCGGERATARAVVGF |
| UniRef90-X0W1U3 | D GNPGVHSARYDGAANNAKLIRELAGVPPRNRTARFRCAD |
| UniRef90-A4RZK3 | GPYVKPMDDALGPDGLWDLMSRHCDRRAEDKCV |
| UniRef90-R5H1G7 | GVHVRRVNGVNLT DEQMRKYYKK $\square$ A AEFGGRCVAQY |
| UniRef90-K4M6B6 | D VGVNVKWLLDNI |
| UniRef90-N1JTM3 | GLQPGAKVRDDEM\D Y Y K K LLE G L G GQA VARYRNA |
| UniRef90-M7AMN2 | WLKKDPGSSGLYKLLA GFEDKSAYALCCTFAF |
| UniRef90_Q4XX99 | NSFPGPY $\square K$ WMKALGCEG I AEAVLKLGNTKCQVVCVYSA |

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CAGP GEKV ${ }^{130}$ F QGRCP 140 150
VDENGTVHTFTEHGEPGT\ASTPFGTWSP $\square$ WD VF $\square P P G A$ AMRFDRGNCLCDEGTCREVRDARRGEGGFGYDPHFWIEDG
 T WPGQESNDIVSAGRISGGAKYPHGSSNYGYDALFVVPEL TCGVEGEPVEVLQGVTRGRIVAPRGSGGFGWD
AYTDGLQ TELFEGLCQVLPEDFSSHPTDPDTADFKPDGS SGSGEVVVRGEWPGTAREPRGDGGFGYDPVFVPYGD

Y G MVIY N G K E VK E Y T WS K S D F Y F VD K T C Y P LD S $\square$ S $\square V P E F$
YDGKE DHQFMGEHEGNDANKDAGNDTNKKWSDYDYKPYGY VILIFPDGDMRTAVGKDEGWDTYGPVKDGQGYGGIFILCDE CLAYYDGDNFVFESSQEGTYSEYQGTNSDKYTKVFIPEGY CLPE GSVELLSGTCSSSDPQSMRGSQGFGFDPVFIPQGD SHGPGAE PLTFLGKTP

VVSRDDGK VIEPRGNNKFGWDNDFQPESL

 AFVDPDGTEITKVATMERII AEARGENGFGYDPMFVPDAQ SAEGSPDRVQVFEGADSGSLLAQPGEGGYGWDSAWLPDGY DGNEYYQFFGISRGSLSNEGHENKRAKSNLW YVFVPDNC IDKSDECHTFSTRVNGILIPATPVTDGLFGVDYILIQENT VVITPQNTIYTTQGRGGVTLTETPRGNRNGLDELEE TEN N VLIDGTGLFHATGEFHGEIAMKESGSNGSSFDLILVPKGM

 S $\square G D R$ AM DQFGG\|LRRUSTEAAGSGGFGFDPVFVPDGQ YDG ENVRSFKGATQGYIASPKGGDGFGW YTADGRSVKLFAGENSGSVAKEPRGEQGYGWDPVWDPDGF AVINNGKASTYTWSKDDFYLVDKPTDKDYP LDNSI SVNKKL
 ALHNGY SVALYQGVTHGTFDKDVPNDAFGFDPFFVPDGA

CDG KQTYTFVGEVGTLTKAPTDGRGFYWDVVFCPDED A LA APNE ILATGLGVVEVIDDDALGGNGFGYDPHFFVPEF
 CLVFSENEIYEARGKKFWLMTEERPQRMEGFDADCADYRT



DVPLS ILPEQERQADSTRSV FAQFGRWL ARTFADLDPDQKARRSHRGVAVR
DQTLA EMSRPKRMSYMHRARAVKNLLDQLGEV GKTFAEMNLNERNS TSHRNNTLNKLL C WRWE I S GEEEQHI DKT L A QLRTDHFFHFSFRQRADKKFDDWYQT DRTAAQLSPAEKDAVSHRGR

TET TSEDRDKEKSNV FWGDAKEQPAKWDAE TKTLAEMTDEEKNRNDGHTSATEAFANWYQND

NKY L VELTEEEKAK
DKTLAEMSDDERN
QLLAEN $\square$ QMARCNHRSQA $\square R Q A V Y Y M E E$ SKTVSEMSSDEKDED
YQTFAEMD $\square E E K E G H S H R G N A L A A L R E R L S R L$
SKTFGEMTFDEKQNLSPRFKAFVQLK
NKY LVE LTEEEKSK
GLTLAQMPIVQRVAYHHRGRAAKNLLKQLS
GATFGEDSYEQQSKVSHRKKADEGFLN
PDTSAEMTPEITKDAISHRGQAVRAリVP
QRTLGEM EGNKFFVNMRHRPYLELADLLLRPMS
$\square K T L A E M T D E E R N R P D N R T S A T D E L D K W Y$
SVPFFY LTKEEKSKNS $\square$ R
GLTLAEDDMQARVHYA HRGRAA KMKNQLQ
 GKYFYDMSPDE
GKYYVEMEEEKDSFGH
GKYFYDLPE
N LT L A E MDVEAKNRFSHRARAVSSLL
ERTLAEDRSS KYVVNMRLLPFLELAAELR NKYFTDMTSEDKENI
NKYYYDDP E DKDEQV $\quad$ A VEDF DEFFKN E YDG 1 PHGMEG GKTFAEMPMYERVAYSHRGRAAKKLLQEI SKTLYELEKDCKDDFSARKNADQNLI KKLKEV SRYYYDL EKLDLS TTALEKFRTFLQE

PK T Y A Q $\square$ A DERK LLIS QS T K A $\square$ K K F A AF $\square$
HKT LAEDEYSERMK DSHRQDAL
GRHFATMPEEE
SKT LYELEKQSKDGFSARRKAVDMF DNE $\square P C L V V$ GKYFVDLTDEERSSAYHCRDGFRNF
LVTYAELPKAVKNSDSHRYRADKELSGYFS



[^0]:    lupas_21
    lupas_14
    lupas_28
    jnet
    conf
    sol25
    sol5
    sol0
    jhmm
    jpssm

[^1]:    lupas_21
    lupas_14
    lupas_28
    jnet
    cont
    sol22
    sol5
    sol0
    jhmm
    jpssm

[^2]:    lupas_21
    lupas-14
    lupas_28
    jnet
    conf
    sol25
    sol5
    sol0
    jhmm
    jpssm

