

## QUERY <br> UniRef90_K2DJJ6 UniRef90-F7TY58

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-
ESLVI S

## H

## A

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 RNKALVRDWDAHGEHFSFEVI DRVKERDDELEKLLELLWRE HNPLLTNAFRKYGDALVFSVIDECLAED LTAREQFHMD SNDHL QRSYNKH GQKFAWGV CEEV FD DDQLLVVEQTVDD

 P N Q A L Q K E WK E F GEAFA DEVV E I L E $\square$ P K D A L K K L K E K W L N K S M T I N V A L L K Y G R NF S F TVVLE F C S $\quad$ LDD S L M S K E K Y Y F E T NK QL QQE WD Q F G DVFFT F DI L E K L K N E KE AL S E L E T K WL D H N D G L Q H A WN T K G S K F T F FiVI N E C R E E D
 P N K Q L

 HS YKL QNDWNQYGSDFSFSSLLEVVQNKNN LLHRE QE Y L D D GN K L L R L L F NE T GE Q F Q Y S L L EVVCD DD K E S V I E DE N R WKR


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 T N K Q M K R D Y R L Y K D GF K C E I L E L C D E V Y N W L K T K E V F Y I E
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 TDKRIARAI LEFGDKFSFSII EHC EPELLLKRERFY
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$R H A G L Q R A W T A H G D S F R F E A L E A V E E D D R V L I E R R A H W S A$

QUERY
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HYTPKYNVLTV
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Y YK T $\square \mathrm{N} Y \mathrm{G}$ Y N KND G G
K
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E R S
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K|L GAEE

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\begin{array}{lll}
2 R G G & Q & A \\
K & A & W T
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G

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| UniRef90_Q2BN88 | VF LS R A F G Y N K N |
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| UniRef90-D2QB17 | ALDS R K H G Y N N N |
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| UniRef90_Q7GEV2 | L L P ${ }^{\text {P }}$ Y N |
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| UniRef90-UPI0003B66CDF | ELNTVP H G F N LT H G G |
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| UniRef90-D6DF62 | T L C T R P F G N K N |
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SNRKI NKALLHYPINWTFVVIEVLETSKKELLGDENYWLA SSKKLYNCI RKYGFDTFKKVI LRDKLTREEAKDEE ILRIA A GGSLLHHALNKYPGQAQLEVL VIADDWDYLCELEQRAIQ GNKLLKDLVAEQGEHFQYSILDIFDPRDRTIIEREHWWMD GCVYLRNALRKYGQDATDRLEERYDLSQDDADMMEAFYDE PHQALNSSFKQHGEA DRFRILEHV
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K KRALVTHIR

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 THRLVSQD G CTKFQEADRTYGEAFVWEETDTASCSNKELAEKEKKY：D DQSPLKTEMREYGDNFTIEQI GQSDNSKT KALEKKEI Q
 HDAKVTKMI QDNAFEFDVIVVTVQEFEALVLECSQIK RGSII CRAI LKYGDDFYLSTLSLGSLG CRLLKKAI EKYGENMKVTVLLECK KEDLDFYERQMVQ


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LLFTEYNCSPTAGSTFG KLNTLPHGFNI
DLQPFEHGYN
ALVTR FGLNRN
$\lfloor L Q T L P N G Y N L T \square G G D$
NQGENLKGYK
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Y $\square$ N N S Y N M NK F A NS P $\square$ G $K \mathrm{Y} N \mathrm{SFKNGLNSTKGGDG}$ AFGTRPNGYNLTEGGEG TLGSHPHGYN

EYDSPEHGYNMKTGG
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$\square$ D DFKFNVLTEAYSSDG
EYDS $\square$ A Q GYN $\square K Y N$
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KLQPFDEGYHK
RLASE
K F D P
YYCSNVK GYN】C CGG

1 VKNFGNCYNT
$1 \mathrm{~L} G \mathrm{~T}$ LPKGYNLT $\square \mathrm{GGD}$
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KYSPRYN L
T $\square G T L A H G Y N \square K R G G D$
Y Y
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$\square Y$ NE S $\square R G Y K \square A$
$\begin{array}{ll}\text { KYQPK YN } & \text { L } \\ \text { QNMPY Y N } & \text { L }\end{array}$
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AYDAYDHGYNRTSGN
A L Q P RYNVL
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EYDS IRNGYNDKYN
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KQQEKK
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E LK K R Y N $\qquad$
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 NSGVYKMLDRNRNVIYI GKAKNLKNRVSQYFTQSNHNNK KK GVYVWESDDGKNLYVGHS DNLYNRISSYFMSS LLKTK QPGVYRMYNRADEVI YVGKAKDLKKRVTSYFRGQHT SQ GGI YRDRCDGADESWVRASADLQGAKNRFAFQCATNDC A GI Y CWYNDT RDLEYI GSSNNLRQRMTCYLSLAY LTSH KPGVYRMFDSAGTVLYVGKAKNLKKRVTSYTKTNRHPTR QPGVYRFRDRDRRVIYVGKAKNLRNRLNSYFADENRDHE KPGIYKFFD DNGI I YVGKAVDIRKRVSSYFNRSAQHNK KPGVY LMKDENGHIIYVGKAVNLKNRVRQYFQSSRNQTA


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LQPGI Y DMKDKKGQIIYY GKAKALKKNRSSYFRSVDKHTP S GVYQMRDQNGTVLYVGKAKNLRQRLDSHYFQKTGDSV KPGVY LMKDEEGNIIYVGKASVLKNRVRQYFQN TDNH $M S S G I F A V A N D G K Y R L Y V G E T H Q L K P R W A K M M A M F S Q G K F$ GVYKFRDENKRVVYVGKAKNLRARLSNYFQELTMLHP GVYRFRDDNGQVI YVGKAKNLRARLSSYFQDLTRLHP GVYQWKDRFGKVI YVGKAVNLRSRVRSYVRE MRYFVYQ TTNLLNGKIYVGAHKG_EPDDGYMG MYHFVYETTNLINGKKYI GSTDDL
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 A GVYKFRDPDRRVI YVGKAKNLRNRLNSYFANPAALHP LK S GVY LDWRNEEQTVI YVGKAKNLKNRLTSY FSGNKDIK QPGVYKYYNSENELI YVGKAKSLKKRVASYFTKT IGGNY
 SGIVYLFKDKNDKI I Y I GKAKNLRKRLISSYFNSSKKKLK S GVYFMKDKSGNILYIGKAKNLKKRVKSYFNPSAKHTH GVYQFKNNQGTII YVGKAKNI RSRVRSYFREGPHDSG PGVYLDKNEKKTI Y Y GKAKNLKNRVTSYFRVSADHTP NPGIYQFLDKDGKII YVGKAKNLKKRVNSSYFRQHHDNGK
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$\qquad$
GVYKFRDSHGRVVYVGKAKNLRSRLSNYFQDLSVLHP

## T P

 GVYRFRDPHGRVI YVGKAKNLRQRLNSYFANPATLLP KPGVYYLMRDRFHRVI YVOKKARNLRKRVGQYFTPSRAMRA GVYIMRNREDTILYVGKAKQLRNRVRSYFS HSGQH VQPGVYQYFDASGNIIYI GKAKNLKNRVLSYDNKTNQSNK
 QPGVY LDMYDAGGEVIYVGKAKNLKKRLSSYFRATVSGEK GKSYI GQTNCTRKRFRKHRTDP
GVYRFSDEHGQVIYVGKAKNLRNRLNSYFHDDSADHP EPGVYRYFDEKGEVIYVGKAKNLKNRVSSYFDKSNQHDR $\begin{array}{cllllll}S G G V & L\end{array}$

 MTSGI Y LISCKSCGDSYI GETRPLCDRVKEHDDGLTKSK EMGLFVIRHDETGKAFLEATNNIKGKINSDVFQLNMETF K P GVYYIMHDKIGTVIVYVGKAVNLKNRVRQYFRASTKHTA
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| UniRef90-W1U6V2 | KNSPKVNAMMNHAEDVDF $\quad$ I LTM T ELEEALILLECNLI K |
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K $\square \mathrm{KPR}$ Y N
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K $P$
AGVY Y Y G GKARNLKSRS

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K P GCYQYRNKNGTII YVGKAKNLKNRVSSYFNNSPKDPK DS PVY DMKDSLGHVI YVGKAKQLKKRVQS EAGVYYFHNEAGEVIYVGKSINIYKRIQQH FAVDYKSR KVGIYLIKCNDKFYIGSCSDLKYRFSDHEFKLRNKYR
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E P G GVYFFSDT NGKI KAGVY LFK KGNEYI GVYDMRNADDE1YVKAKNLKRRVSSYFNKQHDSNK GVYTFRDADDRVLYVGKAKNLKRVAYFDDA GVYVMKGRDGGVVYVGKSRKLKNRVSQYFHNGEKNDK GVYQYYDKDGKLLYVGKAKNLKKRVASY FNKTQENG QMGYYYIVKTSPSGKSYVGQTRTLEERFKEHQGSRKESS KPGVYQMYDAEGGILYVGKAKNLKNRVSSYFRNSGLTDK 1 YLLSCNKCGLQYVGESKELRTKFSSHDASDTQNKT $K P G V Y I M K D V N G I V I Y V G K A V V L K N R V R Q Y F Q N S A N H P P ~$
$G V Y Q M R D A K K V Y V G K A K N L R N R L S S Y F R D S G M S A K$ KPGCYDMKDDTGTVI YVGKSKNLKNRVRSYFKSKQVGRR QPGVYKHLDAGGSVLYVGKAKNLRSRVRSYFHDSRPRDG GCY LIMKN ENGKI YVGKAKNLKNRVRSYFKSSHTGK KPGVYDFKDVKDEILYVGKAKSLKKRVKSYFKEEIVDPK KPGVYRMLSAKGELLYVGKAKDLRNRVTSYFRANLSSA GIYFVVGEREQLFYIGQAKNLRKRWS YFQDLAGGK A EPGVYKFRDDSGRVVYVGKAKNLRSRLSNYFQAPEQLHP KGGIYLWWCKDTGLFYI GSAKSFNGRLHEYFQNNRLINR NSGVYMMRSREEI YYVGKADNRRNRVRQYFHAPSQLTA QPGVYQYYDKEGTII YVGKAKNLKKRVSSYFBETKTH
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$\qquad$
30
HASkRRGS ${ }^{40}$ MNYLI YKI TNLINNKYYVGAHATTD RNN VNSYMGSG MNYL YKLTSP GKKY GQTRSDEQRFDEHQNSYMKDS

 GVYLMHDKHDDVIYVGKADNLKRRVSSYFRGRQSTK RPGVYRMYDTAGNVLYVGKARNLKKRVTSYFRKSGLAPK NSGIYVFETKY HFYI GCSKQLDKREERHWYELINLDH
GGIYLFLDEPT KFYLGSADNLKKRFYTHYNNSLINNN AGVYILHNKSKDLYYVGQGKQVLNRVNNHFTGKGNGDV KPGSYQYYDEHGTI TYVGKAKNLKNRVSSY FHKEVDRF EPGCYDMKNKHNKVIYVGKAKKLRNRLRSYFSGSHNGK

GVYQYFDKDDKILYVGKAKNLKKRVNSYF TKKH GVY LWKDSDNRVIYVGKATNLHRRMHDYFEGATNSYK QPGVYQMWGEGEEILYI GKAKNLKKRLSNYFQKKHEDLK NAGIYQYFNAQGMLLYVGKAKSIKNRVKSYFFSNELCAA GVYDYKDTNDSVLYVGKAKKLRNRVRSYFQESRPADG GCYQYLDNEGVIIYVGKAKNLKRRVSSYFNNPKQTYK KPGVYDFRDTGGRVLYVGKAKSLRTRVRSYFHREADLGAG SGGYQYYDKDGE:IYVGKAKNLKKRVYSYFN KPGVYYFYNQMKKVIYVGKA DNLKKRVASHFSGHKDNPQ
 I YMLTSPY GKSYIGQTRSDEERFKEHQ KKP
SGVYQMQDAQGKVIYVGKARNLQKRVSSYFR RQ
GVYRMYDANQAIIYVGKAKDLKKRLASYFRSQVASKK LNMGYIYIQKFSNGMMYAGLTTNLKKRMNDYKRLRGNNDH KPGVYIMKDKNGKVIYVGKAVSLKNRVRSYFKAGD

GVY MHDAAGRVIYVGKAVILKNRVRSYFRKASQVSP GVYRFRDPDGRVLYVGKAKNLRSRLASYFQDPAGLHP KPGSYQYYDKEGTI YVGKAKNLKNRVSSYFHKEVDRYK GVYKYFDKDHELIYVGKAKSLRKRVSSYFSKSFVGYK GVYQMLGKDGEVLYVGKAKDLKKRIISSYFSSRAKDAK
AGVYRFISTKTGKYFIDNTMDLKG\|ANKLAFGVKDGAG GCYDWKDGSNKVIYVGKAKNLRNRMRQYVTGQDDRA MEPGCYLMKDRNDQVIYVGKAKKLRNRLRSYFTGAHDAKT EPGVYLWKDKSGTVIYVGKAKQLRARMRQYVLNFQDDRA KPGVYLYKNAEGEVIYVGKAKNLRSRVRSYLDEASQANA NPGVYRFRDEHGRVIYVGKAKNLRNRVSSYFAPL KPGCYDMKNKDGVIIYVGKAKDLRNRLNSYFHSSHTGK EPGVYYMRDRTDQLLYVGKSKRLRSRLRSYFNKNGGHD QPGCYLMKDKNGTIYYVGKSKVLKNRVRSYFTGAHDGKT QPGCYLMKNKNNEVLYVGKSRANRTRMVKEKSRDRNG C

GVYRMLDAKGDVLYVGKAKSLKNRVGSY ARGQAH EPGVYLWKDKNDAI YVGKAKKLKNRMLQY FEGRLNSH

SGVYKMKDKENKVIYVGKAKSLKKRVSSYKNPKDTKG GVYLMRDATGTLLYVGKARNLRQRVSNYF MAT GVYLFEDENGNMKYVGSSDNLYNRVCSYGMPSILSK



SYQYLDEKGTIIYVGKAKNLKRRVSSYFNKEQQSNK GVYRMLDAKGDVLYVGKAKNLKNRVGSY
 RPGDYRMLNEKGEI I YI GKAKNLKNRVSSYFKPQTA QPGCYLMKNGEGAIIYVGKAKVLKNRVRSYFSGS GVVYQLECDSCHDLYIGETRTLSVRIREHMATKRRGNL GIYQYDDENGTII YVGKADNLKRRVSSYFQKNQKS GVYVMKDSSGHVI YVGKAKDLRKRVTS KSGVYFMKDSKSEIIYIGKAKSLKKRVSSYFNNSNKDAK SGVY LMK KNNKVIYVGKAKNLKNRVSSYFNRVHESEK


MYNAEAK
SGMYTFKNNSSQILYIGKAKNLKKRIVQS
GVYLMKDAAGKILYVGKAKNLKSRTRA RPGVYLMKDAQGRVLYVGKAKNLRARVRTYFREGADGRP KSGCYLFDNLENKII YVGKAKNLKRRVSSYFK KVSND GVYLWKDKDGQVIYVGKAKQLRARMKQYVMSOKGQ GVYRFKDEHGRVVYVGKAKSLRSRLASYFQDDSALHP QPGCYLYYDKEGEII YVGKAKNLKRRVYSYFHKQHDSVK

GIYIFEDKNKKPLYIGKSTNLKTRFRQHYEGFTEGT GVYYFMNQYGKVIYVGKA DNLKKVASHFTGHNDNKQ MSSGIYYACKSCGEEYVGETRPLCARUKEHLDOGEKSR RSGVYIIKHVETGMCIVGQTTNLKKRFNQYTSRSTNTNK KPGVYRMFDENGNVLYI GKARNLKKRVSNYTCEQRHNNR IVYKLTYKKSGKAYVGQTMRIHKRLEEHQQERGMNS GVY $V$ M K D D H G R I I Y V G G A I V L K N R V R Q Y F Q S S R N H T P


UniRef90 A0A016V539 UniRef90＿D7RMH8
UniRef90－M1H7E7 UniRef90－D5E7X3 UniRef90＿F6B4X8 UniRef90－R6FLC8
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UniRef90 R5KW70 UniRef90＿U2DZ94 UniRef90＿A3U706 UniRef90－N9TVZ0 UniRef90＿K2BK65
UniRef90＿W6ECU5 UniRef90－UPI000364F246 UniRef90－G5GC22 UniRef90－E7C453
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UniRef90－E1A1 10
UniRef90－M11136 UniRef90＿B6J7K3 UniRef90＿Q7VKRO UniRef90－D9RXX6 UniRef90－G4Q6K2 UniRef90＿UPI000255ED56
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UniRef90 E3YWV6 UniRef90＿S3API6
UniRef90＿A7X172
UniRef90－R6HGI3
UniRef90＿UPI00047AE1DA
UniRef90－I YH48
UniRef90
B2GH80
UniRef90－B2GH80
UniRef90＿R5J319
UniRef90＿UPIO0037E9EE4
UniRef90－I3Z251
UniRef90－IOJPI9
UniRef90＿UPIO0046277F8
UniRef90－R5FRD3
UniRef90＿14YUM8
UniRef90＿UPI0003713A3E
UniRef90－IOGJC1
UniRef90－B3E394
UniRef90－T21583
UniRef90－M114G6
UniRef90－I3IQ52
UniRef90－I2FB40
UniRef90＿UPIO00262885B
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UniRef90－B0UL91
UniRef90－F217P2
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| $T$ |
| :--- |
| $V$ |
| V |
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| V |
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TT PLLGKHRHEAHGNDFKCKIILA CESEDSARKALIEAFWI ${ }^{80}$ VN IVKSDKKYGENFKKEILFNFETSEEMYAKEAELVDE
 VKAMLKRAVD $K S L K Q S M V T Q U V R \quad F E Y$
TEALVSRIN
$R T Q A M V Q T A S K$
VE WTVVV
$\checkmark \mathrm{V}_{\mathrm{T}}^{\mathrm{T}} \mathrm{T}$

EYCLN
N SELE A L K K L E

S
D
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DCFA YHA QKHGDNFEKHWYEV

LD SKTQAMMAQ
IEALVGNIHH

$$
\begin{aligned}
& \text { HTKALKKHUDTMKDSFT } \\
& \text { SIDPKKSSMVSHID }
\end{aligned}
$$




TKVLVSK円W


## TLSLVQQ\｜AD S：ETI

NMPEMAKEATEHGDTDQFEILEKVD N
 T


## 

TRAMV T TA A A VQQWTVV
$T R P R \square A D M M R Q$
KTRRMVREIRQ

## TDSTGYRLVREUVD FEY IV

T D S T L
TR L L M


QQVMMAKVAR
DGRPQVRFLMARVTSDEFT：
ADRKVIRYFNKYGFSQVKLTLF ILEE
HTEAL KKYGWDDVKVAITSCP
YTEHLVQTITA
PKANLSQRIALMVSQVA KI HTLL


SNRIARMIAETASEFVTTVTET

TSPLGRHKI EAHGGN DFDIILAF
$K T K R L V N N I R$
RNDKTEALVRK】SD
$T \mathrm{~T}$ ALVEH】RD\EY
TNELVKNILEDIEF
RTASMVMA




KTMQLVRSIA A
DERAKI PLMLE Q DDSFEY VVVE
KTRTLVKHiA
RTRQMVTTAA
GASVVEWTVLTEGVTNT

SGKRIKRADKKYGENFTK TVEWTVVGT TTVLVS

TKALQF円PQT
RQHFLRE！Y $\quad H \square T$ F EV

ITNKELYVAVQE
ITRMI RA Q T T Y HMEFVVTHTETEALLLEANLIK
ECVAUSRA I QKYGENFDKE WYEVVNEDLNFYEEMLVALLGG



| UniRef90_A0A016V539 | VCNPEMNSK ${ }^{90}$ |
| :---: | :---: |
| UniRef90_D7RMH8 | AFVMRTD T Y NAALGGGKG |
| UniRef90-M1H7E7 | LM NTSPD GY L L K E G G |
| UniRef90-D5E7X3 | K N R P R Y N |
| UniRef90_F6B4X8 | EHRPKYNVL |
| UniRef90_R6FLC8 | EYR P K Y N |
| UniRef90-A6EWA4 | S L R P P Y N L L |
| UniRef90_UPI00036B9602 | EYDPRFN |
| UniRef90_UPI00037BECAE | K Y |
| UniRef90-M1K3K8 |  |
| UniRef90 C2P8C4 | T Y D S Y K R G Y N K T R G N |
| UniRef90-R5KW70 | K Y Q P R Y N L |
| UniRef90_U2DZ94 | QHDPRYN】M |
| UniRef90-A3U706 | K L K P R F N |
| UniRef90-N9TVZ0 | KFNPEYNIL |
| UniRef90_K2BK65 | QHKPKYNVL |
| UniRef90_W6ECU5 | QLK P K Y NI L |
| UniRef90_UPI000364F246 | Q Y Q P Y Ni M |
| UniRef90_G5GC22 | KYKPHYNVL |
| UniRef90_E7C453 | EHRPRFNIL |
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| UniRef90_UPI0003072C09 | QHNPRYN |
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| UniRef90-E3HDL1 | T F D T T S Y G Y T K G |
| UniRef90-E1A1U0 | EF $\quad$ S R P DVY N A MVGG G K G |
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| UniRef90-B6J7K3 | Q F R P R Y NVL |
| UniRef90_Q7VKR0 | Q HQPKYNVL |
| UniRef90-M1IBM2 | F Y D NK T K G Y N T T G G |
| UniRef90-D9RXX6 | F Y K P K Y N L L |
| UniRef90_G4Q6K2 | K Y R P R Y Nil |
| UniRef90_UPI000255ED56 | Q Y P R F Ni M |
| UniRef90_R6WKS2 | K Y Q P K N I L |
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| UniRef90_R7M080 | K Y R P R Y Ni |
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| UniRef90-E3YWV6 |  |
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| UniRef90_UPI00047AE1DA | QRKPRFNLL |
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| UniRef90_R5J319 | KHDPKYNIL |
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| UniRef90-I3Z251 | K T Q PKYNI L |
| UniRef90-10JPI9 | K Y D PK Y NVL |
| UniRef90_UPI00046277F8 | K F NSFPK GL N |
| UniRef90-R5FRD3 | KYR P R Y N 1 M |
| UniRef90-I4YUM8 | QLK P R Y NVL |
| UniRef90-D4XUV5 | K Y S P $\square \mathrm{Y}$ N 1 |
| UniRef90_UPI0003713A3E | R H K P R Y Ni |
| UniRef90_IOGJC1 | K F K P P F N |
| UniRef90-B3E394 | QHQPRYN LNLKD |
| UniRef90_T21583 | S $\square$ APNLNVDLVAGGYNG |
| UniRef90-M114G6 | F F NLT D N GY NKT T G G |
| UniRef90-I3IQ52 | QFK PKFNI |
| UniRef90_I2FB40 | S L K P K Y NiL |
| UniRef90 UPI000262885B | K Y D P R Y N |
| UniRef90-K414M8 | QHDTHMKGYNKTLGGDG |
| UniRef90-R7PBW1 | R Y K P R Y NVL |
| UniRef90_B0UL91 | Q L K P R F NVL |
| UniRef90-F217P2 | K Y K P H Y N I M |
| UniRef90_UPI00037B32EF | R Y K P R Y N I |
| UniRef90-A0A015NZR0 | Q Y H P R Y NVL |
| UniRef90-A0A016V0Q1 | T R NPGMNSKN |
| UniRef90_UPI00046B0772 | R Y K P R Y NVL |
| UniRef90_F4GJP7 | K Y A P H N I |
| UniRef90-C0QWI5 | K H K H Y N L L |
| UniRef90-Q8REL0 | K Y S PKYNIL |
| UniRef90-A3TLF3 | EFDPRFN |
| UniRef90_UPI0003A0D270 | KYNPKYN L L |
| UniRef90_D0HW30 | Q Y LP K Y NVL |
| UniRef90-K1ZKS7 | K HKPKYN |
| UniRef90_Q2LR71 | EHHPRYN■ |
| UniRef90_UPI00046D3E4C | R HRPRYN |
| UniRef90-W6ABD7 | K Y K P R F N |
| UniRef90-K0YXG1 | QYAPFFN |
| UniRef90-D7EBR0 | K HKPRYN |
| UniRef90-A0A021VSC5 | EFDPRFN |
| UniRef90_A7XFA7 | E F VERED T Y N $\square$ A L G G |
| UniRef90_R5S889 | K HKPRYNVL |
| UniRef90_K1ZGW6 | S Y Q P R Y N |
| UniRef90-T0MSK6 | K L W P A Y N |
| UniRef90-A0A016U2X0 | A K S P M N |
| UniRef90 E2QAR5 |  |
| UniRef90_Q6G041 | R L H PRFNVL |
| UniRef90-A7J7R3 | TLS P D GYNLKE G G |
| UniRef90_U2TFR8 | K H R P R Y N |
| UniRef90-R7IH51 | L H K P Y Y Ni L |
| UniRef90_W0DFW4 | L H K P K Y NVLHKHGGG |
| UniRef90_D4LEB9 | Q H K P K Y NIL L |

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UniRef90-A3SQP7 UniRef90-R5BR66 UniRef90-JOR4U3 Unirergo_-aichivil
UniRef9O_D5HDC

1 10 20
KPGCYLMKNRRDELY GKAKSHKNVR
30
YFTGSHDGK GVYRFYDATDTVIYVGKADNLKNRLSNYFQGNLAEK QPGCYDMKDRQGT:IYVGKAKVLKNRVRSYF KPGVYYFYNEVRKVIYVGKAVNLKKRVASHFS LEPGVY $\square M \square D K Q E D I L Y I G K S K R L R V R V R S Y F Q E G Q Y H H$ NPGVYQMFDKQDQVIYVGKAKNLKNRVSSYFGEKQHEQN GCYIMKNKTDDIIYVGKAKNLKNRVTSYFRGTKDG

 GVYLWKDEAGQVIYVGKAKQLRARMRQYV NFQDDRA
SGIYFVTDERNYLLYVGKATNLQSRWAG
 GYRMVGKAKDLKKRLSSYFRANVAGEK GVYQYFDAAGKLLYVGKAKDLKNRVKSYYFSTPALA NPGVYLMK KNSKVIYVGKAKNLKNRVSSYF GVYLMHGDMDEVIYVGKAKTLKNRVKQYFQKSTKKSV GVIYEVKCDTCNALYVGETRVLSVRIKEHDASKRHGSL NPGVYMMKDINDKVIYVGKAKNLKNRVSSYFNNPKSSM
KPGCYMHKDKNGNVIYVGKAKNLKKRVSSYFNKDHTGK

GVYLMKDSDENIIYIGKSKNLKNRVSSYFQNSKNHSS QPGVYRFRDAKGRVMYVGKAKSURPRLTSYFQDIGNLDHP RPGVYRMIDANGTVMYVGKAKNLKKRVSSYFQKTHASP ПYKATYRVSRKAYI GQTIQQEKRLLQHQYP S S EPGCYLMRDADDRLLYVGKSKTLRSRVRSYFRSSHDLSP KTGIYYYHNEKGDLIYIGKSKNIKKRVNQHFT GTSN M $\square G S V Y K I V C S Q S D I C Y V G S T E N L K H M S G H R S N F K G K A T$ GVY FRDSDEVVIYVGKAKNLRSRVANYFTKSGDGRP
 GVYRMLDEESRVLYVGKARNLKARVSNYARPA GG GVYLMKDTNGQUYYVGKAKNLKIRVRSYFQNSKAHTQ
GYIYILTHKQ KRYIGQTQNI YMRFKQHQRRASG QPGIYQYFD ENGKLYI GKAKSLKKRVKSYFNPFRPADN
 KPGVYLMKDKHGKVI YVGKAKVLRNRVRSYFSS KH LK PGVYRMHDVKGDVLYVGKARALKNRVGNYVQVDRL

GVIYQDECLDCHALYI GETRALNVRVKEHLASKRRSSL
 NPGVYLMKNAAGKIIYVGKAKVLKNRVRSYF TGSH QPGCYLMKNKHGT:IYVGKAKVLKNRVRSYFTGSHDGKT KPGCYLFYNNYHQVLYVGKAKNLRSRVSSYFNKVY NYK
 GVYDMKDKGGKIIY円GKAKNLHNRVTSYF RKGQD
GVYYFHNEESEVIYYGKSKNGRKRVNQHETN OHHH
 GVYDMKDSTGDIIYIGKAKSLKNRVRQYFQ GSHG KPGVYRMFGTKDEVLYVGKARNLKARVSNY SKGGGGH LYVGKAKDLKKRLSSYFRVQVSSRK KSGVYHYFDMEGRLLYVGKAKNLKNRVKSYFRFTPTLS GVYRMLNAAQEVLYVGKARNLKARVSNYART EGGIYCIHNDVDSVCYVGSTRNYKRRFNQHQRGLKNG H RPGVYIIKHVEDGMCIVGOTKNLKRRFNQYTSMNRINKN GVYRYYDAAGSVLYVGKARNLKKRVSSYFNKTQL SP GVYLMKDSLLNSIIYVGKSKNLKSRIGSYFQNSKSHPP GVYRFTGADEEILYIGKAKNLKKRIASYFTSRKDMRR KPGVYDMKDSSGRVIYVGKAKVLRNRVRSYF AGVYQYFDSSGRVLYVGKAKSLKNRVKSYFADSQTGEV Gl Y FRNKSNKIIYMGKADNLKKRVLSHFS K GNN
 RPGVYDMRDQKGKTLYI GKAKNLKNRLSSY FRATGLTT AGIYFALDSESIHYI GKAENLNKRWKTH RPGVYCMLDADGEILYI GKAKNLKNRVSTYFNNKTASTK VYRDTCKDCDATYVGQTRQLKTRTSEHRHHDRRNTN GCYMMNGEGTVIYVGKAKVLKNRVRSYFNGSHNGKT EPGCYLMKDRNDQVIYVGKAKRLRNRLRSYFTGAHD LEPGVYLMRDHSASLLY:GKSRKLRTRVRSYFRDSQ RPGVYLYKNEDGQVIYVGKAVSLKNRVRSYF GAGAK GCYLMKNKQGEIIYVGKAKKLKNRVRQYFHGAH DF GVYRMLDDGGNVLYVGKAKNLKKRVASYFRENLSSP GVYRMLDAQARVLYVGKARNLRARVSNYARPGRNDGG

ARGKGH
FQKNDCS

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T Q|L $\frac{50}{L V}$ S E TIE DFEY $\stackrel{60}{1} \mathrm{~V}$ T E S A T

 T S S

70
EAlLILEATLI 80
EDEALQLEFSWIK
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 $R \| L R M V E R A A$
 PNPTASTRI K LIMLS QV SHIHTMVV S K $\square P$ LL V D Q $\|$ R
$R Y K Q L V R$ $\square$ KGFEY: VVE
HNKKTQQLV KNDRRQI
ASPR\A LMVAQ】A
T RALVKNI CK
PSPRLSARIAKMDSEAAHLEYIVTPS
HESEKTRELVKNIEDDEFII CNS K 1 QQMVA QI RR VSAGGKHRHDEHGADFDCTILAY

TKALV
KVIDR LV QNL K
HAHAL KKYGWDNTEVATTRCP
RTATMV
K K Y G WDNTEVATTRCP
VVT P T

KCRAFLGABKKYGENFD
R $\square R / L M V R Q i$
TERLVQ
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A D
SEDA I Y P YFRKYGYAFK
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HSARIARMI RETARMMFL
SNPHHSRAI KYHGLSNVNVLVIKC
K I K LKASLK
DFDY
$\mathrm{K} V \mathrm{~V}$ KLTKMLK
DFDF


 HTRALKKHFDA $\square Q \square A F$ HLPKVWKMV SNVHDYEFIV KSREI QKAVA LSSPR Q Q
TEKMLL HAS
PDSPRIQAMVVLVRDDESNVK
K S SPKVEAMVGNI SEFEY
TQRDAAAMIALTARMEFVVTET
HTSALKKAMYK NVQVLTFDVVPEFL
 HSGRIARMISE TMTHMFLTTRTETEALLLEQNLI K GNKLLNKVGKAMKRN
FYAAVQQAINKYSQVFQYVVYTWVDQDKKPDD
R IALLMVARIAK LETVTRSETEALLLENNLIK HVMRIARMI AA TVTVEIISTSTETEALLLLEANLI K K V VKL V KNLK K F KTKRMVMAAKK DRK TQHMVANDADLDNYTLVET NTADFEYIV RERKVSLR $\frac{1}{P A L S M V R Q D S}$
 SYR\|VRASA DFDYIVVR K IIES MVTH $\square$ ARFEYIVVT T KTMALVSKlAA DI QLT $\square$ T


THSVITEHRDNDNHEFDWEVEVTVTHTEGEALLLESQLIKK THSVITEHRLNLNHEFDWENVHLLDKEKF LSKRL


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RHRPHYNIVL
QYAPQYN
QYAPQYN
RYKPRYN
NLWPTYN
QYQPYFNV

KHHPKYNI
RYRPRYN
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Q L K P K Y Ni
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A $\square \mathrm{K} P \mathrm{~L} \mathrm{~L} \mathrm{~N}$


KYTPKYN
EYKPRYN
VRNPKMNNRN
KY LDPKYNLL
KYSPKYN
F F LiTNKGYNKMTGG
EFDPRFN
SLSPRYNVL
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$\frac{\square}{\mathrm{K}} \mathrm{NKKPD} \mathrm{K}$ N
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KYHPKYNIL

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ELQTDPNGYNDKEGG
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EYSPRYN
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K H D P Y Y NI M
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HNKPKYN


KHRPKYN
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QY QPR Y NI

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ALLSPKYNLL



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UniRet90-EOTBE0


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90


K L G A S $L$ Q LRPPRFNVM KLKPRRNVVL KYMPRYNVL TLAPG GYNLKEGG KLKPRFNILNLKEGG | K | L | K | P | R | F |
| :--- | :--- | :--- | :--- | :--- | :--- |
| K | N | L | L |  |  | T NKPYFNIL KYDPKYNI $M \square N P N K D G!N Q P$ $K Y R P R Y N V L$

Q LKPRFNVL
KYRPRFNI
SLKPRYNVL
QLK P K Y NVL


[^0]:    lupas_21
    lupas_14
    jhmm
    jpssm

