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UniRef90_D7NDJ7
( REESSQDI QPVAE RFLK S Y I N N G S Y D K E D DEALQQKTFE Q MK




 R









R
R DESAY L QPVID AF WQA LDD

DESAY L R P L L S A F WA T RPAAHSSDDKAARELRAAFGVMR

E E

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ESAYLQPLFAAFWQSRAAAAPVRDRAARDLLRAAFTVMR
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## R

K E E S V E $\quad$ IA A PVV

 R D

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## QUERY

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 | $E$ | $A$ | $G$ |
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TAQARGDGAASWSARTAVQELNEKIAKSR
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EAGDNASFWAAYVA NLMDPADRA AYEAHKS TSKNSADFQNLYDQARSTQKQMYDLENSDVRHALQP RGQNDTDFWNKY IQNLMSKEDR LAQGRGDGAAAWQAQLRLEPVREALKAS QAQARGDGAAAWQASLALEPVSRSVKGS ENGNDSTFWNAYVA

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VRNCMTAEDR
VQNLM RNGDRAEFWNRF VQNLM SDSARADYE LA QARDDGDAAWAAQRTVRRLRTEDDGS KTGSAADFWAAY LDNLMMTEDKAYNAH KAYE
 KNY AHKS V

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140 150
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 A S K VI KP LID QLIVSAVNRYNHAHGTLLEAEAGY ATKVLLPTGYALFEASTRQYNQRYLADLDARAVY
 G G LVLLPS LNKMFTYAAVEYNRRENAALDTVAEY
 AS LVI KPLI DK TFVAAVERYNRLTGSSSLAAMVE Y GSLVI QPMLDNAMVSLAKKYNQKYNANLAVQVNY GSKVLLPTEYALFEASVGLYNQAYQAALDTRAVY GSCHLKKPAFDRLYQEVVQR
GSKEMLP TA HLLTGQAVSQFNKEHGTNLNATTTY GS GQLMP TFD AL F EASTQQYNRQFHTALNARADY

G S L H L M P T F N A L F E A A T T G Y N A A F H A G L D T K AVV Y ATLVVEP LLNQL LKYN $T$ TKFNAETGKNLLLS LNF GSRVLMPLI E GLYRQTSR
GT K V L MP F I E K L Y R Q I G S D
A GKVLLPTLNALFTKVVDAYNAQNGTK LSNVAEF GS LVMQP FI DSV
GS RVMAPAVNELADVVSKKV
AT KV L LP T L NKG F T QTVEA YNKENGTSFVSEAEY GSKVLHPFIVDLY R Q T GRNILLST
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GT L L R F L P A I N K L F A VA T E K M NA QA G T HY E V V T Q Y GK GVLDP F L K K ALT Q A
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GTGVL D P F L K RA V D EA GA GASRKAGEPYRTDTSY $G K G V L G P F L K E A L T R A$

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$G \vee Q H V P F V K T L L N D V S S K D Q S \square V N P D L N S V$
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 $\qquad$ S 1
Y A
Y A
RA TFRDA
REETPDFTAPAE ESAHLAPLVAE LDERAYRHGD
RAESWETK $\qquad$ T FR $\mathrm{L} A$

Y QEEYDALLREFLADE R A DESAYLRPLLAKFWATRTEAADYSDKAYNDLYAEFDRVE ESPTLTPLLKAFTTAYESGDGLGBRAARALTAYFRTMA DESWMLKDDIRAVKEGMVQGADVSMAAANRLDAQFNRME
 SAYLRPDTEAYWRARTTGGAGTDGDARRLREAFTVLR
 EESAYLAPLVERFWAAAESGAPVDREAARPLREAFAVMA
R E



 E SELAR K K K K E DSAYLRPLLEEFWRTRAARGTGDTAAAERLRAAFTDLR | $P L L$ |
| :--- |
| $P K$ |
| $P L$ | EFWRTRAARGTGDT

DFMKMKAGQDVGA
AFWASRTGPDTARD



 ESPELLEAFLQFRFHFLQGNRRDR D
 ..... WWKVYEANGEAEK
QFWTSYNSTGRDLGG
QFRFHFLYGQKRQG ..... - NAFKTAY
$D A$
$A$
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GE SWNL
ESEEL ..... QPDINEFKTKLAN GDS
R E
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E E|  | $E$ | $S$ | $V$ | $D$ | $L$ | $A$ | $P$ | $K$ | $L$ | $T$ | $D$ | $F$ | $Y$ | $N$ | $K$ | $L$ | $K$ | $T$ | $G$ | $Q$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $E$ | $N$ | $V$ | $D$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |E E

KA Q RALI KEFY F D Y NE QKATAVRQQFDKMV N A LIE E A G A R L R Q E F G T M H


[^0] E
D
E A胥 SHyt P
 $\hat{L}_{1}^{\hat{k}}$

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TAP 50

60
70 S K VP E G|L G R E



G A A GERSVVMI
DAANYYKSNPGNRKTRDQI I YWLNCWEDTTTAADEYL KAI



QVP
NA
A A D E L L Q S
K TPD DV
ATMPETML
ATPA DLRTNGPNSRMFLT L $E T S A W L A K L G A Y G E A G G T A V Q L \sqrt{M}$ GAVDNI RAKCLDNANLLAE LDAP FLLEAFHRMARAAQQVVHAM ELPRRL TGTGLGS


 D A A T L Y K N E GHE R VV S Q DS Y WL N C WE DTMMEAA I S Y L E A I

 D A AA HYK E N PG N P R TARD QIVVY WL


 T A A K T Y R N Q S A G D T R R I K E Q
 MAPMKLIAD GDNAELVKE $E$ L P GRLLSGTS
$E A A E L Y K A S ~ G D$
 NASQTYRAS GNERDKS QIVVYWLNCWDDTTNAAALNYI K GI

 RAPEEL APLDAD GTFGDEVRPWLARLS RYGAA GERAVVMV
 S DYDADKTKTENANLLAELDSTLNSYKALSEAGDASMNAL



 ESAAYYK NSGNKRLREQMAPWLNCWDDTMES GI S Y L E K GII

 D LPGRLSSGTS


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## N

## M

 SAIAD FQ K N CTNEALVQQELEGWLQALDNVAKAGEALLAEAE
 QVVPEK LR GHMENEKF L Q E VVE P Y L N K L K L Y GEA GVI A V N




 A A AETYKASGH ERMK DQQ SH WLDD T DDQMTA L DS L L T A T DSANTYRENPGNERTRDQUIYWLDCWQDTTEAIINYI EAA
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 LNEREGNEEEAAKHREKLQSLLDRLE RAQARGDGTAAWRASLALEPLRTD
EAGDDGAFWAAY
PAKGRAVV
HEEKPDSF DNTYDQMQELEKEQKD $\square R S R D F Q G S K N P N P A$
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KTFRSGDASNFWNGFVANRMTKEARAAYEKH AAQARGDGTAAWHAERALRAVRAETSRNKA
LAQAKGDSDAVSTLYARLQSQRRQLDSVA PQQ DAP HTGNLQAMETQHESALLALDSMEEVNRLKEGVPTDFTVDV DAQRAGDKAAAWTAYRRLGTLRARLE
QGNDDAAFWAHY VDNLMTPADR
DADQEKDDDTAWETFATAGKAL

I AVEDGADWTKYSNGQTAFEKSKTYGFHYVDHT EYAEV KAAEEGKVETWWDNATEKLNEMFTVDRMEDSGTVQYAVAV MAGDNATIWTEYSKAQASFEQSKKYTFWYVDH YEKA EV MAEDANAWEALGEASAALTASKTFTVEKLNSPDVAVEA RTSNESSMLGQFRQMDAYSKLQKK
 MFVQNGNMDSAWKELKASANLAESKTFTDKKGNYPDVVEA HAQRTGDGGLAWAERRALKETLAKAED YAKDRAYTWQRY LETSALLDSMRLINHTLNQKAQPKGVKV
 DANNSFDVWSNYSQATAKTAS SQTY QRPVLDGNKV RAORAGDAGDAWAAYRRLEALR TNDAAKDWDSYYKGLKLYEQSQTHTFH YVDH DEKAE L

KAEANDK $\square W D L Y A T G Q A A F E K S K T Y G F N Y V D H \quad \square E Y A E V$ KNGDVSANVEYNTEGETAFAQSKTHDFDYVNGYQEVAEV $\square A A Q D G D \square E T W L N E A S E K L A L M F K V A R L E D D H T K E Y V V S V$ QNKDMSEFWSDNFEGIKLLRNLDGUKATIANN RANYNGDTEEKYKNLLEYELDEHDTTDVVY
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KEGDVSAVINYNTAGKTAFDRSKTHDFLYVDH QEYAEV RAQDAKDADAAWTAYRRLGE LRAEDAAER
】A DENDDMYAAFNSYTA GSSSFKTSKTFTKNGNPQVVSP DA QRAGDAAAAWTAYRRDGALRARDE DDAENGDVDANTTEDKLKEAETYKVESLESNGTKMNVVKV
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 $E E D K P E E F D Q Q Y K Q M I E L E Q Q Q K A V S R D F P G S D K S P N P T V$
$Q \| Y N D G L F W N R Y V A$
$V$
 TTYDQVDGQNNSDSDKAAMDUVTKDDKS N NQGHGGKKA QA LDDDLFLQNYRDITADQKEDALISRNFEGTDKSARPVV KAGDNNELITLFAEGTSAFDQANNHELDYYNH YEKA RV DAGTEGKMAQAAYHLLKLKKKLVKRAEAM
KA LQQQA $\square$ WENFSAGQSAFAKSKTYGFHYVDH
MAKKNGQADQANEYQAQLRDEMAYNVNKM
MAKKNGQADQANEYQAQLRDLMIQQNKM MEEKEGDNASAEKHRKELQAMLEKLD
TAQ
DAGSSGRVPQAAYHLLRLKRWLKRTERL
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UniRef90

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PALKPQLETFKQQFAAGEDVSD
PELARRLAEFRAAWESGDKAG ALVALRPYAALIA EESEELSPVVEEFTRKLFANESILEEYSKVVLAEYQEIL QSPGLRGKIAKFDKAFTGTTEQKHAAVAELREYQKVLA EQAPRLKGVLDRVREAFAGGDEAARSQAAELARTADEVA
 RLRKRLDEFRGTWEAGGQSRQRAVAELRGYARAVA EES

PELARRVERFWAEWDEGKRA
 EQAPRLKALLDHVREALANGDESERREATALRRKADALA EEAPQLLEKLHQFRYHFFHGD QQKAVE乌LEHTFSEME

PALTAAI DAFWAVRDKG SVDSSLKDRLAA DESADLKRELAD EESI RDES

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 EQAPRLKAVLDHVREATADGDAAARTQAAELARTADEMA EQAPELRRDLDHVWAAYDGG DAADAVPTLRRIADGIA

 RPDAPEMQALLD AYEKVLSGKDVSFERAAL GGEFEKME


EDEEMTTLYDNFMEKF
GGESFPPESDKपRNELENपK QSPELAAA RDFRDTGSAARLTAALDALQ

ESENTASDITTLTTNLNSDQPGTQANKEKIEEEMSKII RADAPEVRELMNQFIKKNAKGED TTAEVEALTAEFDNMI RADAPEMRATMDSFWQKVDNKQDPAEEDE乌LKGNFETIK



 LRVEMQNIV

EPAPELAAALDAFWEAWDAGDH DAAAERFDAVLADDA EQAPQLKALLDHVRETDAGGDAAARQAA $\square G L A E R A D A L A$ EESLELSKLLEAY YSAAAKNDNQSLENYQKLDDYFNKLV DESKHRRTEDETUKNNVSSSTNLDQTALKKJLDDMKKTQ
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A A
N A
Q DATNNFATKSKNEGLKSEDGGWV TNNATKSKNELLKSEDKGWVDSLRDDAESTIIAYINSAA
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D A

R
 Q
 A A A GTYA Q NAGNAS LRRTQUDPWLGFWSDGMNAGRRYLGAL NAPAVI RGGQVQSAFVVSEAAPWLDATALWGEAMVTRRLDAL
 SAA GA L E E L P E P R A R A E DA A WL EAAAGHWLDAAGGAA V E M L


 D APATI RASVADQAFLADAANWL
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 IA I GE GNDEQANSLKSTLQA
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