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 A SIIDKRTLEKTWKLMDKVVKLCQHSKMNLKNSPPFILDDI SAADRRTVEKTWKLMDKVVRLCQNPRDQLKNSPPYILDI



PGAVDKKTVEKCWKLMDKVVRLCQNPKLALKNSPPYILDL PPHIDKKTIEKTWRLMDQVVRMCQHPRLNLKNSPPFILDD DRRALEK T F K L M D HVV:KQCQQPR R L N L K K N S P P F

 VDKK SFERAWREDEKVGKLCQNPKLTLKNSPPFMLDI VVDKKSTEKSWKLMDKVVKLCQQPKMNLKNSPPFILDi

 QWGEARAVDRAVRLLQRLEEQCGDPRLT S SRVDKKAI DSVI RRLDKLDNLCRDPRIVLRNSPPYLLDI
 ADDKKTVEKAWKLMDKVVNLCANRRMNLKNSPPFILDI
$\qquad$
WI
TTS
S D
QWGE

 GAAAR RSLDKALQGLEKLQRLVEQPGLGLRNSPPSLDQL $P$ TRGDLRLVDKTLRRLDKLQQLCSTPRLGLRNSPPYLPQL





 ESSAFGRAVRLLQRLEEQCGDPRLA QS GQQRALDRAVKLLERLEAQCGDPRLA RKL DKVVRLCQNPKLA L K N
AEPRA $\square R R A V S L L E R L E G Q C Q D P R L A F$ ARAFDRAVRLLQRLEEQCSDPRLSM
 T IDDTKTLLRIDDKNTERLDTLCQNPRLNLK H T L L T D S R $\quad \mathrm{L}$ G $\operatorname{G}$ K
AVRLLQRLEEQCGDPRLA
ALGRAVNLLQRLEAQCGDPRFA QSGENRALGRTVKLLERLEAQCRDPRWT AAGEPRALSRAEKLLRRLEEQCGDPRLA

40

TTSDS
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[^0] N S KLL $N$

| PGAVDARTTSRDEKATRKLLTLCSNKRLKLKNSPPYLQGG ARKEQKSLARAIRALEHLEHLGQDPH <br> TGAHRSLEKTLQGLTKLQQLACQPQVALRNSAPHLPS EKKSSIDRAWEMLDKLVKLCQHQRMNLKHSPPYILDI <br>  |
| :---: |

SGEARALGRAVRRLQRLEGQCGDPRLA SSPPSLRDL DSRTLDRLSSRVQKILKLIKSKKLTLRNSPPFLQEL


GTVDKKMVEKCWK LMDKVKGPAEDPR

LDI


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UniRef90_H9FII8
UniRef90-C1C1B9 UniRef90-H3AWW8 UniRef90-UPIO0046B8000 UniRef90-T2MG42 UniRef90-T1FD14 UniRef90-A0A016UJ48 UniRef90-F6PCP5 UniRef90_Q5C3K1 UniRef90-L5KMF5 UniRef90-U6IN86 Unifieioluilis6 UniRef90-W5M9V8 UniRef90-I1FXE6 UniRef90-B3RTT8 UniRef90-H2MER5 UniRef90-UPIO0044381E0 UniRef90-H2W705 UniRef90_UPIO00441F07E UniRef90-G3V8H4 UniRef90-H2KVK0 UniRef90_G3NGI5 UniRef90_UPI000388C095 UniRef90-I3JZS6 UniRef90_UPIO004574347 UniRef90_UPIO003292A8B UniRef90-A6QPZ5 UniRef90-H3FMQ3 UniRef90-UPI000333F1A0 UniRef90-V519K3
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80 LPDTYQHLRLIYNKHDDKLNTLNENDYFRVFDENLMNKCK


 V
 $L \operatorname{P}$



 $L P B T Y$ Q H L R T L L S R Y E GK M E T L G E NE Y F R V F M E N L M K K T K

 V S E T VILLLTE V V WD P Y R GPAPA G D EA D F L K I H V R H L L D K T N


 $\square P R \square A Q L L R E V A Q A R R E P E G P G G A$有
 L R VQLL RQVAHARRGPEGPGGARDF LV H LN EAKSR L P DTYQRLLHI ISRSQ EEELNSNEYFR
 VE P Y GCMA A GSEARYLR




## QUERY

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UniRef90 T1FD14 UniRef90-A0A016UJ48 UniRef90-F6PCP5 UniRef90_Q5C3K1 UniRef90-L5KMF5 UniRef90-U6IN86 UniRef90_UPI0003500DA5 UniRef90-W5M9V8 UniRef90-I1FXE6 UniRef90-B3RTT8 UniRef90-H2MER5 UniRef90-UPI00044381E0 UniRef90-H2W705 UniRef90_UPI000441F07E UniRef90-G3V8H4 UniRef90-H2KVK0 UniRef90_G3NGI5 UniRef90_UPI000388C095 UniRef90 I3JZS6 UniRef90_UPI0004574347 UniRef90_UPIO003292A8B UniRef90_A6QPZ5 UniRef90 H3FMQ3 UniRef90_UPIO00333F1A0 UniRef90-V5I9K3 UniRef90 UPIOOO3341140 UniRef90_UPI00042C8DB5 UniRef90-UPI00045E27A3 UniRef90 M7BA18 UniRef90-UPIO003333396 UniRef90-F7DRI3 UniRef90-I3KEF7 UniRef90_UPI00033433DE UniRef90-A9UYU0 UniRef90-W5K157 UniRef90_E2RCK0 UniRef90_UPIO003316B25 UniRef90_UPI0003F15079 UniRef90-UPIO00444121D UniRef90-T1ELS4 UniRef90 F2UL73 UniRef90_UPI0000F2D1F5 UniRef90-V8NBW1 UniRef90 T1FF19 UniRef90_UPIO0034FB9D9 UniRef90-E4WW32 UniRef90-W5Q088 UniRef90-UPIO003C8C650 UniRef90-B4HJIG UniRef90_UPIO003444755 UniRef90_E9C5G4 UniRef90-D3PFW5 UniRef90_UPI00046BB933 UniRef90_UPI0003C8A326 UniRef90_Q4T8G2 UniRef90-UPI00038EECCB UniRef90_UPI0003840C4F UniRef90 UPI0003BB7504 UniRef90-UPIO0042C25E0 UniRef90-G1PX47 UniRef90_M7AR02

90
100
$R N L T K L S \begin{aligned} & 110 \\ & L I F\end{aligned}$
SHMLAELKG ATIKGKKGKEKMFDENSHYRRNLTKLSLVFSHMLAELKA
 QAI KLFKEGKEKMYDENSHYRRNLTKLSLVFSHMLSELKA QAI RLFKEGKERMYEEQSQDRRNLTKLSLIFSHMLAEIKA



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 RAVLLFKEGKEKMFEETSNYRRNLTKLSLLESHML NELRT QTINLFKNSKEKDFDDDSDARFRLVKLSLVYSHLLNDLEA
 QVAAFLPARNEELFREGSMLRRQLAK LAALI FSHMHAELGA QASQLIFKEAKEKMYDETSSHRRSLTKLSLI FSHMLAELKKA YTTNLGKAAKEKI YDTRTBYRCTLNKMSLI FS HMLTEELKA KAMLLEKDGREKI FDETS S CRRNLTKLSLLESHMLWELKA RAILLEKEGREKI FDETSSYRRNLTKLSLLFSHMLWELKA E ILKLLFKTSA I YNEQSDERRKLTKMSLTFSHMLEEMKA E AKWLFKKDKDKI FQEGSAARRHLTKLSLIFSHMLAELQA QVAELLKDANQDVFPEGSRFRRQLAKLALIFSHMHAELSA QTVRLFKEAKESIFDDQSTPRSQLVKLALVFSHMQRDLEA
 RAVLLFKEGRRKIYEETSTYRRNLTKLTLLFSHMLWELKA QSVSLFKEGKEKMYEETSQP
QVAALLPPRGQELFLEGSRLRRQLAKLALIFSHMHAELGA QVAALLK $\square$ ANDELFREGSRLRRQLAKLALI FSYMHAELDA EVLKLFKSSA I Y NDESHERRKLTKLSLVFSHMDSELRA QVAALLPAASDELFREGARLRRQLAKLALIFSHMHAELGA QADKLFKEGKEKMFDENS
QVATLLPPASEELFREGTRLRRQLAKLALIFSHMYSELGA QVAALLKTANDELFREGSRLRRQLAKLTLI FSHMCAELGA KVAVLLSPAEDELFREGSRLRCHLAKLSLI FSHMLAELGA QTISLFKEGKERMYEENSQPR I SRFGASIMSEAKS Q VEALLKDANQELFPEGYRLRRQLAKLALIFSHMHAELAA QVAELLPSANDELFREGSRLRRQLAKLAVIFSHMHAELRA RADRLFKEGRERMYEEQSQDRTI
QVGALLKMANDELFRPGSS DRRQLAKDALIFSHMHAELSA RASNLFKEAGDRMEDEQSEDRRELNRLTLVFSHMLADFKS RAILLFKEGKDKMFEERSSYRRNLTKLSLLFSHMLWELRA QVAALLPSADDELFREGSRLRRQLAKLALIFSYMHAELGA QLAALLKAADDQLFREGSPLRRQLAKLALI FNYMHAELGA QVATLLPDANDELFREGSRLRRQLAKLALIFSHMHAELGA QLSALLPAADPELFPEGSRLRRQLSKLALI FSHMHAELSA S GLEL FKFNKDRMSVENSENRKSLDKLSLI FSHMDFELKA IATKLFRDAGEEMESEDSEYRRQLNKYTLVFSHMLLADLQA QLA ALFPAGSKAFW EGSSRRRKLTKLSLIFSHMHTEELRA QATQLFKRGKDEILLEGSAA KCMELFSNHSYN
HCNDILSANRVPQGAE TEARRNLTKLSLIFSHDLSELKA ELKKI LKNDPSSHH ILKSSMRRELSKYSLVFSHILHELNV QTISLFKEGKERMYEENSQPRRNLTKLSLI FSHMLAELKG
 QVAALLPTANDELFREGSRLRCVL
NISSLIKKGKEDLQQEESHIRRQLTKFTLILSHUVTDFKA
QVAALLPNASDELFQEGSMYDFRPSCTRL
QVVALLKTAADELFREGSRLRRQLAK LALDFSHMHEELSA RAVLLFRHGRERI FEETSSY
QVAALLPAANDELFREGSRLRRQLAKLALIFSHMHAELGA LTIALL $\quad$ I I FRRNLTKLSLI FSHMDAELKG QVAALLPSASDELFREGSMLRRQLAKLALIFSYMYSELSA QVAALLRSANDELFREGSGLRRQLAKLALI FRYMHAELSA PVTALLKSASDELYREGSMLRRQLAKLALLIFSYMYSELSA QATKLFKGEPEGLFQEGSSYVFRLSCTRL


| QUERY | 1 FPS GLFQGD |
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| UniRef90_K1Q5V0 | 1 YPNGQFAGD |
| UniRef90-UPI0002657C32 | LFPEGTFAGD |
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| UniRef90-T1L458 | 1 FPDGLFAGS |
| UniRef90-S4R6P1 | VFPNGSYQGD |
| UniRef90-H2Z2P4 | EFPDGRF $\square$ GE |
| UniRef90-C3Y0Y7 | FPNGTFSGD |
| UniRef90-Q4SPD1 | FPNGLFQGD |
| UniRef90-E5SBG4 | EFPNGQFIGD |
| UniRef90-U1NJL7 | EFPDGHFIGE |
| UniRef90-H9FII8 | $\square F P N G Q F Q G D$ |
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| UniRef90-H3AWW8 | LFPRGVYEG |
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| UniRef90-T2MG42 |  |
| UniRef90-T1FD14 | LFPSGVFAGD |
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| UniRef90-F6PCP5 | $\square \mathrm{FPGGRFQGD}$ |
| UniRef90-Q5C3K1 | LFPQNT |
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| UniRef90-UPI0003500DA5 | LFPGGRYCG |
| UniRef90-W5M9V8 | LFPGGHFQGD |
| UniRef90-I1FXE6 | L F P D G $\square \mathrm{Y}$ |
| UniRef90-B3RTT8 | F P S G Y N |
| UniRef90-H2MER5 | MFPGGHFQGD |
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| UniRef90-G3V8H4 | L F P E GKY C G |
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| UniRef90-A9UYU0 | LT Q D A K L A D |
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| UniRef90-UPI0000F2D1F5 | LFPDGHYCG |
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