ouear
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 TPSAVKNLLGWKQGDE EEKWAECAIQTLVKKLKKKG T $\square \mathrm{G} T \mathrm{VHTLMCHRQG}$ GESENFAKRAVESLVKKLKKRD SUVHSLMCHRQG D WEKEPFAKRA1 ESGVKKLKKRE FNPPIVKRLLGWRKPSDDTAEGKWGEKAVKSLAKKMKKSS FTPPTVKRLLGWKK DNSEDKWSEKAVKSLVKKLKKTG FSDPIVKRLLSYKKGDDDEGEENWSEKAVKSLVKKLKRTG FNPPIVKRLLGWKKAEG FNAPIVRRLLAWKIGDG PLAVRRLNGWRQVDE FTPPVVKRLLGWKKTSTGN E G N IIMKHLGWKQGDE
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## QUERY

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| QUERY | Y Q R VET |
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PA VKK LLGWK $\square G E$
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 QLELLVVEAVESRGADVGCVSFPKT


 QSELLRAVKSRVDHPSKKSTPPTVLQCILIDKCSTSSSQHLL DLDSLDTADTTNGTPSKCVTIQRTLDGRMQ PADLLRAVKSRVDLPAKTSYLKCDLDKCTTDATEEDDHHV CFDVFFDAVIHENPGTRCCKARND $\quad$ KIAGANGRLII GALE KLANGGSGKCVVPVRGSLDGR GSSGAPSEPHL $\square A E L Q Q A K S R V D P P H K R S T C P S Y D Q C D L I K C T S P M L Q H V$ | $E$ | $D$ | $S$ |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $Q$ | $L$ | $T$ | $A$ | $T$ | $T$ | $N G A H$ | $T$ | $K$ | $C$ | $V$ |


 IADLSQAVKSRVEPPTKCASTTSY DQCULIKSNSPQDQHV
 QLDELEKADTTQNCNTKCCVTIP SNCCVRGKGCVCR PLPV

 KK LTKKKNNGCGTD EDL GVCLGEPE $C V T R A G A G P R A R V A R A D V G M V C T G$
QSEELLRA
EMETFMR
C L $1 \mathrm{~K} C S$
EMETFMRCVETKGEEGGCVTVTRTLDGRDQVAGAKGFPHV

UniRef90 UPIOOO29D9A78 UniRef90-F6RBZ6
UniRef90-J9KAL4
UniRef90-D6WB20
UniRef90-W5UJ14
UniRef90-Q21733
UniRef90_UPI0003C35173
UniRef90-S4RG13
UniRef90-G5B879
UniRef90 G7YKY6 UniRef90-B4NJZ6 UniRef90-E3LV95 UniRef90_E5SE16 UniRef90_E2ATB2 UniRef90- $\mathrm{B4M5J3}$ UniRef90-K1Q889
UniRef90 EOVS69 UniRef90-UPI000273C83D UniRef90-B4KC87 UniRef90-G5CTL4 UniRef90-B4JHE4 UniRef90-E4XYE7 UniRef90 O15968 UniRef90-ROJFM8 UniRef90-W8C5Y9 UniRet90_A7S9K9 UniRef90-A0A034WIK8 UniRef90-K7IBG5
UniRef90 K7HHP2 UniRef90-UPIO004445BF5 UniRef90_B4GDZO
UniRef90_H3FQN1


I YSRI WRWPDV|HKNELKHLLKFCQFAFDLKQDGIICVNPYH VYARIWRWPDL HKNELKSNSYCQYAFDLKVDLVCVNPYH I QAR PPSDSHCSVSGQPVKKCDGTPKTDSYLVDVMS L LF KVFRWPDLRHGAELKRLPGCESYGKVNPELVCCNPHH LSCQLWRWSDLDTNCEVMRHLPCKS GEVDANSVCCNPFH LLCKVFRWPDLKSSSELKRLYCCEMYGUNSTDYYCCNPHH LLCRLFRWPEVRHSAELKRLSVCGQHGRAEGDSVCCNPYH WTCRFWRWPHLKSALELQS:AVCCHGFDKNTND:CHQPYH
 SY
I YCRLWRWPDLQNHQELQPGDRCEYAFHLKKDEVCVNPYH LLCRLFRWPDLHQSHELKHLCYCAGGQGSCGDLLCCNPHH I YCRLWRWPDLQSHHELRAI EHCEYAFTQKRDEVCVNPYH LLCRLYRWPDLQQPHELKRLCFCKSAGGEGTDH CCNPHH VYGKLWRFSEMTKNETRNVEHCNHAFEMKSDLVCVNPYH LLEKVFRWPDLRHWSQLKRLPCCESYGKDNPELVCCNPHH LLSKLFRWPDLQHPGQLRRLCRGEGFGAAGQGPPCCNPFH I YSKLFRFQDLHKNELRAIPCCHYGFENKAEQVCDNPYH LLCRLFRWPDMLPLSQLKALCHCQSFRTQEGQAVCCNPFH LLCKLFRWGDLPGSARLKPLCHCQSFGAVDSAKVCCNPHH VYARLWRWPNV SKNELQKLPDCAVAPDANQDVICDNPYH

MVCKAFQWPDपENMSQLCLMPYCESP QSNHTCLNPYH ICCRLWRWPDLRTVEQLKSTPSCQTA KQSNHLCCLNPYH LCCQTWRWPDLLQSTDLKRLPACRFAGD PVVYVCCNPYH LLCRFFRWPDLQLASPLKALCCCQSFKVPGGEAPCCNPYH LMCKLYRWPELKHLHELKLLCCCEESWKKDSESVCCNPFH IVCRLFLWRDLNNSSQLKRLPVCDPNERDPVYVCCNPGH
 ( TACRLFFWPDLRNGAELKRLPDCPTAGDS DYACCNPGH LILRCFRFSHVRYDSQIKSMGSCRYQFDSSNRTDCMNPWH DCCQWRWPDLQSHHELRPLECCEYPFNAKQKEVCUNPYH

■S CQVWRWPGLRESSQRRRपPGCCSSKDA VYTCLNPYH YAHLXRWPEL HKNELKXMTYNQCPFDLKYDRACVNPHH TTCQLELWSDLMDAGELRRLPTCPSARDS VYYGCCNPLH FTCRLFFWPELRNADELKRHPTCPSA LDYVYVCCNPGH
 LLCKVFRWPDLRHCSEVKRLCCCESYGKAHPELVCCNPHH

[^0]| UniRef90_T1G2J8 | Y E RIV |
| :---: | :---: |
| UniRef90-E5RZD0 | Y ERV |
| UniRef90_G3U0J1 | LS R L |
| UniRef90-G3PXG0 | YRKV Q |
| UniRef90-W5L997 | M S R L |
| UniRef90-R7USL2 | WS R V |
| UniRef90-V9KXV2 | LS R L |
| UniRef90-F7CPE4 | LS R L |
| UniRef90_S4RV88 | L S R L |
| UniRef90-H2YRY5 | Y NK |
| UniRef90-H2YRY4 | Y N K I E T |
| UniRef90-F6X8Q3 | LS RLL |
| UniRef90_Q70MW2 |  |
| UniRef90-M9T3L2 | WS |
| UniRef90-F7CL31 | LS R L |
| UniRef90_U4TYK4 |  |
| UniRef90_UPI0003D087C6 | LS R L |
| UniRef90-UPI000359767F | Y T R |
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| UniRef90-W4WWF6 | Y QRIQ T |
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| UniRef90-L5LXZ3 | Y ERV |
| UniRef90-H2W002 | Y EQV |
| UniRef90-W5UC70 | M S R L |
| UniRef90-H9GFR9 | F A R |
| UniRef90-H3FIC0 | Y ERV |
| UniRef90-UPI000440B5B6 | Y S R L |
| UniRef90-B5LVZ2 | LS R |
| UniRef90-F7IAK4 | Y K RVES |
| UniRef90-I3K6F7 | Y S R L |
| UniRef90-U1NEL3 | Y ERV |
| UniRef90-H0Z189 | F S R L A V |
| UniRef90-H2V1Z3 | Y S RL |
| UniRef90-UPI0002742008 | Y Q R V |
| UniRef90-C3U1W3 | LS R L |
| UniRef90-H0YP36 | L S R L |
| UniRef90-E9L074 | $1 \mathrm{I}^{\text {S }}$ |
| UniRef90-H2LA62 | Y S R L |
| UniRef90-V5GYL6 | WS R |
| UniRef90-E4XJ15 | Y EKVQ |
| UniRef90-V4A702 |  |
| UniRef90-U3KEF4 | F S R L |
| UniRef90-UPI0003D0F4F1 | F S R L |
| UniRef90-H2V1Y7 | Y SRLL |
| UniRef90-B7PPM5 | WS $\square \mathrm{V}$ Q |
| UniRef90-T1KEQ6 |  |
| UniRef90_G0NB70 | Y K R V |
| UniRef90-J9AIH5 |  |
| UniRef90-T1JHA7 | WS R L |
| UniRef90_L9L2Q5 | LS R L |
| UniRef90-F6YV42 | F SRLL |
| UniRef90-K9UV32 | Y ELIE |
| UniRef90-UPI0003EE3C59 | Y Q R F T |
| UniRef90-L7MEE1 | WS MVQ |
| UniRef90-G0NK68 | Y R F L E |
| UniRef90-B3M2A4 | WF R 1 |
| UniRef90-T11311 | WS RLL |
| UniRef90-UPI00029D9A78 |  |
| UniRef90-F6RBZ6 | Y S K |
| UniRef90-J9KAL4 | WS R |
| UniRef90-D6WB20 | WS R V |
| UniRef90-W5UJ14 | Y S RLL |
| UniRef90_H3AVW8 | F S R |
| UniRef90-Q21733 | Y R WVE |
| UniRef90_UPIO003C35173 | WS RII |
| UniRef90-S4RG13 | LS KM |
| UniRef90_G5B879 | LS R L |
| UniRef90-Q297H8 | WY R I |
| UniRef90-G7YKY6 | Y ERV |
| UniRef90-B4NJZ6 | WF R 1 |
| UniRef90-E3LV95 | Y K L |
| UniRef90-E5SE16 | Y K RVE |
| UniRef90-E2ATB2 | WS R L |
| UniRef90-B4M5J3 | WY RII |
| UniRef90-K1Q889 |  |
| UniRef90-E0VS69 | WS R L |
| UniRef90-UPI000273C83D | Y EXVGS |
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| UniRef90-B4JHE4 | WY R M |
| UniRef90-E4XYE7 | YEKAQ |
| UniRef90_O15968 | WFR11 |
| UniRef90-R7VVR3 | L S RL |
| UniRef90-R0JFM8 |  |
| UniRef90_W8C5Y9 | WC R V |
| UniRef90-A7S9K9 | Y S E |
| UniRef90-A0A034WIK8 | WCRV |
| UniRef90-K71BG5 | Y R QVE |
| UniRef90-K7HHP2 | Y Q R V |
| UniRef90-UPI0004445BF5 | FSRLL |
| UniRef90-B4GDZ0 | WY RII |
| UniRef90-H3FQN1 |  |



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UniRef90-W2SJB9
UniRef90-J0XHV9
UniRef90 UPI000441CFBO
UniRef90-D6WRP2
UniRef90-UPI0000221950
UniRef90_UPI00027F3AB2

lupas_21 lupas $14^{\text {lupas_28 }}$
jnet_
conf
sol25
sol5
sol0
jhmm
jpssm


| UniRef90_F7F0M1 |  |
| :---: | :---: |
| UniRef90-E4Y782 | Y E |
| UniRef90-G5EDS9 | Y |
| UniRef90-H3FGJ6 |  |
| UniRef90-M7BIZ5 | Y E R V |
| UniRef90-W2SJB9 |  |
| UniRef90-J0XHV9 | Y |
| UniRef90_UPI000441CFB0 |  |
| UniRef90-D6WRP2 | Y R |
| UniRef90_UPI000022195C |  |
| UniRef90_UPI00027F3AB2 | F S RL |
| lupas_21 |  |
| lupas_14 |  |
| lupas_28 |  |
| jnet |  |
| conf | 520589 |
| sol25 |  |
| sol5 |  |
| sol0 |  |
| jhmm |  |
| jpssm | $\longrightarrow$ |


[^0]:    TICRDFFWPNLRDGSELKRLPTC SNERHS TYVCCNPDH VLYRTFREPNVQSSNELKLAICSR RDSTGKRVCDNPH LCCRLFLDWNLRDATELKRLPICTA RORHSTYICCNPLDH L RLFRFPWIRHD DQAKSTLNCRHQTDRKTVGCNPW LLGRLFRWPDLRHADELKAMSGCSYFAEADGPTVCCNPYH NACRLFFWSSLRNGMELKRLPACPSARD CVVTCCNPLH

