QUERY
UniRef90_H1ZCG0 UniRef90_Q26DC8 UniRef90_H8KVU2
UniRef90_UPI0002EA9CC5 UniRef90-L0FZB1 UniRef90_UPIO00424BDDC UniRef90_W2UKW6 UniRef90_UPI00037C13D5 UniRef90_UPI00041C9E33 UniRef90_UPI0002EADCB4
UniRef90_UPI00047B7713 UniRef90-UPI00047
UniRef90-TONXS4
UniRef90_UPI00029A03BA
UniRef90-X5DYP6
UniRef90_H3C439
UniRef90_UPI000374692B UniRef90_UPI0004572957
UniRef90-UPI000362DC35
UniRef90_G8T9E1
UniRef90_M4AWI1
UniRef90_COH9P8
UniRef90-H2ZXA1
UniRef90_W5LR72
UniRef90_UPI0003B33524
UniRef90_W5MYU2
UniRef90-F8W2A6
UniRef90-U1KS58
UniRef90_U1KR49
UniRef90_Q9RYI7
UniRef90_S4RX00
UniRef90_C3YA27
UniRef90_L1J9L1
UniRef90_UPI0003F0D484
UniRef90_K1QV53
UniRef90_E6SR71
UniRef90-R5V6X3
UniRef90_E7NXS0
UniRef90_UPI0002B8DE5E
UniRef90_Q64XY8
UniRef90_R7AFN4
UniRef90 G8UJX6 UniRef90_R7NW09
UniRef90_R6F578
UniRef90_G2ECN5
UniRef90_J9FP51
UniRef90_A6L7Y8
UniRef90_G8R2T6
UniRef90 R6YJU1
UniRef90_B3RQD3
UniRef90_UPI0004725ADE UniRef90_K5YSK5
UniRef90 R7V4L6
UniRef90-14A2R6
UniRef90_IOWI79
UniRef90_D0E8J7
UniRef90_A7RHJ8
UniRef90_A4AVQ8
UniRef90_A6GK91
UniRef90_UPI000479A5EE
UniRef90_F9YRW0
UniRef90_UPI00036A4260
UniRef90_A9V5E1
UniRef90_UPI00035CBA16
UniRef90_C7PIN0
UniRef90_W0EX05
UniRef90 UPI0003B70426 UniRef90_F2UG32
UniRef90-R7NQC4
UniRef90 UPI0003F60EA3
UniRef90_A6G0Z8
UniRef90_R6YWE4
UniRef90_UPI000418D410
UniRef90 W6TPQ4
UniRef90_C2FU50
UniRef90_A6E942
UniRef90_UPI00047B7676

[^0]
$N \nabla P V F N H T V L Q G K N G T G N V \quad T V Q L \quad N N Q N Y N S L$

| VQ $\square$ F N D S T $\square$ H G K Y G | ASA I VNLP P VKE Y Q DV |
| :---: | :---: |
| K VF E N VA M N G S S G F | T A N V S $\square$ P K D L S K F T A M |

VKAMDNF DHKGGWGSTHSSTFDVELPADTEKYDTL


A GNDGFANTYNHNVNFPASLAEFDTM

F T P A $\square$ GEQASATVVIP VQASNASLI

T D V VG T S A R S S VR $\square \mathrm{P}$ S A LS A F S H V

T WT L P A T MAEYDRL

QUERY
UniRef90_H1ZCG0
UniRef90-Q26DC8 UniRef90_H8KVU2 UniRef90_UPI0002EA9CC5 UniRef90_L0FZB1 UniRef90 UPIO00424BDDC UniRef90_W2UKW6 UniRef90_UPI00037C13D5 UniRef90-UPI00041C9E33 UniRef90_UPI0002EADCB4 UniRef90_UPI00047B7713 UniRef90 TONXS4 UniRef90-UPI00029A03BA UniRef90-X5DYP6 UniRef90_H3C439 UniRef90_UPI000374692B UniRef90_UPI0004572957 UniRef90_UPI000362DC35 UniRef90_G8T9E1 UniRef90-M4AWI1 UniRef90-C0H9P8 UniRef90_H2ZXA1
UniRef90 W5LR72
UniRef90_UPI0003B33524
UniRef90_W5MYU2
UniRef90_F8W2A6 UniRef90-U1KS58 UniRef90_U1KR49 UniRef90_Q9RYI7 UniRef90_S4RX00 UniRef90_C3YA27 UniRef90_L1J9L1 UniRef90_UPI0003F0D484 UniRef90_K1QV53 UniRef90_E6SR71 UniRef90_R5V6X3 UniRef90 E7NXS0 UniRef90_UPI0002B8DE5E UniRef90_Q64XY8 UniRef90-R7AFN4 UniRef90_G8UJX6 UniRef90_R7NW09 UniRef90_R6F578 UniRef90_G2ECN5 UniRef90-J9FP51 UniRef90_A6L7Y8 UniRef90_G8R2T6 UniRef90 R6YJU1 UniRef90_B3RQD3
UniRef90_UPIO004725ADE UniRef90_K5YSK5
UniRef90-R7V4L6
UniRef90_-14A2R6
UniRef90_IOWI79
UniRef90_D0E8J7
UniRef90_A7RHJ8
UniRef90_A4AVQ8
UniRef90_A6GK91
UniRef90 UPIO00479A5EE
UniRef90_F9YRW0
UniRef90_UPI00036A4260
UniRef90 A9V5E1
UniRef90_UPI00035CBA16
UniRef90_C7PIN0
UniRef90_W0EX05
UniRef90_UPI0003B70426
UniRef90_F2UG32
UniRef90_R7NQC4
UniRef90 UPI0003F60EA3
UniRef90_A6G0Z8
UniRef90_R6YWE4
UniRef90_UPI000418D410
UniRef90_W6TPQ4
UniRef90_C2FU50
UniRef90_A6E942
UniRef90_UPI00047B7676
 KMYVQNPCQNKECDEWDRFANVYVKNKKTNEWYEIGRFI T K M YVKLTCPS GGCDEWDVYANVKVTDPDSGERYEMARFI T IL L HVK F A C P D S M C A D WD Y M D RI S IIMM T K G K N D Y E I A R M T



 K M Q V T L GHPDSAAA HWD Y LD F I Y L R R S GVS K D I E L GREI T



 EL D A S L S C P G T R C A H W D H TVV Q L Y VV C C E Q N S C C N L E L M R W I T



## E

E $\begin{array}{llllllllllll}R & L & H & Y & R & Y & A & C & E & P & G & T \\ C & G & S & W & D & Y & T & T & Q \\ E & L & D & A & S & L & S & C & P & D & E & T \\ C & A & P & W & D & H & T & V & Q\end{array}$


EL D RA L A
E L E L A
E V Y A S
ELDTSLS C
ELDMSLS
$\mathrm{N}^{\mathrm{N}}$

CPDTTC
T C G

## ETN

HTV
$\begin{array}{llll}\text { WD H T } & Q & L \\ W & Y \\ W & V & Q & L\end{array}$
WDH T
D S T K L E NLL K G I I A G
G $\stackrel{P}{K}$
$Y$ LDMSLGCTEDGCPPWDHVAT LYVCCEQA $C$
$P$
$P$ TVVELMRRFMT P T I E L M R F M T LMRFMT PTIELMMRMT P NI ELLRFMT P T L E M R F M T PTVE

## WERSPS

S K F
PTV
QLDMALSCRGKRCPPWDHTVQLYVCCSTSHCQQELMRFMT S GDDYE L L R F MT D S TKLENLIGGVS GEDYELLMRFMT DLDFSLSCQDEECPHWDRTVQLHVCCDWSSCGAELGRWDS

| V | $E$ | $L$ | $M$ | $R$ | $F$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| V | E | L | T |  |  |
| M | $R$ | $F$ | $M$ | $T$ |  |

LVDFDMSCEDKNCPDWDHTARLF LCRKDDKCDLLEVARWDT ELDMSVSCPGTGCTHWDHVIRLFVTCDGSVTRSELGRWI \begin{tabular}{llll}
$V$ \& $L$ \& $L$ \& $R$ <br>
$T$ \& $F$ <br>
\hline

 $E V V V T G T C G D D D C G H W D Y E A W V E L C P D Q A G E T T E V E R T V T$ P T 

$V$ \& $E$ \& $L$ \& $M$ \& $R$ \& $F$ <br>
$I$ \& $E$ \& $V$ \& $T$ <br>
\& $V$ \& $R$ \& $F$ \& $M$ \& $T$
\end{tabular} I E V L R F M T WLE A RMSCQD LDCDMWDHVHTVSVTCDGDVQASEI GRWVT

 VKTNEYTP VLMRFFT
 DS T D D Y E L M R F FT
Y T D NQKNKY Q G I K K E $\square E I$ MRFF T E VDMF $\square$ DCPGAT CGEWD TVGS IFFLCEDAEGDRRRV DKWDT PSFRSDSTDY HGLVATETYDTPDELMRFFT


lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm


| QUERY |  |
| :---: | :---: |
| UniRef90_H1ZCG0 |  |
| UniRef90_Q26DC8 |  |
| UniRef90_H8KVU2 |  |
| UniRef90_UPI0002EA9CC5 |  |
| UniRef90_L0FZB1 |  |
| UniRef90_UPI000424BDDC |  |
| UniRef90_W2UKW6 |  |
| UniRef90_UPI00037C13D5 |  |
| UniRef90_UPI00041C9E33 |  |
| UniRef90_UPI0002EADCB4 |  |
| UniRef90_UPI00047B7713 |  |
| UniRef9 | -TONXS4 |
| UniRef90_UPI00029A03BA |  |
| UniRef90_X5DYP6 |  |
| UniRef90_H3C439 |  |
| UniRef90_UPI000374692B |  |
| UniRef90_UPI0004572957 |  |
| UniRef90_UPI000362DC35 |  |
| UniRef90_G8T9E1 |  |
| UniRef90_M4AWI1 |  |
| UniRef90_C0H9P8 |  |
| UniRef90_H2ZXA1 |  |
| UniRef90_W5LR72 |  |
| UniRef90_UPI0003B33524 |  |
| UniRef90-W5MYU2 |  |
| UniRef90_F8W2A6 |  |
| UniRef90_U1KS58 |  |
| UniRef90_U1KR49 |  |
| UniRef90_Q9RYI7 |  |
| UniRef90_S4RX00 |  |
| UniRef90_C3YA27 |  |
| UniRef90_L1J9L1 |  |
| UniRef90_UPI0003F0D484 |  |
| UniRef90_K1QV53 |  |
| UniRef90_E6SR71 |  |
| UniRef90_R5V6X3 |  |
| UniRef90_E7NXS0 |  |
| UniRef90_UPI0002B8DE5E |  |
| UniRef90_Q64XY8 |  |
| UniRef90_R7AFN4 |  |
| UniRef90_G8UJX6 |  |
| UniRef90_R7NW09 |  |
| UniRef90_R6F578 |  |
| UniRef90_G2ECN5 |  |
| UniRef90_J9FP51 |  |
| UniRef90_A6L7Y8 |  |
| UniRef90_G8R2T6 |  |
| UniRef90_R6YJU1 |  |
| UniRef90_B3RQD3 |  |
| UniRef90_UPI0004725ADE |  |
| UniRef90_K5YSK5 |  |
| UniRef90_R7V4L6 |  |
| UniRef90-14A2R6 |  |
| UniRef90-IOWI79 |  |
| UniRef90_D0E8J7 |  |
| UniRef90_A7RHJ8 |  |
| UniRef90-A4AVQ8 |  |
| UniRef90_A6GK91 |  |
| UniRef90_UPI000479A5EE |  |
| UniRef90_F9YRW0 |  |
| UniRef90_UPI00036A4260 |  |
| UniRef90_A9V5E1 |  |
| UniRef90_UPI00035CBA16 |  |
| UniRef90_C7PIN0 |  |
| UniRef90_W0EX05 |  |
| UniRef90_UPI0003B70426 |  |
| UniRef90_F2UG32 |  |
| UniRef90_R7NQC4 |  |
| UniRef90_UPI0003F60EA3 |  |
| UniRef90_A6G0Z8 |  |
| UniRef90_R6YWE4 |  |
| UniRef90_UPI000418D410 |  |
| ```UniRef90_W6TPQ4 UniRef90_C2FU50 UniRef90_A6E942 UniRef90_UPI00047B7676``` |  |
|  |  |
|  |  |
|  |  |

 PYWVGSEKLPRGWEFDVTDFKSLLTGDVELKI YTETWLAK PYWNDNSQLPRGFEFDVTDFKSMLTGNVELRIRTECWNAK PYGGAFDKWKFEWQVDVTDFSSLLRDSVEIE YKHTGYER

 PYGGAFDKWEFEWKVDVTDFSLILRDSVEE E K K KHTGYER



AF RSR GTEGRWS C G T WS
PYR
PFRRRVGHWL
P E WVDVS
PYGKRLGEDGWKWT
PYANAYPRTPWGWK
AFRRGTGHWL
AFRRRUGRWL
AFRRGTGRWL
PYASDWLQQNRKYA
AFHRGUGRWL K A T D DVV

PA

PFRRRVGHWL TDV

| $S$ | $F R R R \\| G R W L$ |
| :--- | :--- |
| $P$ | $G R P G$ |

PFRRRTGRWL
PIPLLLDATCNLTLRTVPW AK

PFRRRVGRW
PF GVRIIT DIISPLLSSDTCTFTMKTAPW A M

PFGVG
$A F R R G T G H W$
$P F G V G H Y K W E V T W Q Q D$
PFGVGYYKWEKQWEQDI
$P F G V G Y O R W N V E W S E D I$
$P F G V G F S E W A E N W E Q D$
PFGVGFYKWEVQWQQD V
PFGVGHYKWEKTWDQDIT

SFRRRIGHWL T P
PFGVGFDKWAKEWKEDI T DRI SELE
PFGVGIDQWSVSWEQNITDLYPLLE
PFRRRIGRWL TNATTFIPLI
PFGVGHFSWAVEWNQDDSQLQSLLMGEFYVGVWDDTWTKE PFGVGFPKWEEEWSQDI SQLESLVTGTFYVGVWIDTWTAE T Y KREGRWVTDI

## MAFKRRSNYWITPI

 G PY
PV
 PYRRRVGHWL PFGIKFNHKGKQWQQDI TDFAAALSNEVYDGVFIGNYDKG
 PFGVVNHNYNKDWEQDISDLASVLNDEVIVGVFIGNYDQG PYRRRVGRW
GFGVRFNHNKVKYKSEVTPLASQLQGEVWDGAYDGNWDAK PFGVNYFNDKRKYKEDVTSLIPPTDEDE WWGVFIGNYDAG PY SAPGRWVIDITPELDELAAGGELTFISAHGGQY GF GVRSYNHNKVMGQDVTPLVEHLQQEAWI GAYIGNWDAK PFGVKHFQDSVSYRQDI SLLQPKLSNEVYI GMFI GNYDAG SFGGI NHYNWSVVYKQDI TSSLLPRLLQGEVWI GVFI GNYDK G
 PFGIIKQYNYNKTWRMDUTDLKPNLSGTVYVGTFIGNYDKG
lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm



QUERY
UniRef90_H1ZCG0
UniRef90_Q26DC8
UniRef90-H8KVU2
UniRef90_UPIO002EA9CC5
UniRef90_UPI0002
UniRef90_LOFZB1
UniRef90 UPI000424BDDC
UniRef90_W2UKW6
UniRef90_UPIO0037C13D5
UniRef90_UPI00041C9E33
UniRef90_UPI0002EADCB4
UniRef90-UPIO0047B7713
UniRef90_TONXS4
UniRef90-UPI00029A03BA
UniRef90-X5DYP6
UniRef90-H3C439
UniRef90-UPI000374692B UniRef90_UPIO004572957
UniRef90_UPI000362DC35
UniRef90_G8T9E1
UniRef90_M4AWI1
UniRef90_COH9P8
UniRef90 H2ZXA1
UniRef90-H2ZXA1
UniRef90- W5LR72
UniRef90_UPI0003B33524
UniRef90-W5MYU2
UniRef90_F8W2A6
UniRef90_U1KS58
UniRef90_U1KR49
UniRef90_Q9RYI7
UniRef90_S4RX00
UniRef90_C3YA27
UniRef90-L1J9L1
UniRef90_UPI0003F0D484
UniRef90_K1QV53
UniRef90-E6SR71
UniRef90_R5V6X3
UniRef90_E7NXSO
UniRef90-UPI0002B8DE5E
UniRef90-Q64XY8
UniRef90_R7AFN4
UniRef90-R7NW09
UniRef90-R6F578
UniRef90_G2ECN5
UniRef90-J9FP51
UniRef90-A6L7Y8
UniRef90_G8R2T6
UniRef90_R6YJU1
UniRef90-B3RQD3
UniRef90_UPIO004725ADE
UniRef90_K5YSK5
UniRef90-R7V4L6
UniRef90-14A2R6
UniRef90-10WI79
UniRef90_D0E8J7
UniRef90_A7RHJ8
UniRef90_A4AVQ8
UniRef90-UPIO00479A5EE
UniRef90-F9YRW0
UniRef90-UPIO0036A4260
UniRef90_A9V5E1
UniRef90_UPI00035CBA16
UniRef90_C7PIN0
UniRef90_WOEX05
UniRef90_UPIO003B70426
UniRef90-F2UG32
UniRef90-R7NQC4
UniRef90_UPI0003F60EA3
UniRef90-A6G0Z8
UniRef90-R6YWE4
UniRef90_UPIO00418D410
UniRef90_W6TPQ4
UniRef90-C2FU50
UniRef90_A6E942
UniRef90_UPI00047B7676

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm


[^0]:    lupas 21
    lupas_14
    lupas_28
    jnet
    conf
    sol25
    sol5
    jhmm
    jpssm

