1
10
20
30
DGTQTLQGELTLALDKLAKNPSNPQLLAEYQSKLSEYTLL EAGAKDMMTELNKAEEALEKDPSNPAVLARYQAKLQEYTL D Q GVVK D L Q G Q I D E A L K NLLA A R P S D P A L L A Q Y Q S K L S E Y N L

 DTGGA Q T M M E QL E TAARK A L S D A P D N P S V L A E F Q A K L S E Y T L D D GVK DLNK QL Q D A Q A NLTKNPSDPTALANYQMUMSEYNL


E

## E

E DGAQDLK D LL D RALLA TLK KDPSNPGLLASYQSAFSSYT

$\qquad$
A LD
K GAT D $\quad$ NKK $\quad$ K A
D D

 GKLHTEEEK DRKEM | $V$ | $K$ | $T$ | $Q$ | $S$ | $Y$ | $E$ | $L$ | $S$ | $E$ | $A$ | $L$ | $E$ | $A$ | $L$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $V$ | $K$ | $E$ | $L$ | $A$ | $D$ | $E$ | $L$ | $K$ | $T$ | $A$ | $L$ | $S$ | $D$ | $K$ |
| $V$ | $V$ | $E$ | $L$ | $N$ | $S$ | $E$ | $L$ | $A$ | $A$ | $A$ | $L$ | $L$ | $A$ | $\square$ |

D S R V $V$ V $E$ L $\qquad$ $\square$ Q GDSS S D T
T K S S E Y Q T D IN N A VER R K K D P S N NEDVNKAI A AMEKNPDNPALLAELQHKINKWSV ADDANKAVNDSI A ALKDKPDNPALLADLQHSINKWSV L D S AL A DL KTDPNNPAKL A NFQASVVNEYSV Q Y K T H L TQANKANKDVNDAI AALNTKPDNPALLADLQHKINKWSV A K E A N E AVVNTA I D NLLS S S A D D P S KLL A E L Q H A I N K W S V ANDAS Q DVVN KIT ALK K K P D DPA LL A ELLQHSINKWTV
 PDNPA LL A ELLQHKI NKWSV ANAANKDVNDADKALQGNADNPALLAELQHKINKWSV SKAKQFGDELNTILADKTLEVDNPLVLAKITAMSGNYNM TK T DA D E L K S ML D D K S L E V D N PL V L G K I T A L S G N Y N M


 E D GAKNMMLDALNVAQANLELNPSNPSVLASYQAS
 LS ENADDPSKLA A L Q H T $\square N K$ WS M
Q D R VK A A M D A L K A TPD DP L L L A QL Q HEMNK Y S H


[^0]

|  | 50 |
| :---: | :---: |
| QUERY | YRNAQSNTVKVIK DVD |
| UniRef90_V5Z4H3 | FRNAQTSTVKAYKDI GAA |
| UniRef90-X8LKC1 | YRNAQSNTVKVFKDIDAA |
| UniRef90-W8V366 | FRNAQTSTVKAYKDI G |
| UniRef90-S3IMC7 | YRNAQSNVVKVYKDVASA |
| UniRef90-Q7NVC1 | YRNAQSNAVKAFKDIDAA |
| UniRef90-Q2NVJ2 | FRNAQSSTVKTFKDI GAA |
| UniRef90-A2S1N1 | YRNAQS SAVKSMKDI D |
| UniRef90-UPI0002DD7F98 | FRNAQTNTIKGFKDIDMS |
| UniRef90-UPI000366E3B4 | FRNVQTNTIKGFKDIDMS |
| UniRef90_B2XU12 | YRNAQSNVVKAYKDLDSA |
| UniRef90-M3D592 | YKNAQSNVVKSFRDI DQGI |
| UniRef90-D4IBA1 | FRNAQTSTI K A Y K il a |
| UniRef90-S6HA23 | FRNAQTNTIKGFKDI DMA |
| UniRef90_R9NLI1 | FRSAQTAVVKAYKDVGSNI |
| UniRef90-JoG5N4 | FRNAQTTTLKVYKDIGAAI |
| UniRef90_UPI0002892E23 | FRNVQTNTVKGFKDTSQ |
| UniRef90-UPI0002D6FC6B | FRNVATNTVKGFKEDDTA |
| UniRef90-V5Z7Q4 | FRGAQSSAVKAYGSI GKE |
| UniRef90-D2TZ28 | YRNLQQSNVIKALLKDVDNN |
| UniRef90-B2VEF9 | FRSAQSSTI KAYSSICKDI |
| UniRef90-U1A9N9 | YRNAQSNVVKAFKDIDAA |
| UniRef90-UPI000464CDAF | FRNAQSSAVKAMKDI DS DI |
| UniRef90-B1FB88 | YRNAQTS SVKAMKDI D S S |
| UniRef90-D2UDE3 | FRNAQSSAVKAMKDI D T Til |
| UniRef90-F5MNT4 | YRNAQSNTVKVIK DVDAAI |
| UniRef90_UPI0004756D5D | FCNAQSSTIKAYKDI ASA |
| UniRef90-V5PX27 | MRSAQSAAVKSMKE |
| UniRef90-A0A024RJJ8 | ARNAQSSVIKMFKDVDSGl |
| UniRef90_S5U3E7 | TRNAQSTSIKVI K DLA M Sil |
| UniRef90_C4S9D7 | ARQAQSNIMKSVKDTSQAI |
| UniRef90-UPI000348F762 | YRQTQSSVVKSYKDVATAI |
| UniRef90-F4NJ61 | YRNAQSNVVKAYKDLDSAI |
| UniRef90-V7YL90 | YRNAQSNTVKVFKDIDAAI |
| UniRef90-D2TZU7 | LL N Y 1 S T TI K THKENAQTI |
| UniRef90-K1ILS7 | 1 Y NINSTVTRAMKDLMQGI |
| UniRef90-I8JSC3 | 1 Y NI NSTI VRSMKDLMQGI |
| UniRef90-U1L066 | VMSLLVATVQKSDK D A M T I |
| UniRef90-C4K5N4 | MINAQT NAIKKFTDNAMAI |
| UniRef90-UPI00046A2B15 | 1 YNITNSTVTRSMRDLMQGI |
| UniRef90-U7QX38 | I Y NI NSTVTRSMKDLMQGI |
| UniRef90-U3AKN6 | 1 Y NIASTTTRSTKDVMQSI |
| UniRef90-E3BLT1 | TFNLSATTTRAI K DVMQSI |
| UniRef90_Q699P8 | 1 Y NI NSTVTRAIK K M M S |
| UniRef90-UPI00030E4EA3 | VYNINATTTRAIK C (VMQSI |
| UniRef90-N9VDP5 | VFNINSTVTRAMKDLMQGI |
| UniRef90-P95434 | 1 YNINSTVTRALRDLMQGI |
| UniRef90-K8WT23 | ARQLQSNFMKSIKDTDQAL |
| UniRef90-D1P132 | ARQLQS NVMKSIKDAAQAI |
| UniRef90-D2TXM8 | $\square \mathrm{F}$ NMNS TI TR S MRD M $\square$ Q S I |
| UniRef90-C4UAQ1 | SRQLQQ NLITKSLKDTSQAI |
| UniRef90-K8WJX0 | ARQLQS NLIMKSIKDTAQT |
| UniRef90_A0A034UQP2 |  |
| UniRef90-IODU12 | A R QLQ S |
| UniRef90-A8T5N5 | NiNAT TTRAIIKDVMQSI |
| UniRef90-S2K134 | NFSLGSTMLKLYKDLFQS |
| UniRef90-L8JG82 | VMGLQSATIKK SVRDALLQGI |
| UniRef90_C4UME6 | LRNIQSNTAKNLKDLVMTL |

[^1]$\begin{array}{lllllllllllllllllll}9 & 9 & 9 & 9 & 9 & 9 & 9 & 9 & 9 & 9 & 9 & 9 & 9 & 8 & 6 & 1 & 4 & 9 & 9 \\ B & & B & & B & B & B & B & & B & B & & & & & & & & \end{array}$


[^0]:    lupas_21
    lupas_14
    lupas_28
    jnet
    conf
    sol25
    sol5
    sol5
    jhmm
    jpssm

[^1]:    lupas_21
    lupas_14
    lupas_28
    jnet
    conf
    sol25
    sol5
    sol0
    jhmm
    jpssm

