## QUERY

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$M L I$
$M$ MLVLSRKVNESIKGDDIELTVVSIDGEQVKIGUNAPKN
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MLILTRRAGESLYL

## MLVLTRKSGENLI

 MLVLSRKQDESKI I MLVLSRKKNESIVI H





 $M L V L S R K K D Q S L M$

 | $M$ | $L$ | $V$ | $L$ | $R$ | $R$ | $K$ | $G$ | $E$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $M$ | $K$ | $V$ | $V$ | $I$ |  |  |  |  |
| $S$ | $R$ | $R$ | $V$ | $G$ | $E$ | $S$ | $I$ | $M$ | $M L V L T R K A B S I$














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mLYULTRKTGEsVTI|NDDI
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 MLVLARKTNEAIQ। MLILTRRLGES: Lil MLILTRRVGETLMv MLILSRKKNQAI HI MLTLTRSVGESI RI mLVLTRKVGESLVI MLILTRRISETMI MLVVTRKKGESILI MLVLSRSQGESVMI mLIITRKKGESLMI MLILTRRVGETIRI MLVLNRKEGETVRV MLILSRKTNQKIRV MLVLTRRRGEGVTI MLILTRKVGESLLI MLVLTRKVGEGIVI MLILYRHPQETLHI MLVLSRKKNESI MI MLVLSRKINERIMI MLILTRRVGEAIKI MLVLTRKDDEQIVI MLSLTRSVGKTI RI MLILSRKKKEAI HI MLVLTRKKGESI II MLVLTRKPGEKI LL MLVLSRKIGQSIII MLILSRKKGESIII MLVLTRKNGQSI RVG MLVLSRQRDEVIKI MLILKRKKNESIVI MLVITRKKGESFLI MLVLTRKQGEKILI MLVLSRKGMEKVYI mLVLTRKTNEAITI mLVLARRVNDSIVI MLVLTRKNGESI KI MLILTRKPTEVVVI MLVLSRKLGEGIVI mLVLTRAKGQKI MI mLILTRRNGETLKI MLILSRKDDQKIRI mLVLTRRAGESVMI MLVLSRKKGESIMI MLVLTRKPGEG| TI

## D

 $M L V L T R K L K E S I M \mid$
 $M L V L S R K K G E A$ $M$
$M$
A M
ML V L SRKPGETI CV

$M L \quad I \quad L T R R K \square G E T L D T$ $\begin{array}{lllllllllll}M & L & V & L & T & R & K & P & G & Q & S \\ M & L & V & L & S & R & K & V & G & E & R \\ L & W & I\end{array}$ ML V L S R K T D E S I M I | $M$ | $L$ | $V$ | $L$ | $S$ | $R$ | $K$ | $K$ | $D$ | $E$ | $A$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $M$ | $V$ | $V$ |  |  |  |  |  |  |  |  |
| $M$ | $I$ | $L$ | $T$ | $R$ | $T$ | $A$ | $G$ | $E$ | $S$ | $N$ | MLVLSR QRDESIMI $M L \operatorname{F} L \quad T \quad R K V V G E S V I$

 $M L V L A R K V G E S$ F M L V I T R K K GE A I L L

 | $M$ | $L$ | $V$ | $L$ | $S$ | $R$ | $V$ | $G$ | $E$ | $G$ | $M$ | $K$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $M$ | $L$ | $M$ | $L$ | $T$ | $R$ | $N$ | $V$ | $G$ | $Q$ | $N$ | $I$ |
| $M$ | $V$ | $I$ |  |  |  |  |  |  |  |  |  |





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| :--- |
| UniRef90 |
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1

 $M L V L K R K N G E T V M I G D E I V V G V L G V E G D Y V K L G F V A P K N$ MLVLSRKSGEK R ML VI SRKKGESSL L ML V L S R K K E EK K L I MLL L T R K K GE A I AII $\begin{array}{llllllllll:l}M & L & I & T & R & K & K & G & E & S & I \\ M & M \\ M & L & L & R & K & E & D & E & S & I & M \\ M\end{array}$ MLI L S R K V D EK I KI $\begin{array}{lllllllll}M & L & V & L & S & R & A & V & G \\ M & I & I & S \\ M & L & L & L\end{array}$ MLLVI SRK $\quad$ KNE K I K I $M L I L G R R K G E S I L I$
 $M \operatorname{L} V \operatorname{L}$

 MLV L S R KI DEALII $M L V L A R K V G E S I M I$


 | $M$ | $L$ | $I$ | $L$ | $K$ | $R$ | $R$ | $T$ | $G$ | $E$ | $N$ | $L$ | $R$ | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $M$ | $L$ | $F$ | $L$ | $T$ | $R$ | $K$ | $I$ | $G$ | $E$ | $S$ | 1 | $I$ | 1 |
| $M$ | $L$ | $L$ | $S$ | $R$ | $R$ | $E$ | $N$ | $Q$ | $R$ | $L$ | 1 | $l$ |  | MLVLSRKPNES LLK MLVITRKKGETLLI $M L \operatorname{L} L$ SRKKNESSI Qil

 $M \operatorname{L}$ I L T R R I G Q N L R I

 MLVISRKSGESFMI | $M$ | $L$ | $V$ | $L$ | $S$ | $R$ | $V$ | $V$ | $G$ | $E$ | $L$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $M$ | $I$ | $S$ | $I$ |  |  |  |  |  |  |  |
| $M$ | $V$ | $L$ | $R$ | $K$ | $T$ | $G$ | $E$ | $S$ | $I$ | $M$ | ML $M L V L T R K P G E T I R I$

 \begin{tabular}{l|ll|lllllll}
$M$ \& $L$ \& $V$ \& $V$ \& $S$ \& $R$ \& $K$ \& $K$ \& $G$ \& $E$ <br>
$M$ \& $L$ \& $L$ \& $L$ \& $I$ <br>
$M$ \& $R$ \& $K$ \& $P$ \& $R$ \& $Q$ \& $Q$ \& $I$ \& $M$ \& $I$

 

$M$ \& $L$ \& $V$ \& $L$ \& $T$ \& $R$ \& $K$ \& $P$ <br>
$M$ \& $R$ \& $Q$ \& $Q$ \& $M$ <br>
$M$ \& $V$ \& $L$ \& $T$ \& $R$ \& $K$ \& $L$ \& $Q$

 

$M$ \& $L$ \& $I$ \& $L$ \& $R$ \& $R$ \& $K$ \& $K$ \& $N$ \& $E$ \& $S$ \& $L$ \& $L$ <br>
$M$ \& $L$ \& $V$ \& $I$ \& $T$ \& $R$ \& $R$ \& $V$ \& $N$ \& $E$ \& $S$ \& $I$ \& $R$

 $\begin{array}{lllllllllllll}M & L & V & L & T & R & K & Q & Q & E & K & I & Q \\ M & L & I & L & T & R & R & V & N & E & T & I & N\end{array}$ 

$M$ \& $L$ \& $V$ \& $L$ \& $S$ \& $R$ \& $V$ \& $V$ \& $G$ \& $E$ \& $L$ \& $I$ <br>
$M$ \& $L$ \& $S$ \& $L$ \& $S$ \& $R$ \& $K$ \& $E$ \& $N$ \& $E$ \& $S$ \& $V$ <br>
$M$ \& $T$
\end{tabular} M L I L S R K E E E S I I V I ML V L R R R C G E R I MI MLL I L T R R K T G E T I T T I

 $M L V L T R R V G E S V V I$

 MLVV K R K K GE S I LI | $M$ | $L$ | $V$ | $I$ | $R$ | $K$ | $K$ | $G$ | $E$ | $S$ | $I$ | $L$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $M$ | $L$ | $I$ | $L$ | $A$ | $R$ | $K$ | $L$ | $G$ | $E$ | $G$ | $V$ |
| $V$ | $I$ |  |  |  |  |  |  |  |  |  |  |

 MLVLS R K K G E S I I
 ML V L R R K K N E S I Q i $M L V L S R K P G E R I: M L$

 | $M$ | $L$ | $V$ | $L$ | $T$ | $R$ | $K$ | $L$ | $N$ | $E$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $M$ | $L$ | $V$ | $I$ |  |  |  |  |  |  |
| $M$ | $S$ | $R$ | $K$ | $S$ | $K$ | $Q$ | $S$ | $V$ |  |

 $M L V V T R K Q G E S I L I$ $M L V V L D T R E C C B E S V W$
 $M L V L S R R K V E E A V V I$

 ML V V TRKKDESVLI | $M$ | $L$ | $V$ | $L$ | $T$ | $R$ | $K$ | $T$ | $G$ | $Q$ | $E$ | $I$ | $V$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $M$ | $L$ | $I$ | $L$ | $S$ | $R$ | $K$ | $Q$ | $E$ | $E$ | $S$ | $V$ | $V$ |
| $M$ |  |  |  |  |  |  |  |  |  |  |  |  | MLI L T R R I G E T L I C




| UniRef90 B | V TI HREEVLKEVLKENKQ |
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| UniRef90_18AMP5 | VALHRKEVY |
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| UniRef90-R4KB86 | VVILRGELY |
| UniRef90-F8KSV9 | TLI L R SELKEAVASENQK |
| UniRef90-UPI0002E75F6C | EI I R GELRQDI SASNTE |
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| UniRef90-I7ZJL6 | - ${ }^{\text {R E E EL }}$ |
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| UniRef90-D1A6J9 | L RVWREEVWV |
| UniRef90_E8R6S1 | V PVFRKEL L EKVSREEQ |
| UniRef90-UPI0002DB9BC5 | VHRAEI YER |
| UniRef90-LODDB1 | VGI Y REELCAP |
| UniRef90-UPI00030E59D2 | VAVNRAELQ |
| UniRef90-UPI00036DF1E2 | VNI YRGELYQEDMLANRE |
| UniRef90-UPI0003783FF5 | V P V HRLEI Y |
| UniRef90_UPI00040882B8 | MSILRKELYKEVESEN】E |
| UniRef90_UPI0003616317 | VPVLRDELA |
| UniRef90-N9WGS7 | I E I L R K EL Y K EVEET E N K K |
| UniRef90-D4M6Y8 | TQI WRKEL WDVIVAENR |
| UniRef90-B1ZR11 | VPIFRKEVL |
| UniRef90-A6W8M4 | V Q V HRQEVYDADREAN |
| UniRef90-D7GSS8 | I SILREELT |
| UniRef90-UPI00047A3113 | I QI L R K ELYKEDT E E NKK |
| UniRef90-UPI00016C4D4D | KVDRSEVAARI A A E D A E |
| UniRef90-C3XI24 | TLI LRAELTEAIIKSENTK |
| UniRef90-UPI0003B52318 | VGVDREEI YQRKQA |
| UniRef90-LODNG0 | V P V Y R |
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| UiRef90_LOEB | $\llcorner$ |

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UniRefooUniRef90_x1K7K2
mLVLTRRTGEEI I I

 MLILTRRIGENGRIGTKVSITVEEVKGDQVKVGVDAPK MLVLSRAVGEVI SI GDHITLRILEVNNLQVKLGVEAPTG MLVITRKKEETILI MLI LRRKKNESIL MLVVSRKLGER1 R1 MLILARRPGESIVI mLVLTRRPGQKI AI MLILNRRTGENLRI MLVLARKPGESLVI MLVISRKKGESILL MLVVSRKKGESILI $M L V L T R K K G E K$ I $\operatorname{L}$ I $M L V I G R E \| G E V I N$ $M L V I G R E V G E V I M I$ $M L I \quad L T R R I G G E G V V L$ | $M$ | $L$ | $I$ | $I$ | $R$ | $R$ | $P$ | $G$ | $E$ | $K$ | $I$ | $M$ | $V$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $M$ | $L$ | $L$ | $R$ | $K$ | $V$ | $G$ | $Q$ | $V$ | $I$ | $Q$ | $I$ |  | $M L V L S R K R M E Q \| V$ I $M L I L S R K R G Q S I V I$

 $M L V L T R K L M E K L I$ $M L V L S R K I D E A I V I$
 $M L \perp L Q R K T G E S I C I$
 $M L L L D S C K P$ G E T F K L $M L V I \quad G R E V G E V I N I$ M L V L S R K V N E S I I I I $M L V L T R S I G G E L G I$ $M L V L S R K A G E Q L V I$ MLILTRKDGQSLII MLILTRRFGESIVI $\begin{array}{llllllllll}M & L & V & T & R & K & N & G Q & K & M \\ M & L & C & S & R & R & V & G & S & V\end{array}$
 $M L V L T R R R G E E I V V$ MLILSRRRGQSIVI MLRLTVSPEEYLMI MLVLARKVNEAVLL MLVLSRRKGESII L MLILTRRVGETLVI MLILTRRIGESLI MLICLSLINQGEYMT MLVLRRKKGEAKI
 MLVLSRKKLESIVI MLVISRKKEESLF MLVLTRKKSQLI Q। MLVLSRKKNES I mLILTRRPGETLHI LSLSRGKROLLI MLVLSRKEGDQVL, MLVLSRKDGDKIL MLVLSRKDNEKIVI MLVLQRKPGESLLI MLVIGREGEI A MLVLGREXGEYITI MLVLGRKPGEYVVI mLVLGRKPGEYVMI MLVLTRKKGESLI
 MLVVTRKTDESLTM,
MLILTRRTGETIVI

 MLI L T R K D GES I K I


 | $M$ | $L$ | $V$ | $L$ | $S$ | $R$ | $V$ | $I$ | $G$ | $E$ | $V$ | $S$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $M$ | $L$ | $I$ | $L$ | $T$ | $R$ | $K$ | $E$ | $G$ | $E$ | $S$ | $L$ | $M L V L Q R K K G E S L L L$ $M L V L S R K V N E R I L$ $M L \vee L S R K R G E S \amalg R$

G D D I E V TVV S S K D GVV K L All K A P N D




 GKDIEITVVKIDDSSVKLSISAPKN GEDVEVVVVKLDNGSVKLSUNAPKD GKDVVSVI SKGHGLLKLGMEAPRE
 NENITVVVI ETSKGVVKLGFDAPKN
 GSDURUTVVKLEGGQVRLGUEAPSD

 GENUTHKVISVEKGVVKLGIDAPKN GDD $\operatorname{R} \| T V$ TDASGDKVKLAFEAPKE GDGAVVRVIATQGSQTKLGUEAPRN GEEIVVSVMDVQGKHVRLGFTAPKK NDEIKIIVVNATERQVTLGI EAPKE NSNUEVLILEAKKDTVKIA:KAPEN QDEVVKI QLVEVKGNQVRLG:EAPKD GDDI EVMVVGIDGENIGIGGSAPKD

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 DEQI II TVVETRGDKVRLGI
 NDNIVIKVIRGRGDKVRLGI
 GENITIKVISIEKDCVKLGIIAPKD



 GDNIKVKVIK SEAGDLRLAI DAPRD



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| UniRef90 UPI000316FC8F | V P \|V|D R A E|I H ${ }^{50} \mathrm{~S}$ |
| :---: | :---: |
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| UniRef90-W6S3D3 | I T I L R K ELL L A EVK E E N K K |
| UniRef90-UPI0004707965 | $V \mathrm{SVV}$ V E EL F E A E M N K A |
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| UniRef90-D2QZB6 | V HVVR S EL |
| UniRef90 ${ }^{-}$W0REF9 | $V A I L R G E I A A A D V A D S N R$ |
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| UniRef90_B0PA05 | $V \mathrm{~K} V \mathrm{~L} R \mathrm{KELV} \mathrm{V}$ Q TI E E NQQ |
| UniRef90_C6PPJ4 | I T I L R K EL Y K EVEHE |
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| UniRef90-Q7VJW9 |  |
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| UniRef90_L0DBY4 | V M V L R E ELLE |
| UniRef90_EOIEC9 | YSIVRRKEVVEDVK Q S N K N |
| UniRef90-M5RJI2 | VPLRRAELGSKPQT D S P R |
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| UniRef90_U2B7Q3 | I P I A R E EL |
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| UniRef90-R6FZQ0 | VQI L R K E L Y 】EVVEK E N K E |
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| UniRef90-UPI000300DEBA | V P V F R Q EL L |
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UniRef90- UPIOOO368F701 UniRef90-M5SBL5 UniRef90_M4NN39 UniRef90_UPIO00255A17A

 $M \operatorname{L} V L_{1} \operatorname{N} R R K$



 $M \operatorname{L} V L_{1}$



 MLVISRKVSESIIL | $M$ | $L$ | $V$ | $L$ | $K$ | $R$ | $K$ | $V$ | $G$ | $E$ | $A$ | $L$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $M$ | $L$ | $I$ | $L$ | $Q$ | $R$ | $R$ | $K$ | $G$ | $Q$ | $S$ | $L$ |



 ML: LTRKGGEKI KI $\begin{array}{llllllllll}M & L & L & Q & R & K & E & G & E & S \\ M & L & L & I \\ T & R & K & A & Q & E & E & I & M\end{array}$ $M \operatorname{L} I \quad L$ S R K lig E S I VI D M L V L S R K I D E TII MI | $M$ | $L$ | $V$ | $L$ | $K$ | $R$ | $K$ | $V$ | $G$ | $E$ | $R$ | $I$ | $I$ | $I$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $M$ | $L$ | $V$ | $L$ | $K$ | $R$ | $K$ | $P$ | $G$ | $E$ | $S$ | $L$ | $L$ | $I$ |
| $M$ | $L$ | $I$ | $L$ | $T$ | $R$ | $R$ | $V$ | $G$ | $D$ | $T$ | $V$ | $V$ | $I$ | $M L I \quad L T R R V G D T V I$ MI $\begin{array}{lllllllllllll}M & L & V & L & T & R & R & V & N & E & A & I & I \\ M & L & V & I & G & R & E & I & G & E & V & V & V\end{array}$ $M L \vee L S R K E G E Q L$



##  <br> $M L V L T R K R D E V I Q I$ $M L I L Q R K A T Q S L V I$   | $M$ | $L$ | $I$ | $L$ | $T$ | $R$ | $K$ | $K$ | $G$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $M$ | $S$ | 1 | 1 | 1 |  |  |  |  |
| $M$ | $L$ | $A$ | $L$ | $T$ | $R$ | $K$ | $P$ | $G$ | $M L L L S R K P G E A \| V F$

 $M L \begin{array}{llllllllll}L & V & L & T & R & K & E & E & E & A \\ L & F & I & I \\ R & R & K & E & G & E & S & I & I & L\end{array}$ MLVLKRKAGESIIV

 $M L V L S R K D G Q Q S I C L G S D T T I T I A K A T R N R L S L A V D A P R E$


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| UniRef90_UPI00037DB4D8 | $\|V\| T\|V\| H R E E\|V\| Q A R \\| D E$ |
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| UniRef90-Q3ADG2 | Y S I Y R E El WREDEKENKE |
| UniRef90_R5GSU8 | VKV TR S ELK K A R Q T N E Q |
| UniRef90-A3ZQB9 | $V R$ L L R G VVLD |
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| UniRef90-R9MFU0 | V QI L R E ELVEATKANQE |
| UniRef90-B6BMB2 | V S I I R N ELL L D VK D L N |
| UniRef90_UPI0003097F1D | V EI HR K El |
| UniRef90-A6CFR8 | I Q I S R P E |
| UniRef90 UPI000262CA71 | V P V L R E L L |
| UniRef90-C7IPT0 | IS V L R K ELL I $\quad \square \mathrm{K}$ D E N |
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| UniRef90_D5SUZ7 | V S V V R G EL A Q Q |
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| UniRef90 IOGRC1 | I S I K R E E |
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| UniRef90-Q5WSD0 | 1 P I HR F EI QK Q I M |
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| UniRef90-J9ZCW7 | LS I HR D EV WE K I M E E N K K |
| UniRef90_Q2RKH1 | V P I VREEL L |
| UniRef90-Q1IDC4 | V E V HR V EV Y K R $\square \mathrm{K}$ A |
| UniRef90-M5R9Q8 | V R I VR GEL D R K |
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| UniRef90_A7ZE51 | TMIL R S EL A N D I K N E N |
| UniRef90-E3DPD5 | E I L R K EL |
| UniRef90-D5SUV4 | V S I RRQE |
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| UniRef90-D6TYM9 | V DIVREEIVRRHHPHKS |
| UniRef90_UPIO001851348 | V SIVRGEI Y K K Q Q |
| UniRef90_UPI00047EAF16 | IS I V R G E V Y E K L H |
| UniRef90-TOIHK5 | TNI I R G E I F |
| UniRef90 UPI0004765574 | I S I V R GELA ER |
| UniRef90-I3PUZ0 | I PVVRREEVKAR】DA D K |
| UniRef90-R9M5K2 | I PVLRRGEVLERTGGERP |
| UniRef90_UPI00047E5C1E | I NI YRKEI Y E D I R T E N K E |
| UniRef90_G7V5X2 | V NI WRKEI L A EV |
| UniRef90-UPI0004010073 | V Q I L R D EL |
| UniRef90_D5SNJ0 | L R I V R GEL A |
| UniRef90_B8L491 | I EI D R T E I R A K K E A A R |
| UniRef90_LODLG5 | V T V Y R E E |
| UniRef90-M5SAL8 | V A I L R GELL |
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| UniRef90-Q8RCD4 | V T V L R K ELI E |
| UniRef90-M5UAX3 | VRILRKELL D G T D E E |
| UniRef90-H5XV78 | TII TTRGELYR |
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| UniRef90-G5FBE1 | I KI MREEL |
| UniRef90_U3H2N7 | V A V HR K EVY E R $\square$ Q A |
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| UniRef90-UPI00034D5BA5 | V P V HRQE I Y ER L L E H G Q |
| UniRef90-D6TEE9 | $V$ SIVREELLR SV |
| UniRef90_C4Z3H1 | L N I V R S K V L S R K K D |
| UniRef90-A6C3S9 | I R V I R G ELL E |
| UniRef90-N1ZAB2 | I S I V R S ELLEAASANKE |
| UniRef90-R6V978 |  |
| UniRef90-E0QLC9 | I S V L R K EVVEA A K D E N E |
| UniRef90-B2TR36 | I E I V R G EVYYEK |
| UniRef90-F0SJ22 | $V \mathrm{P} V E R \mathrm{GEV}$ V D R |
| UniRef90-F0SQL3 | $V P I V R P E A A N P V Q S E G R N$ |
| UniRef90_G9EJ42 | 1 DVDRKEDFLRKQAN |
| UniRef90_U3HBQ4 | V P V H R E EI Y R R $\square \mathrm{QQ}$ |
| UniRef90-UPI00029AACDF | V R V M R G EL |
| UniRef90_UPI0003786A30 | MKI Y R K EVVEA I E Q S N K E |
| UniRef90-D5XCV0 | VAIVVRKEILDEVRAENKE |
| UniRef90-K5DNV3 | I R I L R K EL CNKAVEE |
| UniRef90-B1HN48 |  |
| UniRef90-F6CQT1 | V HIVRAELVEKDREQQEE |
| UniRef90-D6TXG9 | $V \mathrm{D}$ I VREEIVRR |
| UniRef90-171264 | I DII DREEI YK K LQ Q E Q A E |
| UniRef90-F5L437 | I P V DR T EI Y Q |
| UniRef90-A0A024E886 | V NV HRAEVYDR】Q |
| UniRef90-E3PUM5 | V S I I R K EVLD E T K S E N K |
| UniRef90-UPI000368F701 | V T I L R D EL V D |
| UniRef90-UPI000368F701 | V T I L R D E L V D |
| UniRef90-M5SBL5 | TAV SR G EL |
| UniRef90-M4NN39 | $1 \mathrm{~A} V \mathrm{D}$ R K EV |
| UniRef90_UPI000255A17A | V D V $\mathrm{MR} \mathrm{D} \mathrm{E} \mathrm{L}^{\text {L V E }}$ |

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 $M L \operatorname{CI} S M K P G E Y F T V G G S T V V Q L D R L T G D R V H L T V N A P R E$ $M L V L T R R D G E Q D F I D G Q \| Q I K V L F V R N G N I A L G I Q A P P N$

 LI L GRRQGESLEI GRTIVVEVAM』LGSQVRIGIQADRD $M L V L E R K D G Q K V V I D N G I V V K V L K P H G D M I R L G F K A P Q N$
 $M \operatorname{MLI}$
 MLRLSSS TEEYLLI


 $M L V L T R K T N E T I Q L G G Q I T I T V V N V G G G R V R L G I Q A P S E E$
 $M L V L T R K F G E S I R I G E T L E L R \| V K L H G S S C R L G F D G S K T$






 $M L S L Y$ L K D G E Y L $M \operatorname{L}$ H





 $L L J L S L K Q G E Y L N I G D N I R V V Y A G G A G N H I R L L V D A P R D$
 MS R R Q GETI LI G D QI E IVI AH I GRSRVKVG $M L I L S R K V G E A V V L D E K I T V R V I D I S K G V V R I G F D A P N D$ $M L V L T R K P G E E I V F N H N D R L R I V D T P G G F V R V G D D S P E$


 LVI GRRPGQTI HL GEQVTLEVVVWLRGRQARLRFTAPMQ $M L$ FLTRREGENI MI GDGI HI QVLSVDAGNVRIQDEAPDF

 $M L V L T R K E N Q S V V I D N E V K V V V L E V I G N T V K L G I Q A P N S$
 $M L I F E R R A G E R L Q \square G D E I E V R V L D T D G E R V R I A V E A A P R D$ V T I V D I R G N KV R L GI T A P K N










 $M \operatorname{L} \operatorname{R} L$

 MLIVGREI GQSVII A DVI KVTVLQD GSKLRLAI DAPQH
 L I L T R R V G E R L M I MLLLTRREGEN LI

 | $G$ | $E$ | $D$ | $I$ | $M$ | $I$ | $V$ | $G$ | $V$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $R$ | $G$ | $N$ | $Q$ | $V$ | $R$ | $L$ | $G$ | $D$ |





| $Q$ | $T$ | $A$ | $V$ | $D$ | $G$ | $H$ | $l$ | $E$ | $I$ | $R$ | $L$ | $L$ | $Q$ | $C$ | $R$ | $A$ | $G$ | $R$ | $V$ | $R$ | $I$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $G$ | $G$ | $I$ | $D$ | $A$ | $P$ | $E$ | $S$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| UniRef90＿UPI00036D9D5F |  |
| :---: | :---: |
| UniRef90＿G8VS16 | V SVMHREEI Y Q RIGQAEKS Q |
| UniRef90－UPI000288D9A5 | $V \mathrm{~K}$ I T R GEVWEEKQ |
| UniRef90－W5Z328 | $V A I N R E E V F N R \\|$ I D Q K P Q |
| UniRef90＿R6YTH3 | V D I VR S K V L E K A HPE $\square$ R E |
| UniRef90－A6C5C4 | $\mathrm{L} \mathrm{R} V \mathrm{~V} \mathrm{R}$ A |
| UniRef90＿B0P7Z0 | I KI ERGEDFE |
| UniRef90＿R9M7C8 | V P I LR G AVLERS G G E R P |
| UniRef90－D1RHT3 | V D V D R E El |
| UniRef90－N1ZJD9 | MS I ERGENYEKTHD |
| UniRef90－D6TGQ9 | V DIVREELLQR |
| UniRef90＿D3SGT8 | V E I V R S EL L ERARQE |
| UniRef90－D3HTI6 | MDI NKEE』YLR |
| UniRef90－E8LHC7 | V P I E R |
| UniRef90 R5EP45 | V S V K R |
| UniRef90－14MXV2 |  |
| UniRef90＿UPI0003777D38 | L S I RREEI Y VR $\square \mathrm{KR} \mathrm{R} \mathrm{D} \mathrm{T}$ |
| UniRef90－R5VJ26 | V NI DR S SVLEK DNPELKE |
| UniRef90＿X1Q2P7 | I PVNRKEI YQLIQREN |
| UniRef90＿S7TEF1 | V P V Y R E ELY VK\VKE Q N S |
| UniRef90－A3ZNQ1 | $\checkmark$ S I I R |
| UniRef90＿R7N1D2 | V NIVRSS MLE K |
| UniRef90＿D5SXW6 | V R I ERLE |
| UniRef90－X1KHF5 | I P V H R K EVLQ |
| UniRef90－UPI0003642845 | M P V R R E S L L |
| UniRef90－X0TGB7 | FQI LRREL |
| UniRef90＿R6ESA9 | VNIVRRK A I E K R $\square$ Q D |
| UniRef90－R5HHZ2 | $\checkmark \mathrm{R}$ I A R S TV E Q |
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| UniRef90＿D5SMQ8 | I RI CREE』 EPHNENTE |
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| UniRef90＿D4JII9 | M N I S R S |
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| UniRef90－Q3BZX7 | V P V HREEVAARIR A E |
| UniRef90＿R9M5C8 | MTI L R GEVLERNGDE |
| UniRef90＿U9EVV3 | $\square \mathrm{M}$ I YREELLHRSK G S Q T E |
| UniRef90 F8LEF6 | T P I YRNEL $\quad \square \mathrm{NEENEQ}$ |
| UniRef90－K2CEM3 | V Q V D R L EV F ER |
| UniRef90－D1RHQ0 | T D I D R E EI Y I R K K S R |
| UniRef90－R9K8F0 | Y NIVRSEALGR |
| UniRef90－R5DWK4 | VNIVRSSVKKA |
| UniRef90＿D5SZG9 | V Q I AR S ELVDE |
| UniRef90－R7IXB8 | Y N I VR S RVLEK T Q N E K E K |
| UniRef90－H8Z1A8 | WNI YR G EL |
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| UniRef90－I0IR69 | M S V H R D E VF D R $\square \mathrm{MEENR}$ K |
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| UniRef90＿UPI00029ACFB4 | V S V R Q |
| UniRef90－A6C0Q1 | $V \mathrm{SV}$ N R A E $\square$ R K L V Q Q |
| UniRef90＿E8R6X2 | V K I L R T ELL |
| UniRef90＿UPI000462A53F | V A V |
| UniRef90－R6MXE9 | V K I VR S K A DK K Y M K D K E |
| UniRef90－UPI00022CA8A0 | I S I H R E EVY N R I N Q S Q |
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| UniRef90－A4J787 | MDIVRTELLE |
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| UniRef90－R7HER3 | 1 NI A R S |
| UniRef90＿UPI00016BFB09 | I KI LR K EVY D E \ I K S N K |
| UniRef90－R9LZQ7 | 1 P I V R G TVLEQQGRERP |
| UniRef90＿A6FS91 | $\checkmark$ NVER |
| UniRef90＿R7R3L3 | V N I A R G R A DE K R A A T E K |
| UniRef90＿UPI00029B4C61 | WHI R R E E L |
| UniRef90－17HXS3 | $\square \mathrm{D}$ I D R K E V F $\square$ R |
| UniRef90 W1SLV2 | M R I |
| UniRef90 ${ }^{-}$W1SLV2 | M R I |
| UniRef90＿X0YUE6 |  |
| UniRef90－A0A038GFX6 | VTVQQCK DVDSEVT DLTK R |
| UniRef90－R5YB20 | L R I S R S |
| UniRef90＿UPI00036E26F8 | V Q V V A E L VER |
| UniRef90＿UPI00036E26F8 | VQIVRAELVER |
| UniRef90＿T0ZH71 | V R V HR D EVL R R I E E E N R N |
| UniRef90＿UPI00037CD1EE | MRVVREELL NGVDEA D N Q |
| UniRef90＿A0A038GM61 | $\overline{\mathrm{V}} \mathrm{E}$ A Q S R NVVGNE\VTGRKP |



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[^0]:    lupas_21
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    jpssm

