## QUERY

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10
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 S QI Q K WG N S L A L R I P K A L A Q Q V G L T Q S S E V E L L L Q D G Q I V

QVQKWGNSLGIIRIPKSLALKVGLEEGSEVDLDVEDGHLV
$V$ K K W G N S A S V R I P A S I M A S A S L R I D Q E V D V R E E E G R I I

ATI RKWGNSAAVRMSAAVMEEARLEIDDPVDVRVEEGRVV

I K K WG N S L G V R L P A A I A R A A R L H I D QRVVHMSVE D G A I V
T K V Q K WG N S LAI RI PSHIVVEQLAIIHQGSEMEDRVEDHKIL
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T R L A R WGNS QA V R L P K S V L E Q S G MA L G D E L E VVRVQN GA I S




T Q Q K WG N S L A L RIP K G I A E EA H L Q Q R T P V EIIRMSE GQIV


S K V K K WG N S A A V R I P A F I LAA A A HVVALD Q TVVEV REE Q G R I


Q T L K R W G N S L A V R I P A C V A Q E A H F A E G Q E V DVV $\operatorname{C}$
S K V Q K W W N N S L A I R I R R R S I A D D Q L D L
QI K K WG N S A V V R L P A T MLLA QL N L S V G S P V D L K T E G D R L V
KI AKWGNS LGIIRIPKHLAEQVQLQEGDEI EISTAEDKLI

S S I G K W G N S L G L R R P P R H I V E E L S L H P N D E V
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I K K WGNSLAAARI P K A I A D MI GLLHLNQKI NDKAENGKI I
AKIQKWGNSQGLRIAKHLLDMDAKLDVGDEVDISVQDGVLI
QK WG N S LDA L R I A P K S F A E E T G V K A G C T V D L S







S 1
A

$K V V Q K$
T I K H W W G N S L G G V R L





T IVVSK WGN S LAA I R I P S N L A E S L N I K E G S E V E L S I M D S T L T

A HVVYK WE N S L A V $V$ R L


I K K WG N S K A V R I P N N I L N A L N L H E N D K L N I E V V D D N Q I








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S K I K K W G N S L A I R L T K K E L E E Y GLLK E G D EVV

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$K V Q Q K W G N S$ Q Gll RI S K E I L A A E L N N L L E E D D
L A K WG N S L A V R I P G E CAR QA H V K A G D A L E I E V S T G D L R
STVK Q WG G S LA I R L P K S I V E A L Q L Q A E D A V H L K A R G G T L I
KVA K WG H S L A V R L P L Q I V R Q A GL K A G D NV TIISA Q D G SVI

$T$ T R K $\square$ G N S E GVV II P K E T L D R L G L K A G D S L E L Q M E N G G T T

KI QQWGNSAAI RLPANVLKQMSLSSGDVLDLDASAEVI T

T
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Q V $V$ S K W W G N S






Q V
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A V RKWGN S
T K K M WG N S A A V

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\mathrm{S}
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S

## S



 A I K K W W N S S G V V L P S L L L L K K K L G V T T G Q H L D A E I K N G S L I
A

TRWGHSLGRRLP

TKI Q K WG N S L A L R R I P A T Y L L E E S K F S D D E P L V I T A E E G R I
S
T

| $C$ | $E$ | $A$ | $Q$ | $A$ | $A$ | $G$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $K$ | $E$ | $V$ | $L$ | $D$ | $R$ | $F$ |
| $G$ |  |  |  |  |  |  |


K V S R WG N S L A V V R L P T A L V D K L D L Q E G D E L N V V V V E R T L V
$T Q V K T W G N S Q G T R I S$

T L



S R
SR K Q W G N
SRIVKWGNSKAI RLP

## K D F $\quad 1$

 A $\mathrm{T}_{\mathrm{L}}^{\mathrm{L}} \mathrm{G} \mathrm{N}_{\mathrm{L}} \mathrm{T}$ E

T K I A R W G N S Q GI MI P R A V L R E A GILEVVGR V E I
T R I K H WD N A A A I R L WS R L L A K T GLL DVVS S K V S I R V Q D N K V I
 QL A K WG D D F A V V L








T T L Tr K lll


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| UniRef90-E1QDD3 | 1 |
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| UniRef90-G2H1V5 | V |
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| UniRef90_U8LPP7 | V T KV |
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| UniRef90-H8NZB6 | 1 R |
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$\begin{array}{ll}\mathrm{T} & \mathrm{R} \\ \mathrm{A} & \mathrm{T}\end{array}$
A

T|L|QKWGNSQG|I R|L|SKS|LLIRETG|ITEKATFE\|EVVNKKELV
 RLKKWGNSLGFRVPHRLVESLGWDDTCLLELQEQGETLI


 QV $V$ K $Q W$ W G N S K A
 $T \mathrm{~N}$ I I R
T K L I K I G N S T G V A I P R E V L A A A A H M A R G E E V


T R V F K S G N S L A Al RIDP K E L L A F M G A A Q D V E I E K V G N A L V


L K Q W G N S M AVVRL P K S V L T Q A GIV G N S P TVV DIVSVNND K EI

S E I K R WG N S L A L


TSLR R K S



KI GRMGNS L GVVSLPKAMADKMNI SQGDEI EI ENEHGEVV
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A QVF Q WGK S LA V V R
 K V R K I G N A E G VV VI P K A L L R K L G WK A G D QL E L S A T D N T I R Q I K K WG D S A A IVPI P A P I M A A V A LRRDD Q EVVEVRE E E GRIV
 T I R A F G N S K GVVVLPPK T L L VQA G L D T A QV A DV QVV D G S I V
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TKLLKKWGNS Q G\| I L P K E T L K QA G V VEDVS FDII STRHEI I
KLHK $\square$ GNSLGATFPKEVLEQLNLQEGDALTLVIEDG

 T K I T K $\square$ G N S Q G

 AK LVRDGNSRGL | L | R | L |
| :--- | :--- | :--- |
| T | A | P |
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T $\square R \mathrm{~K} \square \mathrm{G} N \mathrm{SEGV}$ \begin{tabular}{llllllllll}
$K$ \& $P$ \& $L$ \& $L$ \& $E$ \& $E$ \& $A$ \& $G$ \& $L$ <br>
\hline


$D$ \& $E$ \& $V$ \& $D$ \& $H$ \& $A$ \& $A$ <br>
$D$ \& $G$ \& $V$ \& $L$ <br>
$D$ \& $L$ \& 1 <br>
$K$ \& $V$ \& $E$ \& $D$ \& $G$ \& $K$ \& $I$
\end{tabular} Q T I QE WGNGLGVRIT



T T I K R WGNSQGI II PKT\|LA K
T K V F Q S G N S Q A V $\begin{aligned} & R \\ & T\end{aligned}$
A Sin P K AVLA QL GLSE
A QVKEWGNNQETRLSKDI RKSAGIELNENLDVSVANGVI T K L C K I G N S L G V M L P K E V L E K F K L S S E G D S L S L I E T K E Gl Q
 AKVFKSGNSVALRLPK $K V R K \ G N S L G V L L P K \quad E L G F A A G$
T R L R K V G N S Y GFTil P K E LMD KY N L N E G





T KL R S WGNS Q GI CI SK DMLK S DD WVNGEKVELGLEKGQI I
TKLRSWGNSQGVCDSKDMLKSLDWVNGESVEAVADKDQ



R L K K WG N S I G L L I P P H P L A I I S WG FD E S
 T L S R W G N S S G I R I P N Q

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| UniRef90-E1VPI9 |  |
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 R R LRGGSLGVTLPAQEVRELGLEEGTPVEVQVDHQRVIT T


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GS SLIITLPKQWAKKLGDKVGD
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TKVFKSGNSQAVRIPKQFAEE
EVEITREGGREV
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