QUERY
UniRef90_UPI000476DD89 UniRef90-K9W4V9 UniRef90-UPI000 UniRef90_UPIO00349E460 UniRef90_UPIO0040E9099 UniRef90-UPI0003F836AD UniRef90-A0A023DDH5 UniRef90_UPI0002D824FC UniRef90-Q1ASJ6 UniRef90_UPIO00423B145 UniRef90-UPI0003634B2E UniRef90-UPI00036F1283 UniRef90-UPI00036B9594 UniRef90_Q3M6B7 UniRef90-L8JRD8 UniRef90-UPI0003602310 UniRef90-14EEJ4 UniRef90-Q3JDW0 UniRet90_UPI00047AAD53 UniRef90 X0R6V4 UniRef90-V4TBC8 UniRef90-UPIO00404944B
UniRef90 H8GQV0
UniRef90-LOIEM1 UniRef90-W4QGV4 UniRef90_LOEAZ1 UniRef90_UPI00047B980C UniRef90-V2GG17 UniRef90-M0MLY9 UniRef90-G4HM30 UniRef90-L7VLT3 UniRef90-K8RFI8 UniRef90-UPI00040C2046 UniRef90-UPIOOO4700950 UniRef90-K9GZ01 UniRef90 B4UEE4 UniRef90-UPIO0036565C4 UniRef90-UPI00037F9F2A UniRef90-UP10003 UniRef90-Q5P1W0 UniRef90-F7XJ28 UniRet90_UPI00047CEA28 UniRef90_A0A059IIT5 UniRef90_A1K6C9 UniRef90_UPI00047ADFD3 UniRef90_T0CJ66 UniRef90-Q1QG35 UniRef90_D1CHI6 UniRef90_A4XI96 UniRef90 UPI00046F245A UniRef90-Q1AVD1 UniRef90_UPI00037F4514 UniRef90 B8E1T9 UniRef90_UPI00037F147F UniRef90-T2RSR1 UniRef90_UPI000463B635 UniRef90_A0A022LR85 UniRef90_D3T1J3 UniRef90-D7BCW4 UniRef90_C1D3V6 UniRef90_F4FEU2 UniRef90-B4CX96 UniRef90_UPI0003F8E244 UniRef90 SOFLM7 UniRef90-W8R4Q1
UniRef90 C8WTL0 UniRef90-F6EGD4 UniRef90_U2C089 UniRef90-X1AZK5 UniRef90-UPIO003B3386C UniRef90_M1NKZ5 UniRef90-A6UGR7
UniRef90-F7XJ26 UniRef90-A7B62 UniRef90-UPI00046E6084 UniRef90_A4FCU6 UniRef90_UPI0003B33AF9 UniRef90 UPI00034CFDB2 UniRef90-X0TE00 UniRef90-X0TE00 UniRef90-D6TKZ UniRef90-L8P6K9 UniRef90_D6TBT9

1
10
20
HMNGARKWFFPDGY TP NGKRGYLVSHESDCTMNTGDETAK


EA $\quad \begin{array}{lll}G K & L & R W A \\ G R R W A\end{array}$



EA

GR T C WA A | A |
| :--- | :--- |
| P |
| I | QKGETHWD



## A K

 MLGGTT TWA QK GET $\quad$ WWY $\begin{array}{ll}A K G S \\ Q \\ A \\ A & G \\ Q & W \\ R\end{array}$E MTGKHTWAI

K GETLW
GSRVWF
$A \square G K N R W A$
$M T G K H ~ T W A$
K GDTHWl



K GETQ WI

EAVGCTVWA


E

E P GKTTWAI | M |  |
| :--- | :--- |
| M | I |
|  |  |
| I |  | AVGRRVWAI

I GHKVWAV A L G K K V WVV A I GHRLWA GALVWLV PGWI GT TCWAI G D GWi
 GATRWA G G GWWIP P G D DPA L R S YLT GKQQWALP DLYWPATDNGSYVSHESVGLNSGREDAD EAVCVLNTSDQEAD


 GKKKWGFPGGF $\quad$ TP T GKEPEMESHEAACFLNAAETAAA YTYSIPDA YWHSKSNGCFPSHESVCVLNAGRKPA H $M \square G K R H W V I A E G Y L P A P D E P A L R S H E T A C C L N A G P D E A V$ R WL I A D GF I P S T S Q G QLAESHESMCIVVNP H S NDAS P $\square$ GHRRWAFTA GNIPS GPEPEFTSRDELCILNAGSADAC MEYKYK WY IP DA Y L HS R GTGYFTSHEGCAFI NETGRDA H
 GRTTWVFSAGFAPTGREPEFTSRNTLCLLNTGDTPAC



E GDGAYVWVIP D GYMPAEKEGGYFSHESDCDSNTADDDT R $\square G G H E F A L A G G V V P H G A E P E F T G Y D L L C V L N A A D Q V A E$
 GSTTWYFAEGSV
QAPANTTWYFAEGAV
QUERY
UniRef90_UPI000476DD89 UniRef90-K9W4V9 UniRef90-UPI00036F237C UniRef90 F8FIF7 UniRef90-UPIO00349E460 UniRef90-UPI00040E9099 UniRef90-UPI0003F836AL UniRef90_A0A023DDH5 UniRef90_UPI0002D824FC UniRef90-Q1ASJ6 UniRef90-UPIO00423B145 UniRef90_UPIO003634B2E
UniRef90_UPIO0036F1283 UniRef90-UPIO0036B9594 UniRef90-Q3M6B7 UniRef90_L8JRD8 UniRef90_B2FTJ4 UniRef90-UPIOOO3602310 UniRef90-I4EEJ4 UniRef90-Q3JDWO UniRef90_UPIO0047AAD53 UniRef90-X0R6V4
UniRef90-V4TBC8 UniRef90-UPI000404944B UniRef90-H8GQV0 UniRef90-LOIEM1 UniRef90_W4QGV4 UniRef90_LOEAZ1 UniRef90_UPIO0047B980C UniRef90-V2GG17
UniRef90 MOMLY9 UniRet90_M0MLY9
UniRef90_G4HM30 UniRef90-L7VLT3 UniRef90-K8RFI8

## UniRef90-M0LKR6

 UniRef90_UPI00040C2046 UniRef90_UPIO004700950 UniRef90-K9GZ01 UniRef90-B4UEE4 UniRef90_UPI00036565C4 UniRef90-UPIO0037F9F2AUniRef90 UPIO0038155E4 UniRef90-HOTVM4 UniRef90-Q5P1W0 UniRef90-F7XJ28 UniRef90_UPI00047CEA28 UniRef90-A0A059IIT5 UniRef90-A1K6C9 UniRef90_UPI00047ADFD3 UniRef90_TOCJ66 UniRef90-Q1QG35
UniRef90-D1CHI6 UniRef90-A4X196 UniRef90_UPI00046F245A UniRef90-Q1AVD1 UniRef90_UPI00037F4514 UniRef90_B8E1T9 UniRef90-UPIO0037F147F UniRef90-T2RSR1 UniRef90_UPI000463B635 UniRef90-A0A022LR85 UniRef90_D3T1J3 UniRef90_D7BCW4 UniRef90-C1D3V6 UniRef90-F4FEU2
UniRef90-B4CX96 UniRef90_UPI0003F8E244 UniRef90_SOFLM7 UniRef90_W8R4Q1
UniRef90_C8WTL0 UniRef90-F6EGD4 UniRef90_U2C089
UniRef90-X1AZK5 UniRef90_UPI0003B3386C UniRef90 M1NKZ5 UniRef90_A6UGR7
UniRef90 F7XJ26 UniRef90-A7B621 UniRef90_UPI00046E6084 UniRef90-A4FCU6 UniRef90_UPI0003B33AF9 UniRef90_UP100034CFDB2 UniRef90-XOTE00
UniRef90- XOTE00 UniRef90_UPIO00470E3DE UniRef90_D6TKZ4 UniRef90_L8P6K9
UniRef90 D6TBT9

## 

 3ПR TT F DFED ${ }^{50}$
60
70
VTVTAYF

## 

## I

## V

L K V T







$\stackrel{L}{\mathrm{~L}}$






 | $L$ | $E$ | $M$ | $T$ | $Y$ | $H$ | $S$ | $D$ | $G$ | $D$ | $P$ | $V$ | $P$ | $Y$ | $P$ | $V$ | $Q$ | $V$ | $A$ | $A$ | $Q$ | $R$ | $V$ | $R$ | $H$ | $V$ | $R$ | $V$ | $N$ | $D$ | $L$ | $I$ | $D$ | $P$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $L$ | $Q$ | $A$ | $V$ | $P$ | $Y$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $E$ | $L$ | $T$ | $L$ | $Y$ | $Y$ | $A$ | $N$ | $G$ | $E$ | $A$ | $G$ | $P$ | $Y$ | $P$ | $L$ | $S$ | $V$ | $A$ | $P$ | $E$ | $R$ | $V$ | $R$ | $H$ | $V$ | $R$ | $V$ | $N$ | $D$ | $L$ | $I$ | $D$ | $P$ |
| $Y$ | $A$ | $P$ | $P$ | $Y$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |







 VR FT FY F Q D R E P MTY T SVVVPARRTKHAR F D L M M A V P M NVGY




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


 Vegrtrhitasle elp gilpy VFTQYLFENRPSLT WSYTVPGRBTRSVNFNELGSASAPUV




