## QUERY UniRef90_I4N794 UniRef90-U3HDV2 UniRef90_14WGW4 UniRef90-Q31EC8 UniRef90-G7URI9 UniRef90-R8B4K5

 UniRef90_UPI00047DE9B9 UniRef90-UPI00047EF8B1UniRef90 UPI000365F896 UniRef90-UPIO004746C48 UniRef90-G3IVY8

## UniRef90-E7RU98

 UniRef90-UPI000 UniRef90-G8QJZ5 UniRef90-G4SUK7 UniRef90_B4X0G6 UniRef90_UPIO00469BD65 UniRef90-K4LOP9 UniRef90_R5MAI7 UniRef90_UPI000463C57F UniRef90-UPIO00360D607UniRef90 UPI00036C5FD0 UniRef90-UPI0003
UniRef90-E6QPU6 UniRef90-E3HF47 UniRef90-X1TCE7 UniRef90-A0A031MEQ2 UniRef90_UPI0002E4E7AF UniRef90_UPI00047C2267 UniRef90-GOAHE5 UniRef90_UPIO0039589AA UniRet90_W1N2M6
UniRef90_Q8RBS8 UniRef90-W6M841 UniRef90-A0A023Y8K6 UniRef90_UPI00035E91F4 UniRef90_UPIO0022609B6 UniRef90_UPIO0035EC424 UniRef90-D9SC90 UniRef90_UPIO0047705D2 UniRef90_Q2KYE5 UniRef90-D6SLP2 UniRef90-W8X1B7 UniRef90-UPIO0037FC47A UniRef90_D1KE42 UniRef90-C8X0F7 UniRef90-H8MH61 UniRef90_K2L3L9 UniRef90-R7IMC2
UniRef90-P57002 UniRef90-R5IZB5 UniRef90_UPIO00378CBC4 UniRef90_M5DIP5 UniRef90-UP100035DE75F UniRef90_C1A8YO UniRef90-H1XR12 UniRef90_UPI00035FA2C6 UniRef90-UPIO00415D4A1 UniRef90_UPIO004164BD8 UniRef90_B6BUH6 UniRef90_UPIO003B3407C UniRef90_J2ZRJ5 UniRef90-W8L1W6 UniRef90-R6TQ35 UniRef90_E3IEB0
UniRef90_R6GTP1
UniRef90_UPI000464FCB0 UniRef90_UPIO0040A06BF UniRef90_Q5L332 UniRef90-WOTP72 UniRef90-A7C2H8 UniRef90-WOSCG1 UniRef90_UPIO00225E460 UniRef90-R7KDD5 UniRef90-E4TJU3 UniRef90-UPIO00378CF00 UniRef90_G4CGM2 UniRef90_UPI0003B4D8B6 UniRef90_UPIO00478A435 UniRef90-D4MAT9 UniRef90-B6BJ87
UniRef90 $56 \mathrm{HYB4}$ UniRef90-TOHQ45 UniRef90-K2FMU9 UniRef90_UPI000381A835 -

##  <br> 

## P <br> $F$ $F$ <br> <br> P

 <br> <br> P}[

.

## $$
-
$$

$P$ Q
$P$ K
$P$ T
ST

## mix



$$
7
$$

$$
\pi
$$



P
P A
$\stackrel{P}{P}$

P
P P A MIN T P E MRF QV D E S R K FA V i D E V L D R L E A E G A D V N R T D

 PVMANTPELRRFPVPEDRKFAAI E EVVRERLSQAGAQMNVL D

$P Q$
$P G$
PSYYSTE
 Y Y H T D E DK V K T T D E L K F K IV D A I K E Y A DN N N Y D I D T T D
 PRYAATPETRVACPEEKKPAAIAAVVKNQFAGRYPVVDVD
 $P R Y Y S$ PNAISTPELNIKMNEGEPHALVAKLRAKLLPGARELITID P A M V N T P E M R F Q V D E A R K F A A I A E HYEATP E L K Y K S T D E K K DE V V E K V DE Y CKKK H Y N I N T ID





 P E EIS T P E I N I S V C D D T K F S I I E QMQQ GE Y P Q G N K NII D



20
30

 ATQRDA

- ${ }^{10}$

 GN
A
A
A保


PRYAATP
DA
PRAl
HYEATP
PVYNTP
RYGGG D

## QUERY <br> UniRef90_I4N794 UniRef90-U3HDV2 UniRef90-14WGW4 UniRef90_Q31EC8 UniRef90-G7URI9 UniRef90-R8B4K5

 UniRef90_UPI00047DE9B9 UniRef90-UPI00047EF8B1UniRef90 UPI000365F896 UniRef90-UPI0004746C48 UniRef90_G3IVY8
UniRef90-E7RU98
UniRef90-UPI00047CFFBD UniRef90 H8L277
UniRef90_G8QJZ5
UniRef90-G4SUK7
UniRef90-B4X0G6
UniRef90-UPIO00469BD65
UniRef90-K4LOP9
UniRef90-R5MAI7
UniRef90_UPI000463C57F UniRef90-UPIO00360D607 UniRef90-UPI0003
UniRef90-E6QPU6 UniRef90-E3HF47

## UniRef90-X1TCE7

 UniRef90-A0A031MEQ2 UniRef90-UPIO002E4E7AF UniRef90_UPIO0047UniRef90 GOAHE5 UniRef90_UPIO0039589AA UniRef90-W1N2M6 UniRef90-Q8RBS8 UniRef90-A0A023Y8K6 UniRef90_UPI00035E91F4 UniRef90-UPIO0022609B6 UniRef90_UPIO0035EC424 UniRef90_D9SC90 UniRef90_UPIO0047705D2 UniRef90_Q2KYE5 UniRef90_D6SLP2
UniRef90_W8X1B7
UniRef90_UPIO0037FC47A UniRef90_UPI0004660FF4 UniRef90_D1KE42 UniRef90_C8X0F7 UniRef90_H8MH61 UniRef90_K2L3L9 UniRef90-P57002 UniRef90_R5IZB5 UniRef90_UPI000378CBC4 UniRef90-M5DIP5 UniRef90_UPIO0035DE75F UniRef90_C1A8Y0 UniRef90-H1XR12 UniRef90_UPIO0035FA2C6 UniRef90_UPI000415D4A1 UniRef90_UPI0004164BD8 UniRef90-B6BUH6 UniRef90_UPIO003B3407C UniRef90_J2ZRJ5 UniRef90-W8L1W6 UniRef90_R6TQ35 UniRef90_E3IEB0 UniRef90_R6GTP1
UniRef90_UPI000464FCB0 UniRef90_UPI00040A06BF UniRef90_Q5L332 UniRef90-WOTP72 UniRef90_R7IEU5 UniRef90_W0SCG1 UniRef90-UPIO00225E460 UniRef90_R7KDD5 UniRef90-12MZ64 UniRef90_UPIO00378CF00 UniRef90_G4CGM2 UniRef90-E1QKF6 UniRef90 UPI000478A435 UniRef90_D4MAT9 UniRef90_B6BJ87
UniRef90 S6HYB4 UniRef90-TOHQ45
UniRef90-K2FMU9


|  |  |
| :---: | :---: |
| QUERY <br> UniRef90 I4N794 |  |
| UniRef90-U3HDV2 |  |
| UniRef90-N6WX82 | FRTQLRQVVPDIE P PGF |
| UniRef90-14WGW4 | F R R Q L Lav NPGLKLP F |
| UniRef90-Q31EC8 | F K A L M L K V D P T S L P F |
| UniRef90-G7UR19 | FRRQLQAVAPELKLT F |
| UniRef90-R8B4K5 | F R D Q K IV APDLRADF |
| UniRef90-UPI00047DE9B9 | FREQI A AI QPDLVLP F |
| UniRef90-UPI00047EF8B1 |  |
| UniRef90-UPI000365F896 | F R DQL L AVDPSLKLP F |
| UniRef90-UPI0004746C48 | F R A L L K K V R P GLELP F |
| UniRef90-G3IVY8 | FRQLMKKI K P D V V P F |
| UniRef90-E7RU98 | VKA ALLA ${ }^{\text {V }}$ R |
| UniRef90-UPI00047CFFBD | M $\square$ A LL RSVKPDAQ |
| UniRef90-H8L277 | Y REQL L A V D P S L K I P F |
| UniRef90-G8QJZ5 | F R RELAAAWPGLTLPF |
| UniRef90-G4SUK7 | F K T LIA S 1 EP P L VLP F |
| UniRef90-B4X0G6 | F R K HLKAVDESLELPF |
| UniRef90-UPI000469BD65 | FRAALKQAEPSIVAPF |
| UniRef90-K4L0P9 | F K RELKKVDPNLELGGF |
| UniRef90-R5MAI7 | FTKLVEKYKKDLS |
| UniRef90-UPI000463C57F | DEEPVARWI |
| UniRef90-UPI000360D607 | FRRELLKLAPQAKLPF |
| UniRef90-UPI00036C5FD0 | LREQLLAI APKLKVNF |
| UniRef90-E6QPU6 | FRRVFHHAAPNLPLPF |
| UniRef90-E3HF47 | F R R ELSKLAPQADLPF |
| UniRef90-X1TCE7 | F F DKLGE |
| UniRef90-A0A031MEQ2 | FREQLTRVAPDL |
| UniRef90_UPI0002E4E7AF | FRAALAPLAGEARLPF |
| UniRef90-UPI00047C2267 | M $\square$ A LL R Q V K P D A |
| UniRef90-G0AHE5 | F KRVI L A VKPDAA号P F |
| UniRef90_UPI00039589AA | MKALLLKVKPDA |
| UniRef90-W1N2M6 | FAAALADID |
| UniRef90-Q8RBS8 | LS E A L A |
| UniRef90_W6M841 | RQQLLALLQPDLILP F |
| UniRef90-A0A023Y8K6 | FRDQLQPL $\mathrm{F}^{\text {P G V D L GF }}$ |
| UniRef90_UPI00035E91F4 | FKQQL SNIDS SLQF DF |
| UniRef90-UPI00022609B6 | LT R Q L E |
| UniRef90-UPI00035EC424 | FRAQLQAMDP GLLAPT F |
| UniRef90-D9SC90 | FRRLL IQAAPNLKLPF |
| UniRef90_UPI00047705D2 | VRKAISKYE |
| UniRef90-Q2KYE5 | FKRELLRLLAPQARLP F |
| UniRef90-D6SLP2 | $\square E K P L K N W V Q E$ |
| UniRef90-W8X1B7 | FRAAFAELLPGRTLPF |
| UniRef90-UPI00037FC47A | VLNTLRQFG E $\square \mathrm{HIP}$ |
| UniRef90-UPI0004660FF4 | YREQLRALLPDAALDF |
| UniRef90-D1KE42 | FRTWL |
| UniRef90-C8X0F7 | VEDPL Q R W $\square$ E A $\$ P  \hline UniRef90-H8MH61 & I EKTVAQAQKEV  \hline UniRef90-K2L3L9 & VTA Q L Q  \hline UniRef90-R7IMC2 & F GAALKKLDPSTKLP F  \hline UniRef90-P57002 & FKAVIES NPNLIWP  \hline UniRef90-R5IZB5 & F 1 NLL NSYK  \hline UniRef90_UPI000378CBC4 & LVAALAKS GVEAP  \hline UniRef90-M5DIP5 & FRRVILLAKPDSLLPY  \hline UniRef90-UPI00035DE75F & F GRVI LAA K P D A VLP F  \hline UniRef90_C1A8Y0 & MEGWL ${ }^{\text {R }}$ |
| UniRef90-H1XR12 | VIDKLKEFGE |
| UniRef90-UPI00035FA2C6 | FIN EL S R $\square \mathrm{CP}$ Y $\square \mathrm{D} \square \mathrm{N}$ |
| UniRef90-UPI000415D4A1 | 1 D A Q L A A |
| UniRef90-UPI0004164BD8 | 1 D A Q L A |
| UniRef90-B6BUH6 | FRDKLKTK\NVSDTP F |
| UniRef90_UPI0003B3407C | LAEQLH IS GVEIP |
| UniRef90-J2ZRJ5 | 1 D R Q L A |
| UniRef90-Q21U43 | MLELLLREVKPGA |
| UniRef90-W8L1W6 | F RAL M H Q ADVTLGLPP |
| UniRef90-R6TQ35 | F 1 D L L NQL |
| UniRef90-E3IEB0 | LA DVLS KPPLNLLNDT W |
| UniRef90-R6GTP1 | FMDVLSKl |
| UniRef90_UPI000464FCB0 | FKQRLLVLAPELKKLP F |
| UniRef90-UPI00040A06BF | MLA L L Q RVKPGAT |
| UniRef90-Q5L332 | LADCL HAL |
| UniRef90-W0TP72 | FRALLKEAAPELPAPF |
| UniRef90-A7C2H8 | FRQQFLA $\square \mathrm{DNSLT}$ T L P F |
| UniRef90-R7IEU5 | LPMIDEFKK |
| UniRef90-W0SCG1 | FRSALETLWPG $\square$ R T GF |
| UniRef90-UPI000225E460 | $\square \mathrm{DAQLA}$ A |
| UniRef90-R7KDD5 | FESLI DKYNK |
| UniRef90_E4TJU3 | FEAELSK口K |
| UniRef90-I2MZ64 | VLA LI R |
| UniRef90-UPI000378CF00 | MEKPI R Q WV |
| UniRef90_G4CGM2 | FRTVIDR RPGLIWP |
| UniRef90-E1QKF6 | IE GAVERAKKEV |
| UniRef90-UPI0003B4D8B6 | LKARILSAG |
| UniRef90-UPI000478A435 | L $\square \mathrm{NLFNKLQ}$ |
| UniRef90-D4MAT9 | V R RLLDEGLP DFAWT F |
| UniRef90-B6BJ87 |  |
| UniRef90-S6HYB4 |  |
| UniRef90-TOHQ45 | ID RQL A A |
| UniRef90-K2FMU9 | LLSTIR |
| UniRef90_UPI000381A835 | $\overline{\mathrm{V}} \underline{\mathrm{L}} \mathrm{A} \mathrm{L} \mathrm{L} \mid$ |


| UniRef90 UPI00035E7D95 UniRef90-A7ZCV3 |  |
| :---: | :---: |
|  |  |
|  | UniRef90-V7IG83 |
|  | UniRef90-K2BH21 |
|  | UniRef90-A6QBM2 |
|  | UniRef90-U7HUH8 |
|  | UniRef90 F3L3K4 |
|  | UniRef90_G0A668 |
|  | UniRef90-B8HCN0 |
|  | UniRef90-T2LI10 |
|  | UniRef90-UPI000477BF0E |
|  | UniRef90-U6EL50 |
|  | UniRef90-UPI0003712DA7 |
|  | UniRef90-Q1GNR6 |

 P L VFFS T D E I K I K TTTD E A KF K I V A K L K E CVVK N K I K N I D D D P E GVVS T P E L L N I A LDP E A D G H A L I A A D L L A Q A A R F D G L

## \section*{P}

P
STEELNVETTEEEKFAIIDKVKELLINPPADIIDVD
 P E SVVSTPELHVALA E GE
$P$
$P$
$P$

P

$P$


M
R Y
R
R
RYAASGEINSTVEDGRTAAVREAF AGRDGVTFDTLD

 RYESSGEINFTVADA RACVDAVYRAYGSEAHSSDDHDD RYAASGEVNFTVTDAE ACVEAVLAEFGDRAQDIDHLD




P
 HFAASGEI NSTVADVEP KYPHSGEI NFRVKDQKY
PKYCAKKRIDGT-PDTDVDA MDKKEY RYAAKKR K KEVVNDID KYAASGEVNSTVDD PQARMAEVEQLYGDDDVTTDTLD

P
P

 T P $\qquad$
PHYFNE KTKVPKNAHALLKAVKE YFNGKKIVKKNEASGLGHKIDTSD PSAIGTPELLARVAPGQEDEIMSQVMAKGRDSGVKADTOD RYAASGEINSTVRDADKAATARVEKTFGAPDVTVDRLD KYFHSGEDNFKVKD RYEASGEVFTVGDA

Q Q A A CVVE QVL K KILAAMK

TPELDVD RYVVSGEI NSEAAE KYFVSGELNTQVADVK

YPSPGEI NRKVSDAN TPE:NVD

## RYVASGEI NSTVDDAK

 HYPCSGEI NSKVKDAD RYAASGEI NSTVDDQV YPSSGE:NSRLAENV $R F P V S G E N T T A D$ KTVTPEIRYSSDEVK KYFVSGEI NSTVADAQ RYAASGE: NSTMVVDCDRYEASGEE
NYTVADA RYEASGE: NYTVADA YFSSGEUNSRLDDV A
 TPELDVD
FPSPGEINSKLADAK

## R

Y VA S GE I N S TVV D D A A A F F $\quad$ P AS G E I DYPDRRENSTVETDEKA
PCLYSTPE $\quad$ R $\square$ S CNPE QK F
P
$\qquad$ P A

K F P C S GEI NF KVAD T Q
$\qquad$ VLA D $\square E A A Y A G S D G G I D D H D$ SVI QK AT E DYYSE GAVVK I DTTD
PS C M D A MVVE R Y G D GEAA E L S T V D D A V I A E V $V$ K A K Y E S S Q A L VVV D T T D DLLKKVEKHYENE A RTEAVRAAFADRTVSTDELD
 P A A A I A R V E R H F A G E A L A V V D R T D D K A A V V M D R L V
 A K L R E L E Q R Y H $\quad$ D GRII EK I D

 TVV I A R I E A E Y G P K G E V S H I D

 F S D GR V Q

P H $\begin{array}{llllllllllllllllll}K & I & P & Q & D & K & L & R & L & L & T & Q & G \\ K & L & E & M & M & E & K & R & Y & A & K & Q & P \\ A & T & Q & K & L & F & D & H & F & A & D & Q & N\end{array}$
A T Q K LLFDHFA DQNP

UniRef90_UPI00035E7D95
 UniRef90-V7IG83
UniRef90- K2BH2 UniRef90-A6QBM2 UniRef90_U7HUH8
UniRef90 F3L3K4 UniRef90-G0A668 UniRef90-B8HCNO UniRef90-T2LI10 UniRef90 UPIOO0477BF0E UniRef90_U6EL50 UniRef90_UPIO003712DA7 UniRef90-Q1GNR6 UniRef90-F8AYT5 UniRef90-UPIO0037B5534 UniRef90-T0K354 UniRef90_UPIO0037588D6 UniRef90-UPIO0037F3668 UniRet90_R4YVJ2 UniRef90-C5ZWJ7 UniRef90-W6JWY1 UniRef90-D8PHE2 UniRef90-D6ZCSO
UniRef90 H3LA73 UniRef90-X5KQB9 UniRef90-K5BBW2 UniRef90-UP10003752AC0 UniRef90-UPIO0037EB7AC UniRef90_C4LK88 UniRef90-V6JWGO UniRef90_UPIo0046446CB UniRet90-Q1YUT3 UniRef90-Q1NDA6 UniRef90-H2JQ79 UniRef90-UPI00036BD515 UniRet90_UPIOOO381428F UniRef90-D1B3Z4 UniReffoc C3PEK6 UniRef90-A4FNK4 UniRef90-WoK5z88 UniRef90-A1HNN1 1 A
UniRef90
F5XOR5 UniRef90-F5XQR5
UniRef90 C7P8W5 UniRef90-FOR6T6 UniRef90_UPI00047765AD UniRef90-K2BZY1 UniRef90-Q7VIJ2 UniRef90-R7F5L3
UniRet90 E7ABU4 UniRef90 UPIo0036F4074 UniRef90-D4H578 UniRef90-R7DJW3 UniRef90-Q46AE1 UniRef90-D1BC82
UniRef90 H8Z7P1 UniRef90_UPI0004793F3C UniRef90_13ZUU9 UniRef90-A6UT03 UniRef90-G7CND5 UniRef90-A1SGK4 UniRef90-K2ESO1 UniRef90-UPI0003B568C8 UniRef90-B8ZQE6 UniRef90 UPIOOO35FE555 UniRef90-13ZXZ5 UniRef90_UP100037CC8EF UniRef90_UPI000419EADC UniRef90_D8HRL9 UniRef90-UPIOOO2BA5094 UniRef90_K2CP45 UniRef90-L9XHU6 UniRef90-R8WLY6 UniRef90-X1CCB3 UniRef90 UPIOOO478576E UniRef90_UPIOOO37D7560
UniRef90 A1T5W0 UniRef90 C6DCL4 UniRef90-UP10002DCFOA8 UniRef90-UPIO0036047E5 UniRef90-W5XBJ4 UniRef90-F4HBU8 UniRef9-UP100037CEEBA UniRet90 E3GCX2 Unireigo -e3gcx
UniRet90_MOPF7 UniRef90-K2ESX5 UniRef90-UPI0003B428BB UniRef90-R9B8S4
UniRef90_H3NWH5


50
GLRIVSTPDGWWLLRASNTQP
 GLRVNFADGWGLVRPSNTTPCLVLRFEADDATVLAKปQSG GVRINFDKGWGLVRASNTTPVLVTRFESTDETLAKEYEEK GVRMDYEDGWGLCRASNTSPKLVTRYEAVDEETLSGMRHC GLRVDYTHGWALVRASNTSAALTLRFEADSEEQLKTLQSA GSTFTANDGWFNLRPSNTEPFLRLNAEATDQATMERVRDR GARDDFGYGWALLRASNTSPYLITRFEAKSGEQAKDLEAR GVRVNTKHGWWLLRSSNTESIVVARAESANKDGLEKI DT GLRAEFDRGFGVVRASNTDPQLTFRFEGDDAQALEKI QSL GARVMTDDGWWLLRASNTQDVLVARAEAVDEAALARLLVA GLTVTLGGEWFNLRPSNTEPLLRLNVEAPDHATMARVRDE GVRVTTEAGWWLLRASHTQAMLVARAEGHSPAALATLVAR GVTFDSGDWWFNLRPSNTEPYLRFNGEAKDAQTLAAVRDE GLTVDAGDWWFNLRASNTEPLLRLNLEAADTASMERHSAE GLTVWHPTWWFNLRSSNTEPLLRLNVEAADPATMERVRDT GVRAIFEDGWGLIRASNTQPALVLRFEAPSPARLDIIRAT GVTVDLGDGWFNLRASNTEPLLRLNAEAADRANVDALTEE GI SVEYPNWRFNLRSSNTEPVVRLNVESRDQDLMVEKTNE GVTVDLGDGWFNLRTSNTEPLLRLNVEARTTEDVEATVEK GVTVDLGDGWFNLRMSNTEPLLRLNVEARTAEEVDDIVAR GLSLDMGDWRFNLRSSNTEPVLRLNVESRGDIALDMQAK GLTVDLESGWFNLRASNTEPLLRLVEAPGEATMRALTDE GLTVELGDGWFNVRASNTEPLLRLNAEAKTREAVDALTSD
 GLRVEYPTAWGLI RASNTSANLTLRFEADDEQAMAEIKTA GVRVREPLGWWLLRASHTEAALVVRAEATDESVLADMLML GLTVAAADWWFNVRPSNTEPLLRLNAEAKDEATMTKMRDE GLTVTGDGWWFNLRPSNTEPLLRLNVEARDAELMAGVRDE GVRVIFNDGWGLVRASNTTPVLVTRFESTNEENAKLYERK GVTVQLKDAWFNVRASNTEPLLRLNVEAKTAEEVQALVDE GYRLDYGDSWVLVRPSGTEPVVRIYAEARSEERASELAGE GVRIEFPDGWGMIRASVTEPLFTLRFEAKTAKRLRETAGI GLTLTGDGWWVNVRPSNTEPLLRLNVEAPTAAEVDALRDE GVKVDFADGWVHLRKSNTEPLKRVYSEAGSMEDANRLADE GLTVMFENGWFNLRPSNTEPLLRLNVEASDADAVAALRDE GLRVIFENGWGLIRASNTTPVLVTRFE GVRVVFEHGFALVRASNT GLTVDLGDGWFNLRASNT GVKDDFPDKWVHLRKSNT GVKI WHKDGWVLMRPSGT GLTVSHPRWWFNLRASNTEP $\quad$ R A GLRLESDKGWALI RASNSEAALAFRFEA GLVEMPMWWFNLRPSNT GLSIYCDNWWFNVRGSNT
 GLTVSHADWSFNVRPSNT

G
$G$

## G

GISMSFADWRFNLRSSNT
GITFFEFPDYWFNVRASNT GLS DFVDWRFNLRASNT GVRATYPSGWALVRASNT
 GLTFTADDWWFNLRASNT GLSVEYPTWRFNLRGSNT GI SI EYPNWRFNLRSSNT GVTVDHPQWWFNLRASNTEPLLRLNVEAADEDUMVEKVAD GI SLSWDDWRFNLRSSNTEPVVRLNVESRGDVPLMEARQD GIRVQLDEGWWLLRASHT GVKIEFDKEWVHLRKSNT GVS


| UniRef90_UPI00035E7D95 | $1 \mathrm{D} Q \mathrm{Q} \mid \mathrm{L}$ A 90 |
| :---: | :---: |
| UniRef90-A7ZCV3 | V T NLLK S |
| UniRef90-V7IG83 | FKTLVEQHG G L Q WP |
| UniRef90-K2BH21 | F R D Y L L M K P DL V L P F |
| UniRef90-A6QBM2 | VN QLI ESAK |
| UniRef90_U7HUH8 | FETAIA K A $\square$ E K |
| UniRef90-F3L3K4 | V |
| UniRef90_G0A668 | FKLLL L Q $\square$ N P E $\square$ S L P F |
| UniRef90-B8HCN0 | V L A L V R A |
| UniRef90_T2LI10 | V FKLL FND $\square$ K E S $\square \mathrm{K}$ |
| UniRef90-UPI000477BF0E | $V \mathrm{~L}$ GLIR |
| UniRef90_U6EL50 | 1 N K Y L E K |
| UniRef90_UPI0003712DA7 | FRRLMEKA A P G LP LP F |
| UniRef90_Q1GNR6 | IDEQLA Q |
| UniRef90_F8AYT5 | V LTRIR R E K P |
| UniRef90_UPI00037B5534 | V L S L V R |
| UniRef90_T0K354 | 1 ES CL A |
| UniRef90_UPI00037588D6 | V L A L V R S |
| UniRef90_UPI00037F3668 | V L GVI R A |
| UniRef90-R4YVJ2 | V L A L V R |
| UniRef90 ${ }^{-}$C5ZWJ7 | L L G L L K K |
| UniRef90_W6JWY1 | L L G M I R G A A P A A D |
| UniRef90-D8PHE2 | I ETELA Q A |
| UniRef90-D6ZCS0 | V LTLI R |
| UniRef90-H3LA73 | 1 L A L L R S |
| UniRef90-X5KQB9 | $\checkmark$ A G H I N P L S E A VP |
| UniRef90_K5BBW2 | V S R T V T A |
| UniRef90_UPI0003752AC0 | TRELL NLIE A E |
| UniRef90-UPI00037EB7AC | V L A L L R |
| UniRef90-C4LK88 | V L A V I R A |
| UniRef90 V6JWG0 | TLA L I R S |
| UniRef90-UPIO0046446CB | MMEI I NKF |
| UniRef90-Q1YUT3 | FRRELSSPF $\square$ N N $\square \mathrm{K}$ |
| UniRef90-Q1NDA6 | LDSQLEK |
| UniRef90_H2JQ79 | ALA I I R |
| UniRef90_UPI00036BD515 | V L T I L R R |
| UniRef90_UPI000381428F | $\checkmark \mathrm{L} A \mathrm{I}$ |
| UniRef90_D1B3Z4 | L NEI I A T A K A ELDH |
| UniRef90-C3PEK6 | $\checkmark$ L A I I R A |
| UniRef90-A4FNK4 | V L A V V R |
| UniRef90 W0K5Z8 | F A T AL R A A K A GVV |
| UniRef90 ${ }^{-}$A1HNN1 | L L D A L |
| UniRef90-F5XQR5 | ALA A I R A |
| UniRef90_C7P8W5 | 1 K K L I S E LD K S L |
| UniRef90_F0R6T6 | $\checkmark$ S A CI |
| UniRef90_UPI00047765AD | V L A V V R R |
| UniRef90_K2BZY1 | L L N I I R |
| UniRef90-Q7VIJ2 | L L A L L K |
| UniRef90_R7F5L3 | V K Q ${ }^{\text {L }}$ |
| UniRef90-E7ABU4 | L L S L Q |
| UniRef90_UPI00036F4074 | V L A I V R |
| UniRef90_D4H578 | L L K L I R |
| UniRef90 R7DJW3 | V M AV I E E M A K K |
| UniRef90_Q46AE1 | GLD M D ${ }^{\text {L A E }}$ |
| UniRef90-D1BC82 | $\checkmark \mathrm{V}$ - V R S |
| UniRef90-H8Z7P1 | $V R$ R M Q S A A P D Le LP F |
| UniRef90_UPI0004793F3C | $\checkmark \mathrm{L} R$ V V R E |
| UniRef90_I3ZUU9 | AEEIVRRA |
| UniRef90_A6UT03 | V K G l |
| UniRef90_G7CND5 | V A A RIT T T G S G A S |
| UniRef90_W7YQP7 | I I A D I K EVVA |
| UniRef90_A1SGK4 | VLEQIR A |
| UniRef90 K2ES01 | L L K L |
| UniRef90-UPI0003B568C8 | FKEELRAAVP |
| UniRef90-B8ZQE6 | 1S A QI A A HISS G |
| UniRef90_UPI00035FE555 | L L Q L E S V |
| UniRef90_I3ZXZ5 | M I E V V K |
| UniRef90_UPI00037CC8EF | 1 L S I V R |
| UniRef90_UPI000419EADC | L L G K I R |
| UniRef90_D8HRL9 | $V L A \square I R$ |
| UniRef90-UPI0002BA5094 |  |
| UniRef90-K2CP45 | $\square \mathrm{L} N \mathrm{~L}$ I R A |
| UniRef90_L9XHU6 | AREIVLEAAEET GVP |
| UniRef90-R8WLY6 | LLTLI A A W S S |
| UniRef90-X1CCB3 | V E G T I |
| UniRef90_UPI000478576E | V L A V I R |
| UniRef90_UPI00037D7560 | $V L A \cup V R$ |
| UniRef90_A1T5W0 |  |
| UniRef90-C6DCL4 | I L R L L R Q |
| UniRef90_UPI0002DCF0A8 | $\vee L G Q \vee R Q$ |
| UniRef90_UPI00036047E5 | V I K V A K S L |
| UniRef90-W5XBJ4 | L L A KIR A |
| UniRef90_UPI00047A9723 | M S ELK K $\square$ A E G |
| UniRef90-F4HBU8 | VLALLR Q |
| UniRef90-UPI00037CEEBA | V L S L V R |
| UniRef90-D3FDX7 | V L A L I R |
| UniRef90-E3GCX2 | 1 L A L L NRAD |
| UniRef90-M0P5F7 | ARDLVA D A |
| UniRef90-K2ESX5 | LKDEL |
| UniRef90_UPI0003B428BB | I DA D C E $\square$ I N S |
| UniRef90_R9B8S4 | LTQLI Q S |
| UniRef90_H3NWH5 | $L \mathrm{~L}$ A I I D A A |

## UniRef90_UPI0003FCDA8C UniRef90-M3CJF0 UniRef90 M2XX85 UniRef90_UPI00036C5DC1

 UniRef90_H8FX12 UniRef90_S8FGK3UniRef90-F8X3F6 UniRef90_D7DT38 UniRef90_UPI0003F81300 UniRef90_UPIO003721085 UniRef90_L9VJU3 UniRef90-K2BH61
UniRef90-DOKY21
UniRef90_DOKY21
UniRef90_UPI0003B5256A UniRef90-D6ZYS3
UniRef90_UPIO003799F12 UniRef90-R5KU45
UniRef90_UPI000363EB31 UniRef90_UP10003C7DE82 UniRef90-UP100037E42F4 UniRef90_UPIOO04755485 UniRef90-M0LEH4 UniRef90-R6AB81
UniRef90-W8L6L1 UniRef90-W8L6L1
UniRef90_UPI000361EECF UniRef90_D1BWY9
UniRef90-B3PIH7
UniRef90-M7MDT1
UniRef90_-UPIO003B4853D UniRef90-HOEAU6
UniRef90-D4H5V0 UniRef90-K2DAT4 UniRef90-WOTMA4
UniRef90- C3XHQ7 UniRef90_D6Y6A9 UniRef90-I6WVM5 UniRef90_UPI00029A7B72 UniRef90_UPI00035F3D0E UniRef90-R5FAQ2
UniRef90_UPI00040DAF22 UniRef90-K2EDF9 UniRef90-E4NWFO UniRef90-K8A665
UniRef90-13T130 UniRef90-H1G2P8 UniRef90-H5X9T4 UniRef90-FOIFT1 UniRef90_UPI00034B3BA7 UniRef90-V3PPQ0 UniRef90-UPIO003B6FBF5
UniRef90-D1Z1C2
UniRef90_D5E8T2 UniRef90_U0EVU5 UniRef90-J7GDG6
UniRef90 L9W5U2 UniRef90_V8DKI7 UniRef90-Q12TN0 UniRef90_V3TSS2 UniRef90-N9C931 UniRef90_A4CL15 UniRef90_C8YZ28
UniRef90-N9B6T6 UniRef90-Q8KFP3 UniRef90-G4QLN9 UniRef90_UPI0003744AF4 UniRef90-R5K7M8 UniRef90_W5TPL5 UniRef90_UPIO002EA8906 UniRef90-E8RBZZ5 UniRef90-F6D8B9 UniRef90_A3YH13
UniRef90_UPIO0047BEBEC UniRef90-R5SM14 UniRef90_I3ZTR2 UniRef90-Q0YPC8
UniRef90 B9LMU1 UniRef90_H4ICR6 UniRef90_A0A009ZE64 UniRef90_UPI0002B8DB5F UniRef90-U2ERE9 UniRef90-D2RMJ2 UniRef90-Y11215 UniRef90-FOZOM7 UniRef90_C6X3E5 UniRef90-UPIO003643755
UniRef90-MOMWD9 UniRef90-MOMWD9 UniRef90-E8XSA6 UniRef90-D5UDK0 UniRef90-R9SJX6
UniRef90_WOJMZo
 YPASGEINSHLQD PQTAITRVLERYQPDALELDVD
 YPCSGEI NYTVTNAN AALQTVRDHYADSQALVDTTD YPCSGEI NFQVADV GTALARVRKHYAPANPALDETD PSYFAKNRIDDA PGTNVEALLSKVKALYKQE EEIDDTD
$\qquad$ PSYYHSGE NFKLIDKAQEKTIETIKDH
 PSFPCSGEL NFEVEDA PQYYMTPKLNVDM

 YPSSGEDNFTVQDI PT\|VKKIKSGYEDAILK DEID YPCSGEI NYRIDDVQ GTIDRVLAHFSPMNPKDDRTD YPCSGEINRRVQDA SGEINRIAD
 PNYY $\quad$ T PDI $N$ VD
$\qquad$

| P |
| :---: |
| P |
| K |
| D | A Al A AVVE NYPCSGEI NYKVAGANN RYQASGEI NSTV RYPMSGEINSTVP

PQYYAKNR TD DDPTTD YPCSGE NYRVEDVI FGILQKVKDLYKNE
PSYVNDRE K RNVEDV $\qquad$ GTLERVTQFYLPQGPQLDDTD YVASGE 1 N $\operatorname{SRV}$ VDA
KFPSPGEI NSHVTD $\qquad$ RARVLDA YL E
P S YFSKKKIELT PDLDVDALLKQMET KYAHETLTTDD FFASGEIN CIVDNQEYVIKKI LIDNYKMQAKHIDYTD
 NFPVSGEINRSVEDPEKTDSM I DEKYRNDSDEI DHTD
$\qquad$
AILVKVKKMY RYT TRRLSLPVDD VAQLLEAMA D KASAMRKMSS GKY $\mathrm{L} K \mathrm{~F}$ E E Q L S S I D
 PEMVNTPEV RDPCA DDRKF QVVTADIA AKLAAAEGAQVDRTD FPCSGEINFRVADV ARTL A


 ENAV QAAT:ADIEAARYSP

```
PAYHSVKD K\KCKD
``` DRK
YPSSGETNSVL
RFPVSGEINRKVINAS
\(\qquad\) E NKA
E N
N
GE\|NYRV

 PAYFSKNKL PAYFSKNKI QLT_PDLDVDAI L RGMAKKYET
 FFSYNRLDLIVAESKKAAIIEKLKS IDAGYPVTSFNDLD FPSSGEINSTV ENAGLTIKKVVEHYADQAEVIDKTD RYSASGEI NSTVSD CSSEEVRFPCPNELKKSTLDKVKQLLF GEI NSTVADAKDRT RYAPSGEI NSTVGD YPCSGEINYRVADTL A AI RAVESHFATLKPAVDRTD PEYPRTG FSDECEHENKEDVLNNLKENDDEKGVSITT D NFPISGEINSTLGHAKAAVDAVMEAFKEEALVVDKTD YFSSGE: NSTVEDVVAAAYERLVTABGPGGADMDEDDPEFY LTNVPA ASHIVDA VMQAVEKEYAKDAKEVQHI D

PEFYLTKR NVPCPDEHKGAVMERLEEKLGSETREVLTI S
 YPASGEDNSYL QQPKESIARVLAMYEGEAVNVDHTD PEYY TVKMKTGCPDDKKEEVMSK KKESSDTDYEL DRTD

UniRef90_UP10003FCDA8C UniRef90-M3CJFO
UniRef90 M2XX85 UniRef90-UPIO0036C5DC1 UniRef90-H8FX12 UniRef90_S8FGK3
UniRef90 F8X3F6 UniRef90-F8X3F6
UniRef90-D7DT38 UniRef90_UPI0003F81300 UniRef90OUPIOOO3721085
UniRef90 UPIOOO2899F16 UniRef90-L9VJU3 UniRef90-K2BH61 UniRef90-DOKY21 UniRef90_UPIO003B5256A UniRet90-D6ZYS3 UniRef90-UPIOOO3799F12 UniRef90-R5KU45 UniRef90-UPIO00363EB31 UniRef90-UPIOOO3C7DE82
UniRef90-UPIOOO37E42F4 UniRef90_UPIOOO4755485 UniRef90-MOLEH4 UniRef90-R6AB81 UniRef90-W8L6L1 UniRef90-UPIOOOY61EECF UniRef90_D1BWY9
UniRef90
B3PIH UniRef90- B3PIH7 UniRef90-V7UKC7 UniRef90-UPI0003B4853D UniRef90-HOEAU6 UniRef90-D4H5VO UniRef90_K2DAT4
UniRef9O_WOTMA4 UniRef90-C3XHQ7 UniRef90-D6Y6A9 UniRef90_16WVM5 UniRef90-UPI00029A7B72 UniRef90 R5FAQ2 UniRef90-RFFAQ2 UniRef90-K2EDF9 UniRef90-E4NWFO UniRef90-K8A665

\section*{UniRef90-13T130}

UniRef90-H1G2P8 UniRef90-FOIFT1 UniRef90-UPIO0034B3BA7 UniRef90_V3PPQ0 UniRef90-UP10003B6FBF5 UniRef90-D1Z1C2 UniRef90-D5E8T2 UniRef90_UOEVU5 UniRef90-J7GDG6
UniRef90 \(19 W 5 \mathrm{~W}\) UniRef90-V8DK17 UniRef90-Q12TNO UniRef90-V3TSS2 UniRef90_N9C931 UniRef90-A4CL15 UniRef90_C8YZ28
UniRef90 N9B6T6 UniRef90-Q8KFP3 UniRef90-G4QLN9 UniRef90_UPIo003744AF4 UniRef90_R5K7M8 UniRef90 W5TPL5 UniRef90-UPIOOO2EA8906 UniRef90-E8RBZ5 UniRef90-F6D8B9 UniRet90-A3YH13 UniRef90-UPIOOO47BEBEC UniRef90-R5SM14 UniRef90_13ZTR2
UniRef90_QOYPC8 UniReftoo-B9LMU1 UniRef90-H4ICR6 UniRef90-A0A009ZE64 UniRef90-UP10002B8DB5F UniRef90-U2ERE9 UniRef90 D2RMJ2 UniRef90-Y11215
UniRef90_FOZOM7 UniRef90-C6X3E5 UniRef90-UPIOOO3643755
UniRef90-MOMWD9 UniRef90-MOMWD9 UniRef90 E8XSA6 UniRef90-D5UDK0 UniRef90_R9SJX6
UniRef9__woJMZo


EA8906

\section*{C}

-

50
GVKID FPENWVHLRKSNTEPII RIYTEAKSQQEADELAQK GISLEFSSDWRFNLRSSNTEPVVRLNVESRNPALMQQKTEE GTTTFA A A D WWF N L R P S N T E P F L R L N V E A H D P A V ME QLRRD R G L




 GI S V WY P T Y WF NV R A S K TE P V I R L N V EA D T K E I L E S KTK E

 GL S L A F A D WR L N L R K S NTEPPL L R L NV EARA Q D GMERRVAE


 GLTV SLPGGWFNLRPSNTEPLLRRLNDEGPDEATVAGMRDD \(G \operatorname{L} T V\) V
 GLSMEFAEWRFNLRASNTEPVI RLNVEARGDAGLMREKTR \(G V R F S L E D G W I L I R P S G T E P Y V R I R V E A K N N K F A K E L L E K\)
 GVKI DFANSWVHLRKSNTEPII RVYTEAPTQQEADALADR GI SI E F E D WR F NLRSSNTEPVIRLNV GLSMSFDGWRFNVRMSNTEPVVRLNVESDGDVGL GV SVDYEDWHFNVRQSNTEPLLRLCLESVSVEHMEQKRDE GVSMSFENWRFNLRMSNT
 GVRVVFKD GWGLVRASNT \begin{tabular}{lllllllllll}
\(G L\) & \(T\) & \(V\) & \(N\) & \(P\) & \(G\) & \(W W F\) & \(N\) & \(R\) & \(P\) & \(S\) \\
\(G\) & \(N\) & \(T\) \\
\(G\) & \(V\) & \(F\) & \(E\) & \(D\) & \(G\) & \(W\) & \(I\) & \(A\) & \(R\) & \(F\) \\
\hline
\end{tabular}

GV RVV GI SMAFGDWRFNLRSSNT GVRVVKVDGGWWLL RASNTQAVLVARA \(G L S M G F G D W R F N L R G S N T E P V I R L N V E\)

\section*{, \\ }
G GLSMSFPEWRFNIRTSNT GLSMEFDDWRFNLRGSNT GLGMDMPDWRLNVRTSNT GVK DF SDCWVHLRKSNTE

 GVTVRLPNAWFNLRASNT GISLDFTQWRMNLRASNTEPLVRFNC

\section*{\begin{tabular}{l}
G \\
G \\
G \\
\hline
\end{tabular}}

UniRef90 UPI0003FCDA8C
UniRef90-M3CJF0
UniRef90- M2XX85 UniRef90_UPI00036C5DC1 UniRef90-H8FX12 UniRef90_S8FGK3
UniRef90 F8X3F6 UniRef90-F8X3F6 UniRef90 UPIO003F81300
UniRef90_UPI0003721085 UniRef90-UPI0002899F16
UniRef90 L9VJU3
UniRef90-K2BH61
UniRef90-DOKY21
UniRef90-UPI0003B5256A
UniRef90-D6ZYS3
UniRef90_UPIO003799F12
UniRef90-R5KU45
UniRef90 UPI000363EB31 UniRef90_UPI0003C7DE82
UniRef90_UPI00037E42F4
UniRef90-UPIO004755485
UniRef90-M0LEH4
UniRef90-R6AB81
UniRef90-W8L6L
UniRef90 UPI000361EECF
UniRef90-D1BWY9
UniRef90-B3PIH7
UniRef90-M7MDT1
UniRef90_UPIO003B4853D
UniRef90-H0EAU6
UniRef90-D4H5V0
UniRef90-K2DAT4
UniRef90-WOTMA4
UniRef90-D6Y6A9 UniRef90-16WVM5
UniRef90_UPI00029A7B72
UniRef90-UPI00035F3D0E
UniRef90-R5FAQ2
UniRef90_UPI00040DAF22
UniRef90_K2EDF9
UniRef90_E4NWF0 UniRef90_K8A665
UniRef90_13T130
UniRef90_H1G2P8
UniRef90-H5X9T4
UniRef90-FOIFT1
UniRef90_UPI00034B3BA7
UniRef90_V3PPQ0
UniRef90-UPI0003B6FBF5
UniRef90-D1Z1C2
UniRef90_D5E8T2
UniRef90_J7GDG6
UniRef90-L9W5U2
UniRef90_V8DKI7
UniRef90_Q12TN0
UniRef90_V3TSS2
UniRef90_N9C931
UniRef90_C8YZ28
UniRef90-N9B6T6
UniRef90_Q8KFP3
UniRef90-G4QLN9
UniRef90-UPI0003744AF4
UniRef90_R5K7M8
UniRef90_UPI0002EA8906
UniRef90_E8RBZ5
UniRef90 F6D8B9
UniRef90-A3YH13
UniRef90_UPIO0047BEBEC
UniRef90-R5SMI4
UniRef90_I3ZTR2
UniRef90-B9LMU1
UniRef90-H4ICR6
UniRef90-A0A009ZE64
UniRef90_UPI0002B8DB5F
UniRef90_U2ERE9
UniRef90 D2RMJ2
UniRef90-Y11215
UniRef90-FOZOM7
UniRef90_C6X3E5
UniRef90-UPI0003643755
UniRef90_MOMWD9
UniRef90-E8XSA6
UniRef90 D5UDK0
UniRef90-R9SJX6
UniRef90_W0JMZ0




LK S L I
1 MQDIKEV

\(M M E E L R V I A\)
\(A R E D V L A A\)
LMMEFMQS
VENLI
I \(\square R F\) E E Q G GAVP
LTDLIRS
\(\stackrel{L}{L} A\)
। IS DI REVIAE
I EELIKR
VLA \(\mathrm{A} V \mathrm{R}\)
ALAI R K
ASEAVEEA \(\square\)
\(\square\) MD 1 V
GMNLVKKA
VLSLVRAARGEGEL
VLAMLR

T E E L L A A Q L
VLGLIRS
LL R L I K
MLKI L E E S L K K K L K
I SALLLNSMA
L L S L I K Q
VLAVVRS
FRKFL
FAE VL \(\square A \square K\) PDFS \(\square P F\)
1 S RLI
L M Q V V
1 DNEIKAVA
LHKALHN YPEDDWGF
VTSLI EK
I LAALVLNQ
L ARVLTA A GVEVP
LLSLI QEA
VLSUR
Fi KEl KN
LLERS
L L L ELE L
GVGLVNQFNK
VMRIARGADQ
VLNLR
LLGLINR
ARAVADAA
LDALILGVD
AENII KEA
■D HLI K
FSSMLSEQYPHI
\(\begin{array}{llll}1 & I \\ I & G Q L & R A L A \\ N\end{array}\)
\(\square L_{V}^{L} \operatorname{LL} L S\)
FVSMLS ERYPED
LMDLI
LLSYIRS
MI NTLESI
1 L S IV R
\(\vee \mathrm{L} A \mathrm{R} V \mathrm{RA}\)
VEK!I RDAA
LKNMI QDV

IMEFIK
AYGTVRKAVEDV
A AKL
ARDLDRAAAD
L N
V \(\operatorname{V}\) D L EL



MIDEIKK【I
ALGAVRA
ASAVVADA
1 LSILRS
VLRLLA
GISLVKK
AREVVETA \(\square\) ANAD

UniRef90 C3J8C9 UniRef90-UPIO0029B04CF UniRef90-CTP7R5 UniRef90-S3YB61
UniRef90_UPIO001D2E49E UniRef90-L9ZUB0 UniRef90- G5LB69 UniRef90_V4ZQV6 UniRef90-A3USU2 UniRef90-A0A023RWU9 UniRef90-B3QVA4 UniRef90-B4S4U5 UniRef90-MODPX3 UniRef90-N9KSJ5 UniRef90-V2TH69 UniRef90-WoJPW6 UniRef90- B2I6M8
UniRef90_A9E7V0 UniRef90-X5K871
UniRef90-A1BDH0 UniRef90-C4TWY4 UniRef90-X1LV89 UniRef90-L9WFM6 UniRef90-GOHYO2 UniRef90-UPIO002E11562 UniRef90-UPI00037FFD90 UniRef90-U3TME5 UniRef90-E2CFD5 UniRet90-MOCS80 UniRef90-U4WS15
UniRef90 B7OZQ7 UniRei90-UPIOOO36DBB97 UniRef90-UPI0002F87174 UniRef90-B3ELQ6 UniRef90-M0CD71 UniRef90-UPIO00467C263 UniRef90-BOE8L4
UniRef90 V4JGS UniRef90-X0QJ02 UniRef90-M4PWK8 UniRef90-MOCSY5 UniRef90-UPI0002EAB305 UniRef90_LOHN43 UniRef90-X1KCG8 UniRef90-MOE9S5 UniRef90-MOCHO8 UniRef90_LOAET UniRef9- J3JI21 UniRef90-MOLLQ7 UniRef90_UPIo004779128 UniRef90-U2HW13 UniRef90-G2MH91 UniRef90-D8J537 UniRef90- \({ }^{-} 4 \mathrm{C} 613\)
UniRef90
U4MZ36 UniRef90-UPI00016C4DD1 UniRef90-A0A022MP50 UniRef90_U1PGS99 UniRef90 Q2RLY3 UniRef90-C6CNZ8 UniRef90-C7LQD5 UniRef90-K2G667 UniRef90 O8U2H4 UniRef90-B9XNJ6 UniRee90_UPI000399C53C UniRef90_A4J949 UniRef90-A3TYQ7
UniRef90 UniRef90-UPIO004734C10 UniRef90 U1NFT4 UniRef90-UPIO00364F027 UniRef90-L2F7U0 UniRef90_JJJGD4 UniRef90_K9TTY1 UniRef90-D6Z313
UniRefo- R6LHP UniRef90-17BHQ3 UniRef90-K9X8F8 UniRef90_UPIO00469EA2E UniRef90-LOAH62 UniRet90-K2GAX0 UniRef90-B111631 UniRef90-K9X0A0 UniRef90-D1BZ10 UniRef90-M0M5M7 UniRef90 H8KQT2 UniRef90_UPIO00478AD20 UniRef90_LOA5V2

PVYYMSKQ \({ }^{10}\) RADLPEGTDTKALARIAAERFASDHP NTTD \({ }^{30}\)
TPEMD \(\mathrm{D}^{\text {D }}\) DLLKQVEEKYKNQPY STID YANSGETKDPVEDGKKEKVMEYVDENGESFKTTPETVD YPCSGELNYTVADV PSVLARVQAHFADLLNTLQDNTD PKTWGSPTMSPHCADERKYQVVEEVTARFQKMAADLVTVN

\section*{PASGE \(\square\) N}

VACPDDR
RFPSSGE TNRRVSD PERCCTEDTYIGTHQSDPKQVIAYVLSHYQVDAVEIDHTD PAYFMSKKMKLPSGGASVDDAFKKLE AKYANEQVTKAD NPDARPDMQD PKRHGTEDLYTATHHVHPVELLDFVEQQSERTRAQUKGD KFPCSGELNFKVSNT GTVI RUDHYAVQNPTDDKD CPDERKEQVLADLEAEAGTPVEDVNTAD PHAYFTAQMEQSVEGDAQACVIEEVQRSVEFDGARLFAFD PSYFSKNK QLT PSLDVDAILKAMEEKKYANEVTTHD PDYYMTPEIDVD KLLE KVKKEFKKEDVSTVD FPVSGELNFT DDD PATKTQQTKQFYVNSADRVTE円D PDYFUSPQUN VDCPDDTEEDFLRUKEKYKNCPAVNTVD
 YPCSGETNHTVADD PATLAAIQTHFQGQAPSISQUD KYPCSGKVNFNI ENKSAAIAAI KDLDSGKCLEINHTD PKTWGSPTMSPHCDDETKYGVVDKVVARFKDMHADLDTVN VECPDEAKQAAMARVSEALAFPEADVDTEH PVYYDRKEVRVD PKRYSSTПHSVNTPDELKWKAMGRIAMRL NYPASGEDNLMLKNSD SATQQiKSL
EKAAVMADVSEAVABPAEVNRED RYAASGEDNFTVSDAEKAA VVDAVVGSVRDRYDEVETLD KVNVDKAFELVKKI YQQS PYYYT TKAKAPATRDQALVEAVKK DFSGYRQDTDD YPSSGELNFRLTTHDAPTIISAIEAKFSNEQPVKSILD PQYFUAKN K QLSDGATALIDRLESELKYASEDVNDID KFPSSGESNREV VNPEQVMGRVLSRYRESAVDIDHTD PRYYQDKE KFPVEREMKRKVVERIGDFLEKNPEKI LRDD YYMSKD KFAADKSQAEQILKLAKERFTDS KFDTTD
 VDCPDDAKSDAMATLEDAAFPNTTVDTDY SYPDRRRSVEDADKEAVMERVRERVEDQRAEIVDTED YPASGEDNRKLSYASQK IIKSIRDUYERDALRVDDTD PQYFMSKN K TTTPGDTDGLLAKMQAAAKYAHEQHSTVD GETNLEYEDEELTAMLDAAETYAREADVTAETVD GEDHVDCPDEEKVHTLDALAEAAGEPVEDVNTAD RYRSCDETDDATDDPQRTAALRA R A YARHEDVMDDDLD RYASSGPVDVRVPD PGAALQRVVRHFAAQGTALDHDD

GKVSVDCPDEEKNQVIDGLDSAAGEPVRDVVTVD RLDIKVDPATKERVLQELPDFAPAKVAGILTVD YPASGETNSLLTDAPVAALARVRAALEPQALTVDETD NYGADPEUNFKVADVGAAKLQNLKASYKAQDWSQDMFD
 KFPCSGEI NFKVADAKAAV ARVMERYSGDNPALDYTD SERLDOHTPQQKTALEQLKELGGQPVIDKITLD PMTWSTPTMSPYAADTEKYDILDRLVEKAGRPIKEVVTVN FPASGE \(\square \mathrm{NLL} \mathrm{V}\) V C ENPEE LLALLVE

TKNSVYS IDYTD RFPCSGELNFHVNDNPMAA!HQVMVATDAHTGRNDRTD NFSGELNFKLNTUTAPELLAKLKQNLFGENASLNETDD

R DDH DSDAHKA DDSFRA \(\square\) AGDA VKEVSRKD RYPCSGELNFRLADPAAAR AAVVQYYREFGPAEDYTD AERDAMLDAAANQAQAADADLNTRD
SNKRDDDHDNDAHKAAVIDSTNNAGDKVKEVGRKD PQTWATPTMSPYASDEDKYDILDRTEQTAGRAIKEVVTVN Y LIAVPETNFKVSN VWDKLDERSKYRDWSQDMFD

SERLDVHTGADRKPRIMENLRRLAGQPVVGRFTVD PATPEMRVEVP RRLASEPLTHVGAYPVASVSHTD VEVADKSGVMDRVAERVNEAEEEVRTLD SFAVERYD四LTEEKKAl TKACKSFGSYKDAQVEDMD


\begin{tabular}{|c|c|}
\hline UniRef90 C3J8C9 & FCNlI V LE 90 \\
\hline UniRef90-UPI00029B04CF & \(\square 1 / \mathrm{D}\) I K E I \\
\hline UniRef90-C7P7R5 & GI K L V K N A \\
\hline UniRef90_S3YB61 & ALALVR G E A EVL \\
\hline UniRef90_F6DC38 & I E D L I \\
\hline UniRef90-UPI0001D2E49E & I D A V L R Q S \\
\hline UniRef90_L9ZUB0 & A I GL L E K A D A TV \\
\hline UniRef90 G5LB69 & T R EIL S F I G K \\
\hline UniRef90_V4ZQV6 & VETAVEDA \\
\hline UniRef90_A3USU2 & L L F L \\
\hline UniRef90_A0A023RWU9 & FI D M L Q ERY P Q \\
\hline UniRef90-B3QVA4 & F SRELLEL \\
\hline UniRef90_B4S4U5 & F REDI EA WIE G \\
\hline UniRef90-M0DPX3 & ARGLVGRA GEAV \\
\hline UniRef90-N9KSJ5 & F V A M L R D R Y P Q I \\
\hline UniRef90-V2TH69 & V S ALI Q A \\
\hline UniRef90-W0JPW6 & GRELLLEPL \\
\hline UniRef90-B2I6M8 & \(F R T H L Q A L L P G Q V L V F\) \\
\hline UniRef90_A9E7V0 & VMKEI A D I A \\
\hline UniRef90-X5K871 & MI A K I K S L I \\
\hline UniRef90_A1BDH0 & L M NELQK \\
\hline UniRef90_C4TWY4 & L T QLL Q K \\
\hline UniRef90-X1LV89 & F M A M F \\
\hline UniRef90 L9WFM6 & \\
\hline UniRef90- G0HY02 & \\
\hline UniRef90-UPI0002E11562 & \ I A D \(\square \mathrm{K} \mathrm{S} \mathrm{F}\) \\
\hline UniRef90-UPI00037FFD90 & \\
\hline UniRef90_U3TME5 & \\
\hline UniRef90-E2CFD5 & VD A V L R E \\
\hline UniRef90-M0CS80 & \\
\hline UniRef90_U4WS15 & VR D WFEE \\
\hline UniRef90-B7QZQ7 & A Y K TVVA K E VE K L K \\
\hline UniRef90_UPI00036DBB97 & A EQVIA E \\
\hline UniRef90_UPI0002F87174 & L L Q L N S \\
\hline UniRef90-B3ELQ6 & F S Q EI S S R \(\square\) E T L \\
\hline UniRef90 M0CD71 & A Q ALLVT E \\
\hline UniRef90-UPI000467C263 & \\
\hline UniRef90-B0E8L4 & V M N L L S A \\
\hline UniRef90_V4JGS1 & \(V \mathrm{~L}\) S L \\
\hline UniRef90-X0QJ02 & 1 Q Q WLA \\
\hline UniRef90_M4PWK8 & \(\mathrm{V} 1 \mathrm{~A} V \mathrm{~A}\) N Q \\
\hline UniRef90-M0CSY5 & A R SVI E T A I E \\
\hline UniRef90_UPI0002EAB305 & V E EL L Q L K \\
\hline UniRef90_LOHN43 & \(\mathrm{G} \mathrm{L} R \mathrm{R}\) V R DFL F S L Q \\
\hline UniRef90_X1KCG8 & VLNI RKEL \\
\hline UniRef90-M0E9S5 & V E D A V A A A \\
\hline UniRef90-M0CH08 & GEELVEPL \\
\hline UniRef90-L0AET6 & V V A \\
\hline UniRef90-J3JI21 & V R A V V D E A VA D A \\
\hline UniRef90-M0LLQ7 & AV GIL Q R A I E R F P \\
\hline UniRef90_S5EF30 & \(\square \mathrm{L}\) T L L \\
\hline UniRef90_UPI0004779128 & F A D P I R V R E D \\
\hline UniRef90 U2HW13 & \\
\hline UniRef90_G2MH91 & VE A E L E \\
\hline UniRef90_D8J537 & GRELVREA \\
\hline UniRef90-F4C613 & I I G E I E A \(\square\) \\
\hline UniRef90-E4MZ36 & V L R R L R A \\
\hline UniRef90_UPI00016C4DD1 & \\
\hline UniRef90 A0A022MP50 & \\
\hline UniRef90-U1PGS9 & GRELLEQVN \\
\hline UniRef90-K2DB42 & TKRRVENI \\
\hline UniRef90-Q2RLY3 & \(\square \mathrm{T}\) T A L R \\
\hline UniRef90 \({ }^{-} \mathrm{C} 6 \mathrm{CNZ8}\) & I L A L R Q \\
\hline UniRef90-C7LQD5 & TREILEVVD \\
\hline UniRef90_K2G667 & LR D Fl] \\
\hline UniRef90-Q8U2H4 & \\
\hline UniRef90_B9XNJ6 & CQKLLA S \\
\hline UniRef90_UPI000399C53C & 1 S A I L K Q \\
\hline UniRef90_A4J949 & V K N K L \\
\hline UniRef90-A3TYQ7 & I D T V I R \\
\hline UniRef90_M0CMU4 & \(\checkmark R\) A A A D A \\
\hline UniRef90-UPI0004734C10 & TKELI L L I \\
\hline UniRef90-U1NFT4 & A ANKL \\
\hline UniRef90_UPI000364F027 & \\
\hline UniRef90_L2F7U0 & \(\square \mathrm{C}\) Q W \\
\hline UniRef90_J3JGD4 & ARDAL ETARP \\
\hline UniRef90-K9TTY1 & MERAI GQ \(\square\) G \\
\hline UniRef90-D6Z313 & LQ A L I L S A G E K \\
\hline UniRef90-R6LHP7 & 1 MKV I E D L A K \\
\hline UniRef90-17BHQ3 & M H D AL A A AKA D \\
\hline UniRef90-K9X8F8 & MEQTI NHLEP \\
\hline UniRef90-UPI000469EA2E & V D A V I R \\
\hline UniRef90-L0AH62 & GEQLVEPL \\
\hline UniRef90-K2GAX0 & L K EII S K \\
\hline UniRef90-B1I6B1 & \(\checkmark \mathrm{R} N \mathrm{~L}\) \\
\hline UniRef90-K9X0A0 & MK S A I A K L E \\
\hline UniRef90-D1BZ10 & LK G F V T A \\
\hline UniRef90-T0LWZ6 & Y Q A L I D G \(\square\) Q E G A S \\
\hline UniRef90_M0M5M7 & \\
\hline UniRef90-H8KQT2 & T K A T L \\
\hline UniRef90-UPI000478AD20 & LIS DI K EV \\
\hline UniRef90_L0A5V2 & A TR R V Q E \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline & \\
\hline UniRef90_E4Q9X1 &  \\
\hline UniRef90-U2 & AEGDCTFKPDQKQALVDKLLPEFGYEVERVS \\
\hline UniRef90-V6M2A3 & ERFST R L D P LT SQEGLLQRIMDAGPFAVQQIQ \\
\hline UniRef90-M0D1X3 & ERQREAMLEAI ERAAEESAAELDT T \\
\hline UniRef90-A6DQ62 & GEDNFT\S HKDEAIKSI EQYFRDQGDAI EY \\
\hline UniRef90-UPI0003695CCC &  \\
\hline UniRef90-X1NYG9 & PHYYMVKE KRAFAGQDFSLIKNKLEE QFKPESLDF \\
\hline UniRef90-A0A059EB &  \\
\hline UniRef90_UPI0003B5F35F & DFHIS DELK EKAMEKAKK\WKF \\
\hline UniRef90-K9VI &  \\
\hline UniRef90-J2HN & PVAYTSLTM \\
\hline UniRef90-Q11 & NFHLTPEQKETFTKKLKSEPKDRVVEINR \\
\hline UniRef90-LOHLL6 &  \\
\hline UniRef90_G9PH40 & ERKAQLLEQI YERFA QVVD HV \\
\hline UniRef90_UPIO00479 & NDYHFTQKKKEEIMDRLLPELPYEVEKVSY \\
\hline UniRef90-UPI00036E & N ERIFDDIKRAYKDQ QUTT \\
\hline UniRef90_C7ME74 & YAGSGE \(\square\) NSRVEDAAAARERVRAHAATLPAARTDD \\
\hline UniRef90_UPIO0047A62BF &  \\
\hline UniRef90_F6CR12 & P WEVKGRVIRRLIDEDPPTA QLE \\
\hline niRef90-M0H & P TRAMSR IT D D A Q Q F E DVQ \\
\hline UniRef90_UPI00036D3733 & E I N F RLT DPAAAVARVEAAFAGLNPA RDE \\
\hline UniRef90-J1L2Y2 & IKEKI R TEHAADVIAS LK M RHAGEDワD \\
\hline UniRef90-B0VHR9 &  \\
\hline UniRef90-K9QNI1 & R LDLHLTEAHKNAVIDSYTKNPPSEVAGI \\
\hline UniRef90-R9GWE5 & \(P \square Y F \square S K N K M T L T E G D \square D G L L K K V Q D K Y C A Q P H\) \\
\hline UniRef90-UPIC & NFRLT P EVKEKFTEKVKDLGGRKVTQVVR \\
\hline UniRef90-R5G1 & PKYFMTPTLQVD I ILKEI EDEYREK A E \\
\hline UniRef90-D9QJ63 &  \\
\hline UniRef90_G5IGY6 & ERDYKFSQEKKDAI A EKLLPQMPEEVEKVSY \\
\hline UniRef90-X1NQM7 & EGERQVINNRIRDNFPESI \\
\hline UniRef90_UPIO0037BA313 & QFHDGKTNE \\
\hline Ref90-B0JTE9 & LREDA GKQVT \\
\hline UniRef90-L5MPU6 & K DKWl S Q MERI GPYAVQ \\
\hline UniRef90-V2TXP1 & Y I Y T T Q Y K P LDiL S FFDKKMQKQL Y Q \\
\hline UniRef90-B3QSL2 & EAEKQLAMSRFKEDDGMKV \\
\hline UniRef90-Q1IU74 & NAVKEDAMERPAKIGKLQV \\
\hline UniRef90-C9P1D2 & GDCKFSPQQKA SLVEKQLPDFDDEI EKV \\
\hline UniRef90_E6QK38 & LKELGGRRVTSVVR \\
\hline UniRef90_R9K6L4 & D Y F T PEKK EEMKRLLMERLLPGLSEE \\
\hline UniRef90-V2ZGV1 & DKLLPDFGAGVEKVSY \\
\hline UniRef90_UPIO003639582 & DAI T SRMTHAPGN \\
\hline UniRef90_J3A424 & FPSSGE \(\mathrm{F}^{\text {P }}\) CAVRNPTDVLEHLCSLLYAGK \\
\hline UniRef90-UPI0003B336BB & Y Q K LMEDKAVPSFEAEVERT \\
\hline UniRef90_A71671 & TPHGVELIKRLGE QYS GESID \\
\hline UniRef90-UPI000288 & K CPWEKK GKVMRNI IEDGGF \\
\hline UniRef90-F2NK79 & DLHLPSEEKDRVMARLKDLA GLEVERVEDL \\
\hline UniRef90_A3CTI8 & A D P A LVRAVEE AFTGET \\
\hline UniRef90-W7T858 & REEKAKLAKLSPEAVTEAI EQRLTAAPGN \\
\hline UniRef90-UPI00042876A1 & YMSKN K \(\square\) TLSASQSDDILEQLKNKYQHE DCNT \\
\hline UniRef90-C9P3E1 & DVI T A RLL HAPGN \\
\hline UniRef90-Q83GV6 & VH NPDMTMSAl RQ AFPGAYVEF \\
\hline UniRef90-W0FNT1 & LTEADKER\VEKKLPSFRYPVEKV SY \\
\hline UniRef90-FOQY07 &  \\
\hline UniRef90-UPIO0037B & VEAA DGAELD \({ }^{\text {d }}\) \\
\hline UniRef90_A8IJC8 & PKTWSSPTMSPHCADEAKYGlVEQVVKHYQKA \\
\hline UniRef90_A3CXQ1 & \\
\hline UniRef90-A0Q1V6 & Y NHKK Q \(\quad\) Y CP WNKKAEVMRKLVEKTK \\
\hline UniRef90-E1F638 & KLDKKLQTLAQESEYNVD \\
\hline UniRef90-16Z4T9 & I TQ L T EAPGNGAA \\
\hline UniRef90_B8J036 & VTEUITRAPGNDA \\
\hline UniRef90-Q3A4Z7 & WRVKD V \({ }^{\text {V }}\) \\
\hline UniRef90_L9VRS0 & AFPAATVDTSY \\
\hline UniRef90-K9P8C2 & ALLREVAGAGVQEVNRT \\
\hline UniRef90-D7CTM7 & PATPEQKAALSALSPEQVTADITAKLTRAPANGAP \\
\hline UniRef90-A3DPI5 & P \\
\hline UniRef90-R7MB10 & QMEEI IDQ K I SKK \\
\hline UniRef90-C7MHS4 & R\FDEHEPAFGREIDR \\
\hline UniRef90-F7XX41 & A \\
\hline UniRef90-A7HB87 & EPI LARLTRAPGNGAG \\
\hline UniRef90-K8WDA9 & DKI TQRLTAAPGNNAA \\
\hline UniRef90-M8DLU9 & FST RMD\R L P E K T P WLEQI RKVGPYAVT GVNRMD \\
\hline UniRef90-TON1U2 & MDQI RNKLK NWTFDF \\
\hline UniRef90-S0FPF6 & \(\square K C P W E S K G T V M R K I D S E Y R D K K L E L L\) \\
\hline UniRef90-F4D0W6 & EPITERLTCAPGNGEPL \\
\hline UniRef90-T0KDK9 & EKI QKVLSSAPGNDAEI \\
\hline UniRef90-G7Q437 & EAITAKLTHAPGNGAA \\
\hline UniRef90-XOSFQ2 & MERVLEHYKDRGRLVA \\
\hline UniRef90-Q07KW2 &  \\
\hline UniRef90-M1PR95 & QRIT QVID \\
\hline UniRef90-Q5L3P1 & N E Q VKKVIQEVEAEMN \\
\hline UniRef90-Q2RH64 & ASRT VA CP WEAKGRVMRTLISEEPAD \\
\hline UniRef90-13ZL81 &  \\
\hline UniRef90-S6BWQ4 & EI A GKPVVGADRR \\
\hline UniRef90-UPI00034CB158 & PTY THRDDLRDTPEHKQAAMEQLENVAGDDVVNVGSKD \\
\hline UniRef90-A9HSH5 & EPIRATLTRAPGNDADIG \\
\hline UniRef90-X7XJS8 & MLKS F G Q \\
\hline UniRef90-D8IXQ7 & EAA A TPEQKARDSK\SPQDVSEP\|REVLT T A PANGKP \\
\hline UniRef90_D9R4Z2 &  \\
\hline UniRef90_A5FRT2
UniRef90_Q89SL1 & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline & \\
\hline UniRef90-YZZJo9 & \\
\hline UniRef90-V6М2A3 & RKLLLEDGWVLDRPSGTEPLVRIYCEATTQQADEKIKEA \\
\hline UniRef90-M0D1×3 & GYRLDYGDGWALARPSGTEPVVRVYAEARSADRAADLADR \\
\hline UniRef90-A6D & GLNLEFKDWRFSLRCSNTEPLVRLNIETRNQ \\
\hline UniRef90-UP10003695CCC & Gl RFT Led \\
\hline UniR &  \\
\hline UniRef90 A0A059EBDO & GARVTLEDGWVLVRASSNKPELVVVVE SMASADDMRDL \\
\hline UniRef90-UP10003B5F35F & GAKIRFGGGFLLVRPSGTEPVMRMYAETESEEDRKDVRE \\
\hline iRef90_K9VMX0 & G \\
\hline & G \\
\hline Q11 & \\
\hline & \\
\hline UniRef90-G9P & GCKVYFDDSWVVIRFSGTEPLLRVFAEAPTYEQAQGUIDQ \\
\hline UniRef90 UPIOO & GSKVYFKNGWIIARFSGTEPLLRUYSEMPDTEDAKKLCKL \\
\hline & \\
\hline C7 & VEHDRWWFS \\
\hline 90-UP1 & GVKIIFESGWVHLRPSNTEPI R Y AESSSESTAEHLARK \\
\hline UniRet90_U1Q & GVRLTLPDSWLLVRPSGTEPYIRLYAESGS V \\
\hline & GLFVEVDEAWFVVRPSRTTGELRVTVEGASNRNAKRLFDR \\
\hline UniRef90- UP100036D3733 & GLSLDFGDWRLNLRRSNTEPLLRLN \\
\hline UniRef90_J1L2Y2 & GI RINRQGA WALVRPSGTEPMMRVI \\
\hline B0VHR9 & \\
\hline e90_K9QN11 & \\
\hline UniRet90-R9GWE5 & GKEWVHLRKSNTEAIIR \\
\hline UniRef90_UP100047D91 &  \\
\hline UniRef90 R5G1T1 & GVK \\
\hline UniRet90 Dgaj 63 & \\
\hline G5 & \\
\hline X1NQM & \\
\hline PIO & \\
\hline UniRef90 UPIO00471B & GVKVYYKNGWALVLPDSEEAVCRI Y SEGVSEEYAEELTKF \\
\hline UniRefo &  \\
\hline UniRef90-V2TXP1 & GIRVEYPEGSGVLRASNTGDYLTVR \\
\hline UniRet90_B3QSL2 & \\
\hline Ref90_Q11U & GMKFFFEDAWVLIRASGTEPLLRVYSEASSPEMVQDILGE \\
\hline 9P & \\
\hline & A \\
\hline UniRef90 R9K66 & GSKVYFKNGWVARFSGTEPLLR FCEMPDAARAAEDCGI \\
\hline 90 & GCK M K G \\
\hline UniRer90-UP1000363 & S TFD \\
\hline UniRef90-UPIO 03 B336BB & GLCKVYFKNG \\
\hline UniRef9 - A71671 & \\
\hline & G \\
\hline UniRet90-F2NK79 & GYKWHLAGGWVLERPSGTEPV \\
\hline UniRet90-A3CT18 &  \\
\hline UniRef90-W1858 &  \\
\hline UniRef90 \({ }^{\text {C9P3E1 }}\) & \\
\hline UniR & D \\
\hline & NA WV \\
\hline & GVKVVFDNSWI \\
\hline UniRef90-UPIOOO37B8 & GVRVVEDDRWV \\
\hline A810 & \\
\hline A3CXQ1 & \\
\hline & \\
\hline & RKWV \\
\hline 62 & 此 \\
\hline UniRef90-B8J & Y \\
\hline UniRef90-L9VRS0 & GVRLEFEDS WILVRPSGTEPYVRIY \\
\hline UniRef90-K9P8C2 & PLLR \\
\hline 77 & \\
\hline A3D & \\
\hline & GVKLYLEDGWILVRPSGTEPLLRIYMESDSLDKIEKIKAM \\
\hline UniRef90-C71 & GCKVYFDDSWLTI RFSGTEPVIRVFSEAETAEGAQELSRT \\
\hline UniRet90-7 \({ }^{\text {UniRef90 }}\) A 7 H & GLKVVAEN \\
\hline UniRef90-K8WDA9 & GLKIMTDYGWFAARPSGTEEAYKIYCESRG \\
\hline UniRef90-M8DLU9 & GIKLLLQGGWVLIRPSGTEPLL \\
\hline ON & D WV \\
\hline & \\
\hline UniRef90-F4Dow6 & G \\
\hline 即90-TO & \\
\hline UniRef90-G7Q437 & GLKVVTENGWFAARPSGTEDVYKLYAESNGRDHLCQLLQAE \\
\hline UniRet90_Q07KW2 & GVRVTCADGWGLVRASSNKP \\
\hline UniRef90-M1PF & GRKMDFEDGWLMIRPSGTEPKVRFYVESRTKSGTAALVEA \\
\hline & \\
\hline UniRef90 &  \\
\hline & GVKLLLED \\
\hline UniRef90-UP100034CB158 & GVKLQLGNAWVLVRPSGTEPLLRISMEADSRDQQ \\
\hline UniRef90-A9HS & GLKIVTDNGWFAARPSGTEDV \\
\hline UniRet90-X7 & \\
\hline & F \\
\hline UniRef90_D9R4Z2 & GCKVYFKNGWVIARFSGTEPLLR F CEMEAEADSVSVCSE \\
\hline Rei90_ASFRT2 & \[
\mathrm{G}!
\] \\
\hline Ref90_Q89SL1 &  \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline UniRef90 E4Q9X1 & F AEFLL N \\
\hline UniRef90-U2ZJ09 & MKAFLL \\
\hline UniRef90_V6M2A3 & 1 R D WFLD \\
\hline UniRef90-M0D1X3 & L H D A V S Gl R VD \\
\hline UniRef90-A6DQ62 & I Q S L L K WI \\
\hline UniRef90_UPI0003695CCC & 1 K Dil \({ }^{\text {L }}\) N Q \\
\hline UniRef90-X1NYG9 & GLLE KI T E V A \\
\hline UniRef90-A0A059EBD0 & F HKEVK \\
\hline UniRef90_UPI0003B5F35F & \\
\hline UniRef90_K9VMX0 & M EKVIS QLEP \\
\hline UniRef90-J2HN43 & F R E EVK \\
\hline UniRef90-Q1IQU8 & A K F V \\
\hline UniRef90_L0HLL6 & I I Q A L K \\
\hline UniRef90_G9PH40 & V V A \\
\hline UniRef90_UPI000479FA9D & Y E E L \\
\hline UniRef90_UPI00036ECCA1 & \\
\hline UniRef90_C7ME74 & \(\square \mathrm{L}\) A \(\square\) A Q D E D VP \\
\hline UniRef90_UPI00047A62BF &  \\
\hline UniRef90_U1QL27 & ATKQI EA AI \\
\hline UniRef90-F6CR12 & Y \({ }^{\text {D }} \mathrm{K}\) I S Q \(\triangle\) AK S A E \\
\hline UniRef90-M0HYA7 & VTRLVCTGEPTAVV \\
\hline UniRef90_UPI00036D3733 & 1 T A L I \\
\hline UniRef90-J1L2Y2 & 1 M A EI R A S A P D \\
\hline UniRef90_B0VHR9 & VK T ML GE\| N \\
\hline UniRef90-K9QNI1 & MENAIA K L G \\
\hline UniRef90_R9GWE5 & L I A D M N EI \\
\hline UniRef90_UPI00047D9D84 & A K N WV \\
\hline UniRef90 R5G1T1 & \\
\hline UniRef90_D9QJ63 & Q E V K P R L \\
\hline UniRef90_G5IGY6 & FEEFL \\
\hline UniRef90-X1NQM7 & G K G L \\
\hline UniRef90-UPI00037BA313 & AKK A I E \\
\hline UniRef90_UPI000471B101 & Y E D K I N W A K K \\
\hline UniRef90-B0JTE9 & AK S W \\
\hline UniRef90-L5MPU6 & \(\square \mathrm{R}\) D WFS E \(\square \mathrm{N}\) \\
\hline UniRef90_V2TXP1 & F A SVLMEKYPE】 \\
\hline UniRef90 B3QSL2 & \\
\hline UniRef90_Q1IU74 & A EKFVHR \\
\hline UniRef90-C9P1D2 & MKAFLQ \\
\hline UniRef90_E6QK38 & A K E F V \\
\hline UniRef90-R9K6L4 & Y E EFL \\
\hline UniRef90_V2ZGV1 & MERFL \\
\hline UniRef90_UPI0003639582 & A R T V E ALL \\
\hline UniRef90-J3A424 & ELLAR İDEK \\
\hline UniRef90_UPI0003B336BB & Y K NLL L \\
\hline UniRef90_A71671 & IKK K SVLLE \\
\hline UniRef90_UPI000288BE92 & \\
\hline UniRef90_F2NK79 & AR Q L I \\
\hline UniRef90-A3CTI8 & \(\square \mathrm{M}\) \\
\hline UniRef90_W7T858 & AR DVVA Q A L A D \\
\hline UniRef90-UPI00042876A1 & \\
\hline UniRef90_C9P3E1 & A QE\|VNQVFKNAGL \\
\hline UniRef90-Q83GV6 & A VKI I \\
\hline UniRef90-W0FNT1 & MAD F \\
\hline UniRef90-F0QY07 & A V S L I R L G \\
\hline UniRef90_UPI00037B84A3 & WA GVVERA \\
\hline UniRef90-A8IJC8 & V D S V L R \\
\hline UniRef90_A3CXQ1 & GH T AL ERAK \\
\hline UniRef90-A0Q1V6 & L K E K V E E I L K E \\
\hline UniRef90-E1F638 & Y EKAL \\
\hline UniRef90-16Z4T9 & AKALVDSV \\
\hline UniRef90-B8J036 & A M NFLERLLK D \\
\hline UniRef90_Q3A4Z7 & GKAFI EA \\
\hline UniRef90_L9VRS0 & A R DVVETADA \\
\hline UniRef90_K9P8C2 & A R QL A E S \\
\hline UniRef90_D7CTM7 & A QEIVAA A \\
\hline UniRef90_A3DPI5 & FED K L DE \(\mathrm{I}^{\text {I }} \mathrm{K}\) K \\
\hline UniRef90_R7MB10 & \\
\hline UniRef90_C7MHS4 & V A D \\
\hline UniRef90-F7XX41 & F D Q L L \\
\hline UniRef90-A7HB87 & AKAIVAAALKSA \\
\hline UniRef90-K8WDA9 & A 1 E \(\ddagger\) V S K V I \\
\hline UniRef90-M8DLU9 & 1 R E WF \\
\hline UniRef90-T0N1U2 & 1 K S L I Q S \\
\hline UniRef90-S0FPF6 & Y Y GLL E K \(\square\) \\
\hline UniRef90-F4D0W6 & A R DVVSA \\
\hline UniRef90_T0KDK9 & A Q A I MQELLFKTL \\
\hline UniRef90_G7Q437 & AKE\|VDA \\
\hline UniRef90-X0SFQ2 & \\
\hline UniRef90_Q07KW2 & \\
\hline UniRef90-M1PR95 & A R G M L D E \(\square \mathrm{G}\) \\
\hline UniRef90_Q5L3P1 & \(\square \mathrm{A}\) DVVRR \\
\hline UniRef90_Q2RH64 & Y E ER L K ELI \\
\hline UniRef90_I3ZL81 & A EQFVLE \\
\hline UniRef90_S6BWQ4 & A E EVVRSL \\
\hline UniRef90_UPI00034CB158 & \\
\hline UniRef90-A9HSH5 & A A D A I S S L \\
\hline UniRef90-X7XJS8 & IS D L V \\
\hline UniRef90_D8IXQ7 & A Q D I V R A \\
\hline UniRef90_D9R4Z2 & FEEYL \\
\hline UniRef90_A5FRT2 & G L K CLK S \\
\hline UniRef90_Q89SL1 & \(\mathrm{A} Q \mathrm{AG} \mathrm{L} \mid \mathrm{AK} V\) \\
\hline
\end{tabular}

UniRef90_UPI00035C2643 UniRef90_Q50805 UniRef90-R5A181 UniRef90-A2BUQ9 UniRef90-C3PIR2 UniRef90-Q6AL15 UniRef90-UPI000345E970 UniRef90 \({ }^{-14 V U I 2 ~}\) UniRef90-XOUYS7 UniRef90-E8LKK4 UniRef90 UPIO0037555D3 UniRef90_E6PWW1 UniRef90_Q2JQ98 UniRef90-C2GJK3 UniRef90-17IY12 UniRef90-X1NJ85 UniRef90-A9B2Z0 UniRef90-B3EBI6 UniRef90-UPI0003B72B45 UniRef90-X1MWP7 UniRef90_UPI0002E89BEF UniRef90 E6K1B5 UniRef90-A0A017T2R3 UniRef90_G2SXZ1 UniRef90_UPI000474CD40 UniRef90_C9KJY4 UniRef90-।6Y4P0 UniRef90-K7VSR7 UniRef90- S0L833 UniRee90-UPIOOO3B4C0A4 UniRef90_B0ULN3 UniRef90-D3QID9 UniRef90-EOSPA8 UniRef90-E6W605 UniRef90-X1CZF9
UniRef90 S8AF20 UniRef90_M4UJG0 UniRef90-E1IE80 UniRef90-E8XN83 UniRef90-A8M4B8 UniRef90-S7TEW7 UniRef90_Q03AF8 UniRef90-IOHZE7 UniRef90_IOHZE7
UniRef90 UPIO0047A3310 UniRef90-S0J6P5 UniRef90-G4FCL7 UniRef90-K9W736 UniRef90_V2XR45 UniRef90 C7QZ24 UniRef90-J2X3Z5 UniRef90-U2QFB5 UniRef90-UPI00047C2364 UniRef90_E2MXI6 UniRef90-K6ZKP1 UniRef90-UPIO00362094C UniRef90_UPI0003B72E24 UniRef90_A0A024JVQ2 UniRef90-Q8R814 UniRef90-UPI0003800BD9 UniRef90 Z5XR23 UniRef90_UPI000360406F UniRef90-J9W8H2 UniRef90_IOI9N9 UniRef90-UPI0003818F73 UniRef90-A8KY05 UniRef90_U7FWH3 UniRef90_14VUS1 UniRef90-B8ET86 UniRef90-A7X524 UniRef90 UPI0003086DB9 UniRef90_U5P6L3 UniRef90-G7WPQ6 UniRef90_K9QZM4 UniRef90_D1BU43 UniRef90-M4CQE8 UniRef90_UPI00024933F9 UniRef90-UPI000359979D UniRef90_G9PG02 UniRef90-X8K1Z2 UniRef90-A6NV12 UniRef90_UPI0002DDFF9D UniRef90-UPIO003B61BFB UniRef90-X6DW25 UniRef90-L7LLJ7 UniRef90-H0J469 UniRef90-K9S8A6 UniRef90-D4L4F4 UniRef90-UPI00036790CC UniRef90-F8B3R7
UniRef90_UPIO00374290E
\(10 \quad 30 \quad 30\)
AEFDKGRLMSEVVRYTEVAGHRVET\D EFK D SVIERRLAEH FGDKKI ELIDD

 S P E VNVQVTDKNAVMDNA
ak VLEAKIVEADMQ EKIEQVLDKAPGNGAADG
\(D \square P F T E D \square N K K \square 1 E E M T K A L D A K \square T N \square N K M D\) ERDYKFTPARKEE\|VDKALPDISEPDERVSYMD
 MDPPAE \({ }^{L}\) GQKV C K HF DKD
TVNPVVAKEAVAASDKLAAAVEEAREDLL
 RI DTHISSEAKEALLQRLRNEAGRTVATTNFSD FPSSGEINFVVADARAAVARVRAAMEPQAVAVDETD

VNVKVADKKAALENDQTQA\| I K K VE TEMN EPI E QKMTTAPGNGARTG EP QAKLTRAPGNGADLG
ERDYKFTLEKKLKMQEVLMEQKQLPDLHVSYLD YFSYDRDDLPLSSEVQAKLLN
\(V N V K V A T K E G W E T N E A I K K A I A E G D K E L\)
T A VLTNAPGNGAP \({ }^{\text {T }}\)
SYDR\DLPLANEVRGRLLKQLQEI AGKEVIGCQTID \(V N I R V T D K N G A M E V P A \ K A V V E Q A E A E M N\)

PKTWGSPTMSPHCADEVKYGVVEKVTARVRARIVDLV E E GKK IE GUKE I Y R
1 C CPS GNRY口D!D
PAQYARKD \(\square R L S R P\) V KAEVADRNKYKTTDA ERKLTEPEGLODQ TD \(P A S P E Q K E V L A N D S A A Q V T E V I D D K V T H A S G N G A A I V G\)
\(F M\) PPYFM A QTRIPCRWESKGKVMRULNQQYAER GQTDQV
\(\square N V P V G D R T V G A V A P A V R A E V E R A E V E L\)

 EPITAKLTRAAGNDAP 1 G DKL LPDLPEEDDHDSYLD

 PATREQKSTLAQDSPDQVTATITERDTTAPGNNAADG



 DP I A KLS HAPGNGAAVG
\(R \prod R C D W K D K G R \| I R E L T A F E R K N N V T F L D\) PQULINVKDVDKAKAADELTAAVRAAEAEL
】NVKVADKKHALDNDKVKDVIAQVEEEM

E \(\quad\) NT T D \(R \square D \square P \square A S E V A K L L E Q L Q A \| A G K A V V S C Q T D D\) V PTPWAEKGTVMRRVVESVDDSGDQVDTTD \(\square N V R G P N R D G F E A L P A V K A A V A D A E A K L A\) PDQLK IE RLEKIEQVLSHAPGNGAADG
PKTWGSPTMSPHCDDETKYGVVEKTLARLSALEAELVTVN
 VNDRVENSMKDKAMEAI RAII EKMEAEMA EGSAADLMRRLEGDL A P L L E P D T TD QD DT DRLTAAPGNGAKI G SRQVKVEVPD RTAVVTTREETEALRPLG\|DAIN I NVPVTDKNNWKEHQDILD IIKVVEDEMD SRQLKVKVEDRTVVQTTDA ERRTTHPPGLQEAVE EPDEQR LVRAPGNDAP I G




 STE DRYK ILEKDGEK \(\square\) IADLTKYAEEQDGWCDNRE VP TPWASKGAVMRAADEAAD GRP DDTTD


\begin{tabular}{|c|c|}
\hline UniRef90_UPI00035C2643 & \(A T R R \backslash V A L L D^{90}\) \\
\hline UniRef90_Q50805 & 1 MNLL L S \\
\hline UniRef90-R5A181 & L LQ F L E A H K E G VDD \(\square\) \\
\hline UniRef90-A8F3N2 & V R K \\
\hline UniRef90-A2BUQ9 & S QKFINRVK Q N \\
\hline UniRef90_C3PIR2 & A Q A LVSQV \\
\hline UniRef90_Q6AL15 & AR QL L \(\square \mathrm{D}\) ¢ G \\
\hline UniRef90_UPI000345E970 & \(\square \mathrm{A}\) NV V R A \\
\hline UniRef90-14VUI2 & AQK\|VDA A \\
\hline UniRef90_X0UYS7 & AKETMEKLD \\
\hline UniRef90-E8LKK4 & ATE V V A ALKKA \\
\hline UniRef90_UPI00037555D3 & F EEFLE \\
\hline UniRef90_E6PWW1 & A R GF ALEA \\
\hline UniRef90- Q2JQ98 & \\
\hline UniRef90-C2GJK3 & A Q E L I R V \\
\hline UniRef90-I7IY12 & L A A V V A S I \\
\hline UniRef90-X1NJ85 & G K K V V N S V \\
\hline UniRef90-A9B2Z0 & G R \\
\hline UniRef90-B3EBI6 & A H R \\
\hline UniRef90_UPI0003B72B45 & LR R L 1 E \\
\hline UniRef90_X1MWP7 & GVKMAREA \(\square\) \\
\hline UniRef90_UPI0002E89BEF & \(\square \mathrm{A}\) D V VR Q \\
\hline UniRef90_E6K1B5 & A T AVV D K A \\
\hline UniRef90-A0A017T2R3 & A R Q L V D EA \\
\hline UniRef90_G2SXZ1 & Y E Q F L \\
\hline UniRef90-UPI000474CD40 & \\
\hline UniRef90-C9KJY4 & \1 A D V VK K \\
\hline UniRef90-16Y4P0 & AREVVDAA \\
\hline UniRef90-K7VSR7 & A K N W \\
\hline UniRef90-S0L833 & \A E V VR A \\
\hline UniRef90_UPI0003B4C0A4 & GLLE KL \\
\hline UniRef90_B0ULN3 & \\
\hline UniRef90-D3QID9 & \(\square \mathrm{A}\) QVVE A \\
\hline UniRef90-E0SPA8 & L \(\square\) T Y I K S \(\square\) Q \\
\hline UniRef90-E6W605 & Y K G K \(\square\) R Q W \(\square\) N E A \\
\hline UniRef90 X1CZF9 & \\
\hline UniRef90-S8AF20 & VK A L L K \\
\hline UniRef90-M4UJG0 & AKKIVAQAFSDA \\
\hline UniRef90-E1IE80 & Y A GL I \\
\hline UniRef90_E8XN83 & AVE V \(V\) S V L A D A K \\
\hline UniRef90-A8M4B8 & IA D Q V R T A S P \\
\hline UniRef90 S7TEW7 & A Q A V \\
\hline UniRef90-Q03AF8 & 1 V DV V K \\
\hline UniRef90_K9UYH4 & \\
\hline UniRef90-IOHZE7 & Y S D L VRS F \(\square\) D D L Q \\
\hline UniRef90_UPI00047A3310 & A R A V V \\
\hline UniRef90-S0J6P5 & Y EKFLE \\
\hline UniRef90_G4FCL7 & A K A L L A GVLKE \\
\hline UniRef90_K9W736 & AKDWANSV \\
\hline UniRef90-V2XR45 & I I E V I K A \\
\hline UniRef90_C7QZ24 & A K NVVSDA \\
\hline UniRef90-J2X3Z5 & T A EL L R Q D D A G \\
\hline UniRef90_U2QFB5 & A R QVVSEV \\
\hline UniRef90_UPI00047C2364 & A Q ALVNDAI \\
\hline UniRef90_E2MXI6 & A Q DVV S AV \\
\hline UniRef90-K6ZKP1 & A E ELVASV \\
\hline UniRef90_UPI000362094C & A Q A MV S A AFKA A GL \\
\hline UniRef90_UPI0003B72E24 & A K S IV D A A \\
\hline UniRef90-A0A024JVQ2 & A R EVVNKVI \\
\hline UniRef90-Q8R814 & Y E K K I Q D I \\
\hline UniRef90-UPI0003800BD9 & L A DVVRKA \\
\hline UniRef90_Z5XR23 & A K K L V D S V I \\
\hline UniRef90-UPI000360406F & AQAVVAEV \\
\hline UniRef90- J9W8H2 & \(\square \mathrm{D}\) D V V R \\
\hline UniRef90-I019N9 & GRRLLV \\
\hline UniRef90_UPI0003818F73 & A K W W \\
\hline UniRef90_A8KY05 & WS AVVETVPP E \\
\hline UniRef90_U7FWH3 & L A DVVE GAI \\
\hline UniRef90-14VUS1 & AQKIV D D A A G \\
\hline UniRef90-B8ET86 & V D A L R E \\
\hline UniRef90-A7X524 & 1 A DV V Q \\
\hline UniRef90-UPI0003086DB9 & A Q S L V \\
\hline UniRef90_U5P6L3 & \} \ \text { A A V V K } \\
\hline UniRef90-G7WPQ6 & F M G F I E \\
\hline UniRef90-K9QZM4 & A K D W \\
\hline UniRef90 D1BU43 & A K DVVT A A \\
\hline UniRef90_M4CQE8 & VA QLVK S F \\
\hline UniRef90_UPI00024933F9 & I A DVVK K \\
\hline UniRef90_UPI000359979D & \\
\hline UniRef90_G9PG02 & AK K V V S A A \\
\hline UniRef90-X8K1Z2 & LA A L I S R \\
\hline UniRef90-A6NV12 & LA NLI K T L \\
\hline UniRef90-UPI0002DDFF9D & SKNFIK NI \\
\hline UniRef90-UPI0003B61BFB & \(\square \mathrm{CNAVRKAA}\) \\
\hline UniRef90-X6DW25 & \\
\hline UniRef90-L7LLJ7 & VA A V V A GV \\
\hline UniRef90-H0J469 & A T K L L \\
\hline UniRef90-K9S8A6 & \\
\hline UniRef90_D4L4F4 & LG K F L K \\
\hline UniRef90_UPI00036790CC & WA D L T R A G \\
\hline UniRef90-F8B3R7 & A Q AVVDA A \\
\hline UniRef90_UPI000374290E & A R A F \\
\hline
\end{tabular}



UniRef90 UPI00021971F6 UniRef90-C8W670 UniRef90-K6WCC9 UniRef90_R5IF91 UniRef90_R6UPR8
UniRef90_S3WVI3 UniRef90_UPIO003B4D760 UniRef90 K9PQK5 UniRef90-UPIO004675678
UniRef90-R6NJB1
UniRef90_E8PP19
UniRef90_B7JWW5
UniRef90_E6QU06
UniRef90_UPIO00225F1D9
UniRef90-UPI00034BA44C
UniRef90-B0PAT9
UniRef90-E2XSB1
UniRef90_U5VQL4
UniRef90-UPIO00479261D
UniRef90-H3NIQ4
UniRef90-WOEAF8
UniRef90-M1ZFB0
UniRef90_U5WWC4
UniRef90-V1H5Q9
UniRef90-Q21ZC0
UniRef90_I8S8T1
UniRef90-UPIO003747C43
UniRef90-A9CW62
UniRef90- F3P5L3
UniRef90-A0A033UG10
UniRef90-17J5C0
UniRef90-H5SAM8
UniRef90-D0BN44
UniRef90-R718Q1
UniRef90_U7URF1
UniRef90-K2ESN5
UniRef90-V5RI00
UniRef90-UPIO00466B683
UniRef90_C0QKB1
UniRef90_M3J316
UniRef90_Q3B098
UniRef90-H5SPA7
UniRef90_UPIO00333879A
UniRef90 R5L8E6
UniRef90-W4QJY7
UniRef90 R5HYZ4
UniRef90-M7ZKE3
UniRef90-V5RTA4
UniRef90-Q6ZDQ1
UniRef90 H6MTE7
UniRef90-DONIH8
UniRef90_UPIO002630500
UniRef90-R5IVQ3
UniRef90_UPI000344A549
UniRef90_A8PZW5
UniRef90-G8SRV3
UniRef90-A0A024QFJ0
UniRef90_U3U8M3 UniRef90-R7BPP7
UniRef90_C4KCY7
UniRef90_F2JR64
UniRef90_Q0AE26
UniRef90-W5WK00
UniRef90 D3EQR5
UniRef90-U1S9K1
UniRef90-R6QJF4
UniRef90-B4S3L2
UniRef90-10YJY8
UniRef90_K8WIK7
UniRef90-D2AV47
UniRef90-A714W6
UniRef90_UPIO00374C80A
UniRef90-D1Y4Y9
UniRef90-V7Z738
UniRef90-B4IX69
UniRef90-C6LWZ0
UniRef90-A0A024KA34
UniRef90-A6LQV8
UniRef90-D9RZR2
UniRef90-R6HE86
UniRef90_D8KKT1
UniRef90-R6IKQ6
UniRef90_UPIO0029B2D75
UniRef90 B1KEH8
UniRef90-R6IXD2
UniRef90-D2RJQ7
UniRef90-A9BEQ1
UniRef90_Q0VSS6
UniRef90-H1C765
UniRef90 UPI0003
\(\square \mathrm{V}\) EVVK
\begin{tabular}{cc}
\(M I\) & \(K\) \\
\(M\) & \(A\) \\
\hline
\end{tabular}
L V Q A V E A N L Q K
IVDFIKE
A K
AREVV


AKNWANSV
AQGIVDAA
A L \(A\) L V R
AQALVVER
I AA A V I
AQVLVDGA DS S
VADEVRTASPA
FVEKMQ

VADAVSAA
V L HEI
A QT IVSDA
\begin{tabular}{l|l|l|l}
\hline\(L L\) & \(L\) & \(L\) & \\
\hline\(A R E\) & \(L\) & \(K\) & \(A\) \\
\hline
\end{tabular}
TMALVKGSAGD
V
I A EVVEQ
\begin{tabular}{l} 
VFDKV \\
\hline GLR RI
\end{tabular}
1 A DVVRQ
I A QTI R A
GKNLI AKA

MWTNLENGKMFLLEI

LLERIE K



\section*{T A D L I K E}

VVGAVRQ
VARHVHS \(\square\) AA GVGL
SLLKNIQTFSEN
WARVVEEAAAT
T L K R I A GV
FGAMI RALL
LAKIVAE
1 VDVVKA
\(V G G L V Q K V G P D L V K P\)
YEKAL
GLDAAERA

I A KLI E A
L A A Ll V A K K
\begin{tabular}{lll} 
I & A EVVV \\
I & A S \\
\hline
\end{tabular}
A Q A MI E
I A DVVRE
1 A EVVRK
FSQLI QS \(\square\) DNE
LA EVVVEAD
L A NVIK

UniRef90 UPI00040674DF UniRef90-UPI00026299CE UniRef90-A0A023F312 UniRef90-R4XEG1 UniRet90_S2XDH9 UniRef90-A8VFM3 UniRef90-G8YTN2 UniRef90-UPIO0046CDA10 UniRef90 Q6FX17 UniRef90-G4Q5M3 UniRef90 C6WVI2 UniRef90-UPI00045E68AD UniRef90-UPIO002490E47
UniRef90-E4N418
UniRef90 \({ }^{-}\)G2E255
UniRef90- F8AYZ6
UniRef90-D3Q926
UniRef90_R7GEIO
UniRef90 D4M482
UniRef90-K9YMA0
UniRef90 UPIOOO470COF9 UniRef90 \({ }^{-}\)W7CUJ1 UniRef90-D2NRSO
UniRef90-E31EF8
UniRef90-E9E601
UniRef90 K2A7W6
UniRef90-UPIO00371615D
UniRef90-F215L9
UniRef90 U1LX23
UniRef90 UPI0002DA5BBB UniRef90-U3JJ60
UniRef90-E8SE28
UniRef90 UPI0003B6B552 UniRef90-UPI0003FA84C5 UniRef90_UPIO002195D94 UniRet90_FOHBR9 UniRef90 Q4WF91 UniRef90-D2PXZ4 UniRef90-R7HYR0 UniRef90 G2FLQ8 UniRef90 K9T5X9 UniRef90-UPIOOO4417621 UniRef90_U1WBQ7 UniRef90 D5T505 UniRef90-R5D2M7 UniRef90_UPIO0047400AF UniRef90_UPIo0035F09FB UniRef90-R5WF62 UniRef90-UPI000364AED8 UniRef90-U2P2G6 UniRef90 R7RQA8 UniRef90- \({ }^{-13 C E D 5}\) UniRef90-V6ITS6 UniRef90 R5NC15 UniRef90_UPI0002F619DC UniRef90-E8N4Y6 UniRef90-U3CEF1 UniRef90 R6E487 UniRef90-UPI000363AD92 UniRef90_C6X6X0 UniRef90-UPI000376D320 UniRef90-G7MBR3 UniRef90-A3K8U5 UniRef90 UPI00026281D9 UniRef90 K9Z1R3 UniRef90-H1CXU1 UniRet90_-F5S649 UniRet90 G7H3X3 UniRet90-R5UM73 UniRef90 A3TGZ4 Unirefo UniRef90-D7TTG2
UniRef90-W8KHC3 UniRef90-UPIOOO2D95398 UniRef90 UPI0004633817 UniRef90-A0LU93 UniRef90-12JIW4 UniRef90-H8Z750 UniRef90-B51168 UniRef90-T4VXP8 UniRef90-D9SWRO UniRef90_UPI00047C63D8 UniRef90-J1Y860 UniRef90-A5VIH5 UniRef90-A0A011U0E6 UniRef90 EOTID9 UniRef90-UPI000382A8CC UniRef90-U5MNQ0 UniRef90-K2KAG1 UniRef90-B8BR08
UniRef90_V6EXK4

VNTRVSDK DLPTAWQDKGQVMRTVVEAA SGRAIDTTD AI E AL F GESFGSVVS TDVT D
VATPWATKGTVMRRIVESVDPDGGTIDTTD \(\square N V P V T D K K S \| V N V R Q R V A D H E A\) DDKE【KNAIEKLEKEFA
NVRVKDKKTALDNAAVQAAVEKTAEELGT
LQEDAGKKVVDCLADD
 KKESTDMSKSN

VRVEVGNKDLFQATDA ERRDSHPPGADEDD KITVGESEKT\|I Q TMTDD
\(\prod \mathrm{NVPVSD} K S A V L D A V V A A K T E A E N E L\)
PTYPQ ELINVKVTRAGKEEAMNN ADVKAEDDAVESELL EDYKQQVAKNLQQ GETEADELPSSN
LKVQVADRRVDDTEDAERRALTPPGLQEKDD
KYPQSL VNVRVTDQDVKAVMDEVEAEMN
AD
NVRVDKEKAQEVDKVEEALGS
 PKRFSRAALIRNFPRATSLK IIDRFSEHGFSSISRDDYTD EP LDRMTSAPGNGAADG NVRVTD KNAAMEDVLAAAKQVEEELGT
LRCPWKVKGALMRYLVETHATEDLED TD VKVVVGDRNAFRTVDA ERRLVSPAGLQEKID
VNTKVADQNDPDVIAKTAEVEADMAG
PQYPQ ELI NVAVSHGVKDAI MQDLRHAIAQMEQELA
PSFYKRDDIKFPNQSEKKEFIDDNUPENINNHKDKISKTD PLSVLTKEVKIYPQVLKNVRVYDKKEAR ENPEVIKADAE
\(N V R V K D K K E A Q A D P D V Q K\) AVAEVAEKL
\(P L E D E A V Q R V A Q A E A E \square N\)
KEKMDMDTSN
LPCAFTERGRIIRQLDE QNNPKNMELYE
\(\Pi N V P V K E G A K L L Q L P V Q K A Q V A E Q S L D Q Q\)
VNDRVADKKHVTEAVAQSUKDVESDMA VKENGERSETDLPTSN N
\(\qquad\)
MKDEEVAMA \(\square\) AA \(\square E A K M E\)
DVVNTVD
\(\square N V K V A G K V D L A A Q P A D Q Q A V A D A E Q K D Q E N\) SRQLKVKVAD RTSVVTANAETVVVSPPGLQEATN PQI NMAVTVKNKDIINDKELKSLISEDESDLTV R \(\downarrow\) NDKRADFRTYGUIEGLKKYVEQUEGEPQNYE
VNVRVSDKATVAKSDVVREAVEAVEAEL
EIVLRCPSKTKGSLMRYLDE GETESPEKLELDD E VYSKNGWEENELIMDSIVRAEEELGA

EEITAVLTRAPGNDAP \(\square G\) VNAKVPNHKKESYMEEI AEAI GELEKKFA
 KYPQT \(\square \quad \square N V P V P S A R P H G L L D R T A T V T A N A E T V V V K P P\)

RKFEPVPQDLKNVRFSGGSPLET D VPTPWAAKGLVMRSVLHAAGGKP VETTD \(R \square N S P V D N S E L V A A V E A V E L E L A\)

A \(P\) VVA \(\square D H\) T D \(E P V T Q V L T E A P G N G A A L G\)
\(I K D Y K N G D D D L P K S D\)

 DP \(\backslash T A D L T K A P G N N A G \square G\)
PATPAQKSADSK \(\square\) APEAVTEP \(\square\) TAK \(\square\) SHAPGNGAA \(\square G\) SEEK पSPGKTSFPEKNTAAAQQLFGNNDEHDDNTD NATVPNSKKD \(\square Y\) Y \(L\) E \(\square Q E E \square K K \square E \quad D A D N\)

UniRef90 UPIO0040674DF UniRef90-UPIO0026299CE UniRef90_АоАогзFЗ12 UniRef90-R4XEG1 UniRef90_S2XDH9 UniRef90_A8VFM3
UniRet90 G8YTN2 UniRef90-UPIO0046CDA10 UniRef90-Q6FX17 UniRef90-G4Q5M3 UniRef90-C6WVI2 UniRef90 UPIOOO45E68AD UniRef90-E4N418 UniRef90-G2E255 UniRef90- F8AYZ6 UniRef90-D3Q926 UniRef90-R7GEIO UniRef90-D4M482
UniRef90_K9YMAO UniRef90_UPIO00470C0F9 UniRet90_W7CUJ1 UniRet90_D2NRSO UniRef90- E31EF8
UniRef90- \(99 E 601\) UniRef90-K2A7W6 UniRef90-UPIOOO371615D UniRef90-F215L9 UniRef90-U1LX23 UniRef90-UPIO002DA5BBB UniRef90-U3JJ60 UniRef90-E8SE28 UniRef90_UPI0003B6B552 UniRef90-UPIOOO3FA84C5 UniRef90_UPIO002195D94 UniRef90-FOHBR9
UniRef90_Q4WF91
UniRef90-D2PXZ4
UniRef90-R7HYRO
UniRef90-G2FLQ8
UniRef90-K9T5X9
UniRef90-UPIOOO4417621 UniRef90-U1WBQ7
UniRef90_D5T505 UniRef90-R5D2M7 UniRef90 UPDIOOO47400AF UniRet90-R5WF62 UniRef90-UP1000364AED8 UniRef90-U2P2G6
UniRet90_R7RQA8
UniRef9--13CED5
UniRef90-R5NC15 UniRef90-UPIOO02F619DC UniRef90-E8N4Y66
UniRef90 U3CEF1 UniRef90-R6E487 UniRef90_UPIO00363AD92 UniRef90_C6X6X0
UniRef90-G7JZT7 UniRef90-UPIOOO376D320 UniRef90_G7MBR3
UniRef90 A3K8U5 UniRef90_UP100026281D9 UniRet90-K9Z1R3 UniReffo-H1CXU1 UniRet90-G7H3X3 UniRef90_R5UM73 UniRef90-K9RBT7 UniRef90_D7TTG2
UniRef90-W8KHC3 UniRef90-UPI0002D95398 UniRef90-UPIO004633817 UniRef90-A0LU93 UniRef90-12JIW4 UniRef90-B51168 UniRef90-T4VXP8 UniRef90-D9SWRO UniRef90 UPIO0047C63D8 UniRet90-JY860 UniRef90_A0AO11UOE6 UniRef90-EOTID9 UniRef90-UP1000382A8CC UniRef90-U5MNQ0 UniRet90-K2KAG1 UniRef90_B8BR08
UniRef90_V6EXK4

\author{

}

GNGR1LVRASGTE 60 GLKVSTESSWFAARPSGTEDVYKIYAESRGEDHLAEVQQA K VQKYAKGRSFVRPSGTEDUVRVYSEAETQEAADKLAME QLCAKYKEARAFVRPSGTEPCVRVYCEARERSEMDHUALT GEGR\|LVRPSGTESLVRVMVEAKTDEDAYNYAQR GDSLEFEGWRFNLRDSNT

TEDAVRVYAEASTSEDVEKLSRL DGRVLVRYSGTEPKLRVMVEGDDEDRIHALADE MLVADAPCGRSFIRASGTEDAVRVYAEAQTVEATEKLSTE GYRVILDGGIIVFRPSGNAPELRCYVESDTQEKAQHLCKV GLKVITESGWFAARPSGTEDVYKDYAESFGEVHARHILEE VEHDMAGDGRVLVRPSGTEPLDRIMAEAPTKDEVHOYVTR GVRVLEDDGWALVLPDSVSAVTRLWAEGPDPASADALLDE GVRVIRPDGWVLVLPDPAEAVTHLWAEGSAATDADQLLQR

VLGDDGRILLRPSGTEPLVRVMVEAATAEQAQGVAED
GNGRVLIRPSGTEPLVRVMIEGEDQKYDQKKAEE GYKYRLEDSWLLIRFSGTEPLLRLYSEGQSWQTVQE

GRGRVLLRPSGTEPVVRVMAEGEDSSLVQEVTEQ VIKCFDEDGWFCLRPSGTEPKI KFYFEASATEKLERVRKA VLGESGRVLLRASGTEPLVRVMVEAATQEQADEVAQQ QVVQKYTSARSFARASGTENACRVYAEADTRAKADELANK GLKLVFDDSWILMRPSGTEPKFRIYYEDTSAKALDSYCQA

\section*{G} VLKFTFEDGWFCLRPS GLRLKLSDGYVHLRPS
 GVKVINPDNWVLRP ALVGGFEGGRSFVRPDAGPLVHIFANSDDRDWVDRALKD
 DGRVLVRSS GПK TRTDNFWLLFRFS



GDGRVLVRPS
 V L K AETAKY GR
GRGRVLIRKS
MAGDGRVLVRPS
GVRVIGKGRVROS
GLKVTTESAWFARPGNADELRIYAVADTQERADQIATE GLKVTTESAWFAARPSGTEDLYKIYGESRGADHLEQVFAQ

NGRVLLRQSGTEPLVRVMVEAETDALCAKYVKQ
 GTKLRTDNFWLLERFSGTEALLRLYYEAPKESYLIDEVLEW VEKVLGDDGRILVRESGTEPVIRVMVEAASNEICEENVDR VLQWFCEDGTVSVRPSGTEPVIRVMAEGDREDQVRDVVER GVKLVSDKGYALLLR
 GVRDNCGDGWFLLRDS GVKロNGTENWVLLRLPD
GLKVTTANAWFAARPS GEGRVLI RPSGTEPLVRVMAEGKNQEVI QQQAKQ
GSGRVLLRKSGTEPVVRVMVEAATKDDAQLVADR GVKПCYEDSWVLVLPDASEPLVHLYVNSNDRDWVDESLRK GLQAKYPQGRSFVRPSGTEDIIRVYAEATTQDAADSLGNS \(\stackrel{G}{G}\) \(G L R V T L\)
\(G V V M L D G\)
\(G V V E D\) RGRVLLRPS EQSWVLVLPD GVRATLSNGEIHLRPS Gl KVATANAWFAARPS

\begin{tabular}{|c|c|}
\hline UniRef90_UPI00040674DF & I A K VVV|EA 90 \\
\hline UniRef90-UPI00026299CE & AKELV \\
\hline UniRef90-A0A023F312 & V G K L V \\
\hline UniRef90_R4XEG1 & I A S WL E K \\
\hline UniRef90-S2XDH9 & I A DVVE E \\
\hline UniRef90 A8VFM3 & \\
\hline UniRef90-G8YTN2 & V K L L K \\
\hline UniRef90_UPI00046CDA10 & I C E AV H R \\
\hline UniRef90_Q6FXI7 & V T D L I E TV V E \\
\hline UniRef90_G4Q5M3 & 1 A EVVRR \\
\hline UniRef90-C6WVI2 & CLLS NL K R \(\square \mathrm{Y}\) S \\
\hline UniRef90_UPI00045E68AD & AQA 1 V ND A \\
\hline UniRef90-UPI0002490E47 & \(\square \mathrm{A}\) DV AK K V \\
\hline UniRef90_E4N418 & WCEAV \\
\hline UniRef90_G2E255 & CMD L A S W \\
\hline UniRef90-F8AYZ6 & WS AVI A S \\
\hline UniRef90_D3Q926 & 1 A A AV S A \\
\hline UniRef90_R7GEI0 & I A K L I E S \\
\hline UniRef90_D4M482 & V V K V I E S \\
\hline UniRef90_K9YMA0 & \\
\hline UniRef90_UPI000470C0F9 & LA A V V S D A G \\
\hline UniRef90-W7CUJ1 & L L E I V E K \\
\hline UniRef90-D2NRS0 & L A GVVA K \\
\hline UniRef90-E3IEF8 & \(V M E R V R G F L N T A S P\) \\
\hline UniRef90-E9E601 & VA Q V VRQF G S \\
\hline UniRef90-K2A7W6 & GQKI L Q K A D HVALL \\
\hline UniRef90_UPI000371615D & 1 A A V V A A V \\
\hline UniRef90_F215L9 & I A D KV A D I \\
\hline UniRef90_U1LX23 & V MKQAK A I D \\
\hline UniRef90_UPI0002DA5BBB & \(V \mathrm{~L}\) G H \(\square \mathrm{R}\) \\
\hline UniRef90_U3JJ60 & \\
\hline UniRef90_E8SE28 & I A K V Ve E \\
\hline UniRef90_UPI0003B6B552 & I VA AV E T A A \\
\hline UniRef90_UPI0003FA84C5 & 1 A K V I \\
\hline UniRef90_UPI0002195D94 & L V Q TV Q E L A \\
\hline UniRef90 F0HBR9 & 1 L A V V E \\
\hline UniRef90-Q4WF91 & GV A E \\
\hline UniRef90_D2PXZ4 & A R EVVST A LE T \\
\hline UniRef90-R7HYR0 & V A D V V K E \\
\hline UniRef90- G2FLQ8 & V I DII \\
\hline UniRef90-K9T5X9 & Y R G R V Q E F \\
\hline UniRef90-UPI0004417621 & V A G L V \\
\hline UniRef90_U1WBQ7 & MS QL \\
\hline UniRef90_D5T505 & 1 A E V V R E \\
\hline UniRef90-R5D2M7 & LA DLI K I L S E K \(\square \mathrm{Q}\) \\
\hline UniRef90-UPI00047400AF & GQEFINL A G E \\
\hline UniRef90-UPI00035F09FB & V I A V M S \\
\hline UniRef90-R5WF62 & V I QVI E \\
\hline UniRef90_UPI000364AED8 & \(\square\) C A AV EKAA \\
\hline UniRef90_U2P2G6 & STK Q I E A \(\square \mathrm{K}\) A S \(\square \mathrm{L}\) L \\
\hline UniRef90-R7RQA8 & VVERL K K \\
\hline UniRef90-I3CED5 & L A DVIR \\
\hline UniRef90_V6ITS6 & 1 A QV V K E V G G E \(\square \mathrm{Q}\) \\
\hline UniRef90_R5NC15 & LTEAMKK F \\
\hline UniRef90_UPI0002F619DC & V M A R V \\
\hline UniRef90-E8N4Y6 & GLK \\
\hline UniRef90_U3CEF1 & VLA AV Q K L \\
\hline UniRef90-R6E487 & L A A LI E K \\
\hline UniRef90_UPI000363AD92 & \(\checkmark \mathrm{V}\) E R L \\
\hline UniRef90_C6X6X0 & I A TVVQA \\
\hline UniRef90_G7JZT7 & \(V A K L V D Q F\) \\
\hline UniRef90_UPI000376D320 & 1 KKII E \\
\hline UniRef90_G7MBR3 & LILLFLKKYEE \\
\hline UniRef90-A3K8U5 & TL AKL R E \\
\hline UniRef90-UPI00026281D9 & LA GVV S SV \\
\hline UniRef90-K9Z1R3 & YR D KV Q S F I \\
\hline UniRef90-H1CXU1 & I A SVVE \\
\hline UniRef90-F5S649 & 1 A D Al A A V \\
\hline UniRef90- G7H3X3 & \\
\hline UniRef90-R5UM73 & LA D L I T K V \\
\hline UniRef90-A3TGZ4 & L V A V V K \\
\hline UniRef90-K9RBT7 & YRARVQEF \\
\hline UniRef90_D7TTG2 & VARLVD K F \\
\hline UniRef90_W8KHC3 & LA D CVRHAAERAS \\
\hline UniRef90_UPI0002D95398 & V L S NV Q T \(\square \mathrm{Q}\) \\
\hline UniRef90_UPI0004633817 & \(L \vee G V I\) \\
\hline UniRef90_A0LU93 & WA SVI D A I A \\
\hline UniRef90-12JIW4 & LA D KV R K L \\
\hline UniRef90-H8Z750 & CMRVLLQD W \\
\hline UniRef90-B5I168 & A R S V V L A A \\
\hline UniRef90_T4VXP8 & LE K I I NEDT S NL \\
\hline UniRef90_D9SWR0 & \(L A Q M 1\) \\
\hline UniRef90_UPI00047C63D8 & GLDL \\
\hline UniRef90-J1Y860 & \\
\hline UniRef90_A5VIH5 & F EKALQEFAE \\
\hline UniRef90_A0A011U0E6 & \\
\hline UniRef90-E0TID9 & \(\square\) C D A \(\quad\) E Q \\
\hline UniRef90_UPI000382A8CC & CLQ TL S K WK G E L \\
\hline UniRef90_U5MNQ0 & LAA L I E K \\
\hline UniRef90-K2KAG1 & \(\checkmark \mathrm{R}\) H A V A \\
\hline UniRef90-B8BR08 & A M M L I \\
\hline UniRef90_V6EXK4 & \(\square \vee \mathrm{AT}\) S A A A \\
\hline
\end{tabular}


\footnotetext{
lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
jhmm
jpssm
}

\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{45}{*}{}} \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline
\end{tabular}

\begin{abstract}

60
70
80 GVKI FNPDSWVLILPDATEPLIHVYANSPNRGWVDETLRE GFLEDDCWFCLRPSGTEPKI KFYAKADSEALLEAVKAT
 GLKVTTESAWFAARPSGTEDVYKIYGESKGAQHLTQVQEA


 AEAELGDSGRVLLRPSGTEQLVRVMVEAATAEQADAIARR GLRLTLEDKDIVLBPSGNAPELARCYAEADSLDSACLLVNQ
 G LRLDAWPDKWLLVVRGSNTEELFRVMVEAAEEEHARKVAGR GATGRVLLRPSGTEQLVRVMVEAATTEQAHSVATK



SGEGRVLI RPSGTEPDVRVMI EGGRDKGLIDADAKA
 \(G L K M T F E S G U I H L\)
\(V\)
\(V\)
\(V\) VLKFYLDDGWFALIRPSGTEPKIVKYFKGETAEEDERVRSAB
 VIKYHFEDGWVCCLRPSGTEPKIKFYFEASTKK LKKAVEQK GETGRILLRPSGTEQVVRVMVEAADEDTARRVAVH
 KEM DGKGRVLI RPSGTEPLVRVMLEGKDQDHDHELADG

 \(V L R \square H D A D G R V M V R P S G T E P K L K I Y I D A S S D E G\) GKGRVLLRKSGTEPLI RVVMVEGEHQEQVIS LAANS G \(\quad\) EEGRVLLRPSGTEPLI RVMVEGRAHDDVDALAGE

 GLRMSLSDSUVHLRPSGNAPELRCYAETSDFETAKLLVDN
\end{abstract}

\footnotetext{
lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
jhmm
}

\begin{tabular}{|c|c|}
\hline UniRef90_M1W7F4 & V/A HIVVQ F G \\
\hline UniRef90_UPI00037E9BB2 & YRLRVQEF \\
\hline UniRef90-L5NE49 & V C ERLHAL \\
\hline UniRef90_D8G8C3 & YRNLLVYDFVSQAE! \\
\hline UniRef90-A3SL01 & \(\square \mathrm{D}\) GAVREAGKTA \\
\hline UniRef90-UPI0003B77DE8 & AKALVSDA \\
\hline UniRef90-U3Q9C8 & \(1 \mathrm{I} Y \mathrm{El}\) K K L \\
\hline UniRef90-F9Y3A5 & 1 V A AVERAA \\
\hline UniRef90-F8GA91 & LVEKVK \({ }^{\text {V }}\) \\
\hline UniRef90-A5IYQ4 & FKETIKS【 \\
\hline UniRef90-UPI0003712F8B & 1 A S AVK A A A \\
\hline UniRef90-M3TQH4 & LAGVVETAG \\
\hline UniRef90-UPI0002F4DC3D & TLS KLEQ \\
\hline UniRef90-Q10ZL2 & YRNMIHD \\
\hline UniRef90-W1N8C2 & VRELL \\
\hline UniRef90_U7LQ25 & L S AVVA SV \\
\hline UniRef90-M5RCR8 & A A AKLAEIIA \\
\hline UniRef90-V8CU40 & \(\square \mathrm{DAAAVES}\) \\
\hline UniRef90-W6AA18 & FERLSH QLIN D F Le LiN \\
\hline UniRef90-D2APK3 & CVDLINK \\
\hline UniRef90-SOKH43 & LKAAI EA 1 \\
\hline UniRef90-UPI0003B5D6E4 & LADVIAKA \\
\hline UniRef90-G8M5M8 & 1 A QVVK E A \\
\hline UniRef90-A0AGZ4 & L K K Q V \\
\hline UniRef90 E315H3 & ALK LVV \\
\hline UniRef90 W7BQX3 & L L Q V E Q \\
\hline UniRef90-F5SG95 & I HAVMGRDDE Y L E \\
\hline UniRef90-B2UYH3 & L A NLIL S \\
\hline UniRef90-W9UPY8 & LAESVETYTRRLDE \\
\hline UniRef90-NOAR71 & FMDLVEK \\
\hline UniRef90-UPI000372C35B & VA E SVV A \\
\hline UniRef90-TOIDU9 & CQAKMDSV \\
\hline UniRef90-K0D7D7 & LAEVIRE \\
\hline UniRef90-R5J8C1 & LAAIIKE \\
\hline UniRef90_S6G6T8 & AK QKV Q A \(\square \mathrm{Y}\) N E L L K \\
\hline UniRef90-UPI000374736E & VT DLI \\
\hline UniRef90-N6Y8K9 & IA S AVE \\
\hline UniRef90_U2SVB8 & \\
\hline UniRef90-R9NPQ5 & 1 A D A VK S V \\
\hline UniRef90_UPI000344AF7D & LARQVQTL \\
\hline UniRef90-V4JWH4 & V K DLAS R A A S NI \\
\hline UniRef90-W1SDX5 & FMKLVEQ \\
\hline UniRef90-K2GFE6 & LRAEVSE \\
\hline UniRef90-UPI0003747AD6 & I LAA A S KFRE \\
\hline UniRef90_U3GYE9 & L A A V V A D V \\
\hline
\end{tabular}
```

