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A Q A Q L El
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 A


 AQDLKKLIVAMP AMRTVAD AQEAKTLFVNMPDSLLPLLTSVNRADCID AQTLKEIFVHMPDTLSPILTPVNRADCVD AQDLKSLYIALPDSLSPLLTKVNREDF
AQDMKSLFVALP
A
AQDMKSLFIAMP

## A

 AQQAKTLFVQMP AQRVSSFFIIMPDELPQIETNRRKDM|D AQKMRDVFAAMPDSVLGTMTKNNRGDC: D
$A Q Q \| A A Y F V S M P E E L L L Q U P N R K D M I D$



A G H FLESKMR \begin{tabular}{c|cccc}
F \& $L$ \& $E$ \& $S$ \& $K$ <br>
$F$ \& M K <br>
A \& $S$ \& $N$ \& $M$

 $\begin{aligned} & F \\ & F \\ & F\end{aligned} \left\lvert\, \begin{array}{llll}A & S & N & M\end{array}\right.$ F L E S S K M K 

$F$ \& $L$ \& $E$ \& $S$ \& $K$ <br>
$F$ \& $M$ \& $K$ <br>
$S$ \& $S$ \& $K$ \& $M$ \& $K$

 

F \& L \& $S$ \& $S$ \& $K$ \& $M$ <br>
$F$ \& $I$ \& $E$ \& $S$ \& $K$ \& $M$

 F L E S K M K F L E S S K M K F L E S K M K F V D S K M K $\begin{array}{llllll}F & L & E & S & K & M\end{array}$ 

F \& A \& S \& $\mathrm{N} M \mathrm{M}$ <br>
F \& L <br>
A \& N \& M \& K
\end{tabular} FLESKMR FLASNMK

 | $F$ | $E$ | $S$ | $K$ | $M$ | $K$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $F$ | $A$ | $S$ | $K$ | $M$ | $K$ |

AQDMAAVFI AMPDEYVPQLEDAWRKDLVD
FLASHMK

 4 4 AQNDRSLFLDMPETFTPLLTSANKADFDD A QSVKAA WLAMPDTMSPYLTKARREECLD AKSLRELWVSMP A QSVREMWLNMPDSIIPYLNKS DRQECDDELQDMKVK
 AKSMREMWLTMPDSIVPYLNKNLRLELVDY MTELWQS IPDSII PYI ERSQRQEMTD
 A QEIGSIFLTMPENIIFGLEAAQKDLLISNPGD A QQVRKMWVNMPTSIVGSLEKSTRQELLD
$\square$
$\square$
 FLESKMK LYK S GKE LYNSGKE F Q H Sok F $\square E \mathrm{NDME}$
GQK LYRSNEK $\square K N\left(\begin{array}{cc}L \\ L & K \\ M & V \\ V & K \\ K\end{array}\right.$ TYBAKK FiD SKMK LK K K N L E
 F $\square$ A MGAE LY NGKMN LK A Q S L R DVWI EMPDSLVGY NRNQRTELADYVG LKEMKKK AEPAAQFFVAMPDSLVPSIEVNRRKDLIDLF HAGQK QNLK S YFISMPDSIIPLLTKVNREDCIVD FLDSKMK AKSMKDLLVSMPDSVVPYLNHNLRLEF TELQEMGVK A QNMRQI WLEMPDSII PYLNRSLRTELAADYVTELQEMMK QT पKEI IGNMPESVIPYINDDQRAEL Q

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 FHNAGVA LMHAGOK

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A S LE S S LGG TVT F LL
 AEVENRFGKKSEMTLSKDY RMQMSPQTTWQMKLLALNDT
 AEVTNRFGGKSEMTLSPDYINVQMTPQSSWQMKLLAMNDT AKVENRFGGESEMTLNKDYIVIGQMTPQSTWQMKLLAVNDS

## A

## A

## A



A EVVKNRFGQTSEMKL

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

A EVVKNRFGQP T E L K L
A E V K N R LGGK N S E M K L T

A E V K N R F GK P S E L K L
A Q V K N N K F G N T
A R L K N T T M G K
S R L L K N T M N G F S T L K L
A K L K N TMNGF S T L K L


| A K | $V$ | $R$ | $N$ | $R$ | $F$ | $D$ | $G$ | $S$ | $V$ | $L$ | $L$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $G$ | $G$ | $I$ | $T$ | $N$ | $A$ | $L$ | $G$ | $G$ | $S$ | $E$ | $T$ |
| $M$ | $S$ |  |  |  |  |  |  |  |  |  |  |

A R L L K N N M N G Y S T L K L T

## 

AKLQNMMQGASLMK
A K I M N K F N K T S EMMKL

 A S V K N L F Q G E S I M T L A T D Y A H I Q L N E S S I M E M K MFP S NT G

 A KVR H A L Q G E S K M T I T S D

R
TT N

A QVDNKLGGTTAMT L
AEVKNKFGNDSELKL
A V V K N


ASVVNLFHGESHMSL
H HIVNQLGGEVLITI D D M Y L L L Q QVDTSTTVEMKVLPY Q S AEIVTKLGSKAEMTLQDSLLSIDLSKRSKMEIRWYDTTGN
P A V K N L L D D T T R I R I T K D Y ML V RLLS DASS MEII K L L


PAVLDNTFGRSVVRIEMTKD
AVI E GLLGEESRI T L
A EVQ N KL S D T T RIIK

PEVVNSLQD
PEVANLLGETT LTT TT


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AKAENLYGGQSEMTMTADFLSLKTTESGEWQMKMLPYED D T R ID NLLGHSTMDTLT A D Y L RI R L N E S TEDQLKRLPVEGA

V P Y AL G E DK K LLE Q S S D Y L K I K T S D A G T TQQL K M L P V A K D $P$ V V K N T F G D S T F I K M T K D Y L K V L L N K N T QLE I K IL AEVRNSFNGYSAI TLSDDFAEVVLDTGTSLQMRRLYLDR K

 SEVRNLLNDTTKIVMSDNYLSVILSKSSKMELKIL V E NLSGDTSVVLLTSNYMKVKLSNSSVIELLKLL

 A ETENSFGGRTLMVEKDSYVELQLTEVSSWELKRLPDAE G
 A PVKNLLGDTTKREMTDNYLGVRGNNKTYLQMKKINAN
A EAYN IVGGK SVVM KT D S MF S I S L T E S S R WD L A L L P Q S A D


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A QS ITKDILKTlPQEILPYVNDDQRKELADYINEFVGQKAN AQNVDSLLA HVPESVLPYLVQSNRLDLLD INEFLYNSRMK RTAFAEAPSSVFPLLDKLTRLDMIDYF A QS $\square$ EKRVIP $\square$ S E ELEPLLSKEDCSDFI KNA A QTASQAFVEAPRSVLPLLDRNARLDMLDYF A QD DRQL KTMKDVWKEMPDSILPIMMNSSDRSDIVDNDNVDEGR】Y K LIF P Y D R S S R T IMAD GVGEDMPTG

TE Q S VR MDMLD Y
YASGMR
A QSVGDLFVSMPDSLIPILDSTLRADLLKSPGETL
K DI RYYFLQMPAAHVPMLTSEDRVALLDAFGKDNA $A Q S L E E L I V A L P E G T I P F L D V E A R E S L L K A E P$ AQEMRDIFVDLPKHILPILPKSSRAKLI ENHTQRERAKQS A QSMRSLWINMPDSVIGYMDKNSR DESLDY GEMKVK A QS DRDVFRQMPDS DMPY L ARTAADFFMAEADTAFDAISATTRLDMLDYA K T VA D Y F F R $\square$ P K D L LP GLT DEQR IA AL LNSKNRYDLK GT



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| UniRef90_R5AIM4 |  |
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| UniRef90-R5BC36 |  |
| UniRef90-R5GB35 | A QLVTDPELLNRNNTKRVLSEVGTLAYSYQWSPTEL |
| UniRef90-R6WET7 |  |
| UniRef90-J9G2C1 | EAATARPDTMSEEQYALLQQKI EPTI RFYLLS PSNTLLRA |
| UniRef90-W4UN57 |  |
| UniRef90-R7HTZ7 | RDFL TAKDKKALREIESKIAFPLIDYRFDPNG |
| UniRef90-UPI0003600FEE | ELIL L TDRESNGVKSGLAEQGHLHWVASFNKDNPEL |
| UniRef90-UPI0003A1FD22 |  |
| UniRef90-C3J7P8 |  |
| UniRef90-UPI00046E71C6 | SDFLQNPKDSTLLVFKNAM |
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| UniRef90-D5ERY7 UniRef90-R7J092 |  |
| UniRef90-V6HEM5 | EPYDLKPLPKDS |
| UniRef90-Z4WPN0 | AEF LS G LD DPKTSAGYRFLELLTPLPLALSSWHNEGNLYA |
| UniRef90-L1MCl2 |  |
| UniRef90-U2KEP5 | WADQADVLLV |
| UniRef90-S3W5E7 | EYF EPINVKSFPKES |
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