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PDAGRVSFYLAGRPPEQPVDHAHLLTLLSLYGYQASPEMT DDELKDCYQSQFCKS DPABKEDLLDKFKQYGYDTSDAET
$P$
$\qquad$ $L$ Q K
A S TVAYYR


PDPDDVRRFLALQQP GTPDAASWQRRLAAYGYDAPSGEW

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D
D
P
D
D


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$N A Q Q K R V$
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$\stackrel{D}{\mathrm{D}}$
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| UniRef90-UPI0003299FE1 | Q |
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PDAQAVARQQALFEAQLP SVTWFQEELARLGYATPTGEL
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$\stackrel{P}{P}$ DAQAVAHEQAQFANDGP STDTWRQELALLGYETPTGEL
$P$
PEAEAVARYQAQYAAQLP S STTWF QEELLARLGYSTPTGEEL
$P N A$ Q

P E EDDAVASWQARFEAQ PPALSVLQEALRVWG DPETKEKF IQEFTAE GLPNKAEIVAHFGTYGYDAT DAS S $P$
$P$ $\begin{array}{ll}P & D \\ P & A\end{array}$ $\begin{array}{lllllll}K & S & E & L & H & L & F \\ V & T & Y & G \\ V & \text { A } & F & Q & A & L & A \\ K & Q & G\end{array}$
P
P P
$P$
$P$
PDAQAVARQQAFFTVS DDADKNGYLYQYPYDTST
$P D E R L V A Q R Q A M L A T N L P$
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## DAEQKDSYQEEFTKDP

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$P D E Q A V M R Q Q E V Y A \quad Y Q L P S P T W F Q Q Q L Q Y L G Y Y T P T G E W$
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$P$

$P$
P
P

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D E E T
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$P D E Q R V T E R L K E P F$
$P S D A L P W Q T A L A R Y G Y G V P S G E W$
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ALLK Q GTEGDEVREMQQAMAD YGYRVVNNG S Y

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PDSRRVQFWLAGKAPHAAVPAEQVLTLLSRYGYPVSDGMS

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PAPLRGGRYFSLGDRGEPVVAAYQSLLAAYGYGVPDGTF
REGDAGPDVVVMQQALLADYGYGIVSTGKY

$P D V L A L Q Q A L A D Y G Y G 1 Q S S H Y$
$P E P S R V A A R L P G Y Q \quad Q Q \square P D V F W F Q R T L A Q D G Y A V P T G V F$
DPERVTGGEEVLAPGDRGSAVAGLQRRLAQEYGYGVETGVV
PTA $\square$ TGGRFFQRGDRGQP VEALQSMLSLYGYPVEDNAF

ATASDHWQALLTEGLDTVAQVQCNLQKYGYGTETGEF

E S DVQRLL RYGYGVEVNGL
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$D D S T R A A L L T Q D E R N T P P F I Y K V Q S Q L Q A L G Y A U D S G Q W$
PAPVTGGRFFQRGDSGPPVEALQAMLALYGYNTPSGEF


PAP $\square G G G R F F Q R G D R G Q P$ VEALQSMLSLYGYGLESGEF
RPGDAGDAVEELQSMLALYGYGVETGQF
EPEPVGEGPVLREGDRGDTVAELQYLLADYGYGLEVGRY

PAAER $\square A \begin{array}{r}R F \square M M G D S G Q P \\ A \square G P P L G P G D\end{array}$
RYFMRGEHGQP

I EAGQMLAEYGYGVPVNGY
RYFMRGEHGQP

 | $P S D G R F F M R G E H G Q$ |
| ---: | :--- |
| $P A P D K G G R F F G P G D E G E P V$ | FPTEQPPS PSP $\square$ AGGRFFQKGDAGQP AA

 RFFQRGDQGQP RFFMLGDAGEP

PVPVTPGK $\frac{\| L Q E G D R G A A D D}{F M Q E G E S G Q P}$ | V | $\mathrm{A} A$ |
| :--- | :--- |
| I | M |

$\qquad$ $V E$ AlL $A \square R P G N R G E \square V A R G Q R G L A A F G Y V L E T$ $A \square R E G D Q G A Q V E E L Q S L L A L Y G Y G L D T R E T F$ EVRRLQQALADYGYKIDTGDY PGDAGEPVAAALKAMLAWYGYGUADDAY

VEVEKLQALLSMYGYGDRVSNL A LEP PAEGGEVSALQQALADYGYKSPSGCY
$P G D A G D A V A G A L Q R D L A A F G Y G V P T G R Y$ VLKL DVRD
 RRPRHGLADPHWFL
D DDTVLQYKQALQK GLVTVDTAYEKI QEYGYCVVRHNT
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 DEATKQYY $\square D E F A G Q G L P$
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A ERPE GGMVRAAALL
DMAKAL EQ GYDISS
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D A P VT GA EVA A LL GRYGYDPAEP
VR AL R A TLL R R I G Y QLA P G P A


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$P \xrightarrow[P]{P} \begin{array}{r}\text { Y } \\ \square\end{array}$ EETARQALAT GY


$P D E A G D A S Q L L A S L K T D G Y D T S D$ QK Y A P K E P $\square$ S R S F FFR M L R Q Y G Y S L P T D $\square$ D R Y R A R P T G D Q G A A V R D L L Q Q E L L L D L G Y D

A FRVVGDQGS DVA E I Q G QLL A S L
$R R N D Q G P Q V R Q L Q Q L L A Q R G Y A V A S G T F$

AL R IIG Y D T S N

 AFFHTQSSGNRGVEVLAMQHLLAHHGHAVPTGVF AFFHTQSSGNRGVEVLAMLKMIKKLGYSLTAGQL

| $M L$ | $K$ | $M$ | $K$ | $K$ | $L$ | $G$ | $Y$ |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $S$ | $L$ | $T$ | $A$ |  |  |  |
| A | $A$ | $L$ | $L$ | $G$ | $Y$ | $N$ | $V$ |
| $S$ | $D$ |  |  |  |  |  |  |



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