## query

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UniRef90-UPIO003EBFE5F UniRet90_S7PM55 UniRef90 S7MT16 UniRef90-UPIO003C4BDE0 UniRef90-L5LSM8 UniRef90-L5LSM8 UniRef90-UP10003EC44BD UniReffo-STMMX7 UniRet90_G1SNN1 UniRef90_S7PHP3 UniRef90-UPIOOO3BB9D13 UniRef90-S7MT61 UniRef90-s7P7B6 UniRef90-UPIO002C692FE UniRef90-S7PG26 UniRet90_UPIO003EC3894 UniRef90-UPI0003C109BB UniRef90_UPIO003EBBC9B
UniRef90 UPIO003EBBF67 UniRef90-UPIO003EBEB46 UniRef90-UPI0003C43285 UniRef90-UPIO003EBBECA UniRef90-S7MSU9
UniRef90 UPIOOO3C452B1 UniRef90 UPIOOO3EBC30F UniRef90-S7PHN9 UniRef90-F7CDR7 UniRef90-UPIO003C473EB UniRef90-UPIO003C483EE UniRef90-UPIOOO3EBC076 UniRet90_UPIOOO3333331 UniRef90-UP10003C4AA7D UniRef90-S7PHM6 UniRef90-S7MD65
UniRef90 S7MT52 UniRef90-UPI0003C450E7 UniRef90_UPIO003C450E7 UniRet90_S7PBQ5
UniRef90-UPI00045E18A2 UniRet90_H0XLQ2 UniRef90_UPIO003EBD556 UniRef90 UPIOOO3ECO118
UniRef90-UPIOOO3F1BB57 UniRef90_UPIOOO2C46A63 UniRef90-UPI0003C48C93 UniRef90-UP10003C48886 UniRef90-P56280
UniRef90_UPIO003C43021 UniRef90_UP100027F8E65 UniRef90_UPIo003C461C2 UniRef90-S7MQ74
UniRef90-UPIO003EC584A UniRef90-UPI0003EBF71C UniRet90_S7PBF5 UniRef90-D3ZWG3 UniRef90_UPI00046BB995 UniRef90-UPIOO042C3687 UniRef90-UPIOOO32B280C UniRef90-HOVDP8

## UniRef90-F7C9Y9

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UniRef90-D2HEN7
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UniRef90_S7PEU4


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S N S H 1 S H P L C L L M I I HLTSSHP l C
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HLTSSHPMY
GAHESPMYL GAHL GVHPSRLWWI WDKAVVYMDEKRRT

## S

S K V $\mathrm{H}^{\mathrm{H}}$
SKV H
A K V S H L
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S


S K V H V T R
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SKVHLHSH
S K V
SHPDF
H S HPSY
H L T
S H P V
H H P DRL
SKVVLLTKHP
HPDR

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| $S K \stackrel{A}{\square} \underset{H}{E}$ |
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S K VH
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PETPPHPIS
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$V$
GGGAGASPDH
A APHLREPPDR
PDRLRRRPGI YEDEAGRT

GEAVTDHP A S A RLGTP

A HTA L H P D H
HLTEHPSR
$\begin{array}{cccccc}A S P C D & G & P & P & P \\ G D V V & G A & P \\ G L D Q & L & T & P\end{array}$
A S P P L G S P P


UniRef90_S9YC40 UniRef90-S7QH03 UniRef90_UPI0003343F87 UniRef90_S7N4G3 UniRef90-S7MQ76 UniRef90_UPI0003EC2B36 UniRef90 UPI0003C8D23B UniRef90_UPI0003C44837 UniRef90-UPI0003C4A9B5 UniRef90_UPIO003C422BE UniRef90_UPI0003C45E87 UniRef90-G1LIZ1
UniRef90_UPI0003EBFE5F UniRef90_S7PM55 UniRef90 S7MT16 UniRef90-UPI0003C4BDE0 UniRef90_L5LSM8 UniRef90_L5LSM8 UniRef90_UPI0003EC44BD UniRef90_S7MMX7 UniRef90_G1SNN1 UniRef90_S7PHP3 UniRef90_UPIO003BB9D13 UniRef90_S7MT61 UniRef90_S7P7B6 UniRef90_UPIO002C692FE UniRef90_S7PG26 UniRef90_UPIO003EC3894 UniRef90-UPI0003C109BB UniRef90_UPI0003EBBC9B
UniRef90_UPI0003EBBF67 UniRef90_UPIO003EBBF67 UniRef90_UPI0003C43285 UniRef90_UPI0003EBBECA UniRef90-S7MSU9 UniRef90_UPIO003C452B1 UniRef90_UPIO003EBC30F UniRef90-S7PHN9 UniRef90-F7CDR7 UniRef90_UPI0003C473EB UniRef90_UPI0003C483EE UniRef90_UPI0003EBC076 UniRef90_UPI0003333331 UniRef90_UPIO003C4AA7D UniRef90_S7PHM6 UniRef90_S7MD65
UniRef90 S7MT52 UniRef90_UPI0003C450E7 UniRef90_UPI0003C450E7 UniRef90_S7PBQ5 UniRef90_UPIO0045E18A2 UniRef90_H0XLQ2 UniRef90_UPI0003EBD556 UniRef90_UPIO003EC0118 UniRef90_UPIO003F1BB57 UniRef90-UPI0002C46A63 UniRef90_UPIO003C48C93 UniRef90-UPIO003C48D86
UniRef90-UPI00046B9F30 UniRef90-P56280
UniRef90-UPI0003C43021 UniRef90-UPI00027F8E65 UniRef90_UPI0003C461C2 UniRef90-S7MQ74 UniRef90_UPIO003EC584A UniRef90-UPI0003EBF71C UniRef90_S7PBF5 UniRef90-D3ZWG3 UniRef90_UPI00046BB995 UniRef90_UPI00042C3687 UniRef90_UPI00032B280C UniRef90-HOVDP8

## UniRef90-F7C9Y9

UniRef90_UPI0003289B70 UniRef90_UPI000333A2AA UniRef90-I3MON7 UniRef90-UPIO003C44AFE UniRef90_M3WPE9 UniRef90-G1LIY8 UniRef90_UPI00042AF251 UniRef90_P56279 UniRef90-F7CDS4 UniRef90-D2HEN7 UniRef90_UPI00038E943A UniRef90_UPIO003C8F207 UniRef90_G3VS98 UniRef90_UPI0003F13BEB UniRef90-UPI0003508B41 UniRef90_F1SAR4,
 VLMHQEDVPLGEAVCPSVVAPYPLPLMWQLYPGRRYRGSD
$\qquad$ $V$
$V$

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## \section*{$\lll$} <br> $\lll \lll \lll$

 $V$$V$
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V

\section*{V} |  | $R$ | $L$ | $C$ | $Q$ | $M$ | $N$ | $I$ | $P$ | $C$ | $E$ | $H$ | $I$ | $T$ | $I$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

 $\begin{array}{lllllllllllllllll}V & Q & L & C & Q & L & D & D & P & S & E & N & N & A & L & T & T \\ V & L & M & R & Q & E & D & V & L & L & G & E & A & V & C & P & G \\ V & L & M & R & Q & E & N & V & P & L & G & E & A & V & K & P & S\end{array}$ | $V$ | $L$ | $M$ | $R$ | $Q$ | $E$ | $N$ | $V$ | $P$ | $L$ | $G$ | $E$ | $A$ | $V$ | $K$ | $P$ | $S$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $V$ | $R$ | $L$ | $R$ | $Q$ | $E$ | $D$ | $I$ | $P$ | $S$ | $E$ | $H$ | $P$ | $L$ | $T$ | $T$ | $S$ |
| $V$ | $Q$ | $L$ | $H$ | $Q$ | $I$ | $D$ |  | $P$ | $I$ | $E$ | $D$ | $N$ | $A$ | $L$ | $P$ | $S$ |
| $V$ | $R$ | $L$ | $C$ | $Q$ | $V$ | $D$ | $V$ | $P$ | $P$ | $G$ | $H$ | $I$ | $V$ | $L$ | $P$ | $S$ |





 $V$ Q L R Q E D P G Q H V G L A N Q V P F S L L P WE WA L Y P G D Q Y L D S L A H L WQ M P V H P Q T P R S P S Y L L V F G L P LK WE L Y P GRRRY QA T D

 $V$ H M W Q I P V H P Q E P M S P S Q L P L S R L P L M WQL Y P G R R Y R A T D



 $L \operatorname{RVL} L E D V V L G R P M T P T Q \| G P S L L P I M W Q L Y P D G R Y R S S D$


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





## UniRef90_E1BFF2

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HVSTHPGRDWDRQLTMDVDKRQRVWRA LILVRNN Q PVLLVSVSLGTYEDEHHRVWDAVNVETETCVT AFDPLGPLPVYLVSVRLGIYEDEHHRVWIVANVETSHSVT

QEAGTDQ SPLLRAPPHRLCVQRPGTYRDEEGRSWVTVALCTSPSQR SPLLRAPPHRLCVQRPGIYRDEEGRSWVTVALCISPSQR PS YYQDE $\square$ QR VWMVAGLEMT P A LT VLQPGQSVM

GPSSGRDENKK LDWM
lupas_21
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