QUERY
UniRef90＿W5M242
UniRet90＿W5M242 UniRef90－W5M242
UniRef90
UPIOOO2C680 UniRef90 UPI0003C86D24 UniRef90－UPIOOO4438AF9 UniRef90－UPIO004438AF9 UniRef90 UPI0002C430BD UniRef90＿UPIO002C430BD UniRef90－UPIoo032B1937 UniRef90－UPIO0032B1937 UniRef90－UPIOOO32B1937 UniRef90－G1L5H4
UniRef90－G1L5H4 UniRef90＿UPIO003F150A0 UniRef90－UPIO003F150A0 UniRef90－UPIO00274204C UniRef90－UPI000274204C UniRef90 UPIO0042AC199 UniRef90＿UPIO0042AC199 UniRef90－UPIOOO3444665 UniRef90－UPIOOO3444665 UniRef90＿UPIO0042C5D52 UniRef90－UPIOO042C5D52 UniRef90－UPIOOO42C5D52 UniRef90＿UPIO004403EDE UniRef90＿UPIO004403EDE UniRef90＿UPIO0038C1E86 UniRef90－UPIO0038C1E86 UniRef90－UPIOOO4548C18 UniRef90＿UP10004548C18 UniRef90－UP10003333DDD4 UniRef90－UPI000333D9D4 UniRef90－UPIO0038EE38D UniRef90－UPI00038EE38D UniRef90－UPI0003337F7A UniRef90－F7EKA5 UniRef90－F7EKA5
UniRef90－F6QZC5
UniRe90 F6QZC5
UniRef90＿UPIO0035961D5 UniRef90－UPI00035961D5 UniRef90＿G5B2T7
UniRef90 G5B2T7
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UniRef90－Q863J2
UniRef90－Q863J2
UniRef90＿H2ZZC
UniRef90 UPIOOO4439BFC UniRef90－UPIO004439BFO UniRef90－UPI000329ECAE UniRef90 UPI000329ECAE UniRef90－UPI000333766A UniRef90－UPIO0045E3013 UniRef90－UPIO0045E3013 UniRef90－G3HTE5
UniRef90－B3EWZ5 UniRef90 UPIOOO274204E UniRef90－UPIO0046B1603 UniRef90＿G3TQF9
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UniRef90－Q8QGD4 UniRef90＿UPI00032B23E3 UniRef90＿UPI00042AA45D UniRef90－M7Bот9 UniRef90 M7Bот9 UniRef90 UPIO00359EC66 UniRef90＿UPI00039592BA UniRef90－UP100042ACDDO UniRef90－UPI0003F05CE4 UniRef90＿H2SAF2
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UniRef90 M3W981
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UniRef90－S9YQE3 UniRef90＿S9YQE3
UniRef90＿M1TA72

## AEEQ

C
KPAACRCS ${ }^{10}$ QDPKNRVNC ${ }^{20}$ FPG KPNESVC $A$
$A$
V G SA
EKPSACQCSRIGPKNRTNCGFPG QKPD

## SQEC

## A EQC

 $\checkmark M E$\section*{AEQC} c $\checkmark M E A$ AEEQCVME MEVKARRNC A SQE | C |
| :---: |
| C |
| C |
| C |
| C | $\begin{array}{cc}c \\ C \\ C \\ C \\ C & \\ C & \\ & \end{array}$ CTVPAK

ASEE
ASEE
CVMEVKARVNC

E P GSEQC

$\begin{array}{lllllllll}V & M & S & T & R & K & N & C \\ V & M & E & S & D & R & K & D & C \\ V & M & \end{array}$

## E P G S E Q C

K E A P T Q C
CVME GS
CVMEGS
VMP
CVME
NDNERFDCHPEHA
NDNERFDC
DELQRFD

 | P G |
| :--- |
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S
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 DEL R万D R D PEEA
APAETCVVDPHE CVMEVKDRKNC EQPTPTQC CVMEKDRKNCGYPGG
 EGPTETCSMLTPKERVNC

AESCTMAPSARTNC
$\qquad$ Q
PSSCSSINPQLRRDCGWVG
PSSCSSINPQLR
A Q
QECVMEVSARQDC
PSQCHLVPESHRYDC

## APCSHCNVRA

MP NNRFDC

EKEAAEKTCTVTPGDRKNC
AQCSSIAVRKRTDCIFSGIT

| QUE | $\text { P GVP WCFKP }{ }^{50} \mathrm{~L} \text {, }$ |
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| UniRef90-UPI0003C86D24 | PGVPWCFEPL |
| UniRef90-UPI0004438AF9 | P Q V P WC F |
| UniRef90-UPI0004438AF9 | P Q V P W |
| UniRef90-UPI0002C430BD | P NVPWCFYP |
| UniRef90_UPI0002C430BD | P NVP WC |
| UniRef90-UPI00032B1937 | PQVPWCFFP |
| UniRef90-UPI00032B1937 | P Q V P WCFFP |
| UniRef90-UPI00032B1937 | PQVPWCFFP |
| UniRef90-G1L5H4 | VNVPWCFFP |
| UniRef90-G1L5H4 | V NVPWCFF |
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| UniRef90-UPI0003F150A0 | P Q V P WCFFPLPVQ |
| UniRef90-UPI000274204C | FQVPWCFFP |
| UniRef90_UPI000274204C | F QVP WC F F P |
| UniRef90-UPI00042AC199 | F EVPWCFYP |
| UniRef90-UP100042AC199 | FEVPWCFYP |
| UniRef90-UPI0003444665 | VEVP WC |
| UniRef90-UPI0003444665 | VEVPWCFFP |
| UniRef90-UPI00042C5D52 | PQVPWCFF |
| UniRef90-UPI00042C5D52 | PQVPWCFFP |
| UniRef90-UPI00042C5D52 | P QVP WCFFP |
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| UniRef90-UPI0004403EDE | P Q V P W |
| UniRef90-UPI00038C1E86 | F EVPWCFFPQS |
| UniRef90-UPI00038C1E86 | F EVP WC F |
| UniRef90-UPI0004548C18 | P EVP WC F Y P |
| UniRef90_UPI0004548C18 | EVPWCFY |
| UniRef90_UPI000333D9D4 | P EVP W |
| UniRef90_UPI000333D9D4 | $V \mathrm{P}$ W |
| UniRef90-UPI00038EE38D | R QV P WC F F P |
| UniRef90-UPI00038EE38D | RQVPWCFF |
| UniRef90_UPI0003337F7A | R NVP W |
| UniRef90-F7EKA5 | F EVPWCFYP |
| UniRef90-F7EKA5 | VPWCFYP |
| UniRef90-F6QZC5 | V P WC F R |
| UniRef90-F6QZC5 | P QVP WCFR |
| UniRef90-UPI00035961D5 | P EVP WCFYP |
| UniRef90_UPI00035961D5 | P EVVPW |
| UniRef90_G5B2T7 | P R V P WC F F P K PVE |
| UniRef90-G5B2T7 | PRVPWCFFPKPVE |
| UniRef90_UPI0003EE | VNVPWCFFPM |
| UniRef90-UPI0003EE33BF | VNVPWCFFPM |
| UniRef90-P70699 |  |
| UniRef90-Q863J2 | RNVPWCFFPILNQ |
| UniRef90_Q863J2 | R NVPWCFFP L L N |
| UniRef90-H2ZZC1 | P R V P H |
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| UniRef90-UPI0004439BFC | EKVPWCYYP |
| UniRef90_UPI0004439BFC | E K VP W |
| UniRef90-UPI000329ECAE | S GQP WC ${ }^{\text {a }}$ P |
| UniRef90_UPI000329ECAE | S GQP WCIY P |
| UniRef90-UPI000333766A |  |
| UniRef90-UPI00045E3013 | PEVPWCFF |
| UniRef90-UPI00045E3013 | PEVPWCFFPLSVQ |
| UniRef90-G3HTE5 | M G QP W |
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| UniRef90-B3EWZ5 | P NVPVCFYH |
| UniRef90-UPIO00274204E | P GYPWCFTP |
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| UniRef90_G3TQF9 | VGQPWCFF |
| UniRef90-A7RL31 |  |
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| UniRef90-E1BU22 | PGVPWCFYP |
| UniRef90-Q8QGD4 | VN AKWCFF |
| UniRef90-UPI00032B23E3 | M GQPWCFF |
| UniRef90_UPI00042AA45D | R GFPWCFH |
| UniRef90-M7B0T9 | P AVA WCFY |
| UniRef90-M7B0T9 | PAVA WCFYPLLVE |
| UniRef90-UPI000359EC66 | RGVPWCFKPHALE |
| UniRef90_UPI00039592BA | P NAPWCF |
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| UniRef90-H2SAF2 | EKAPW |
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| UniRef90-M3W981 | PGQPWCFF |
| UniRef90_U3K | P GVVP WC |
| UniRef90-UPI000333F7F6 | R GVVPWCFHKQVVE |
| UniRef90-M4AS73 | A EVPWC |
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| UniRef90-UPI0004544336 | R GFPWCFQPLP |
| UniRef90-UPI000214AE38 | R G VP WC F |
| UniRef90-H0V6Y7 | T GQPWCFFP |
| UniRef90-S9YQE3 |  |
| UniRef90-S9YQE3 | P |
| UniRef90_M1T | P N V\|P Y C F Y H P S K |

UniRef90_UPI0002C58B7D UniRef90-F7A375 UniRef90-UPIOOO3289307 UniRef90_UPIO003289307 UniRef90- F6WCG6 UniRef90-K91NF5 UniRef90_UPIOO045D5FE2 UniRef90-UPIO0033411D5 UniRef90-UPIOOO2C66811 UniRef90-13MOU3 UniRef90-UP1000359C1EC UniRef90 UPI000388BBE3 UniRet90-UPIO0038BC90E UniRef90-P04155
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UniRef90-L5MF58
UniRef90-UPI0003C8DF5E UniRef90_G3NW31 UniRef90-G3NW31 UniRef90-UPI0003834C2C UniRef90_UPI0003834C2C UniRef90-UPIO0044404AF UniRet90-UPIO00440E88B UniRef90-UPI000440E88B UniRef90-UPIO003331F82 UniRef90-Q5KR09
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UniRef90-UPIOO03C285EF UniRef90-UPI0003C285EF UniRef90-UPI00038BFFA6 UniRef90-UP10003D08E3B UniRef90-UPIOOO3DOE2D4 UniRef90 G1NSK1 UniRef90-UPIOOO441A760 UniRef90_UPI000441A760 UniRef90-UPIOO0441A760 UniRef90-UPIOOO441A760 UniRef90-UPIO00441A760 UniRef90-UPIO00441A760 UniRef90-B4X8D7 UniRef90-F7DPS8 UniRef90-F7DPS8 UniRef90-F7DPS8 UniRet90-F7DPS8 UniRef90-H2MA444 UniRef90-UPI00046C388A UniRef90_UPIOO046C388A UniRef90-C3ZDQ9 UniRef90_UPI0003F17B86 UniRef90-G1KRW0 UniRef90-R7V9X3 UniRef90-UPI0003319052 UniRef90-13JDQ0 UniRef90-I3JDQ0 UniRef90_UPIO0039562B9 UniRef90-UPIo0039562B9 UniRet90_F1NG93 UniRef90-F6YDB5 UniRef90_UPI0003F080D2 UniRef90_UPI0003F080D2 UniRef90-UPIO003F080D2 UniRef90-V4B5J1
UniRef90-HowTG7
UniRef90 ${ }^{-}$T1E7F8
UniRef90-UPIO003C1990C UniRef90-L9JRQ6
UniRef90-G1SUN8 UniRef90-G1SUN8 UniRef90-UP1000332FEEB UniRef90-UPIO0038EA938 UniRef90-UPI0002BD0747 UniRef90-O863B4 UniRef90_UPI0002B415F1 UniRef90-H9GHK5 UniRef90-UPIOOO3COFFOC UniRef90-UP100032AF2DC UniRef90-UPIO0032AF2DC UniRef90-V8NMT4 UniRet90_F7DF32
UniRef90-F2U8G22
UniRef90_V8PHZ8
UniRef90-A9UPK3
UniRef9O-E9C9S7
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CVMEVSA $\stackrel{R}{R}$
RAAPTQCD RFDCAPDKLT

CPADSRAR RFDCHPEEAD

RTNGGFPG

AAPTGC

E WPRPC
TAAQC
 RAAPTQCD ELASACQCKKAS ELASACQCKKAS S
EKTRDKQCYIVDDG

DRKNCGHSGISA
QRVDCHEENS
QRVDC
MDVKRKNCGYSGNS
$M D V K E R K C G Y S G \mid S$

PTQCD IPPDSRFDCAPDKLS

$$
\begin{aligned}
& \text { SKEQC MVPPKDR }
\end{aligned}
$$ RINCHPEDVDQ

SDRFDCHPEGASRE
SDRFDCHPEGASRE
$Q C A M P V A R R V N C H P P G A T Q$
$E T Q S E T C A M A P Q E E K N C G P P G V T A$
$N V S D V E K D D C Y P D G A S K$ NVSDVEKUDCYPDGASK
AAGVCYGIGL
QCDVPPNSRFDCAPDKI
 SPGYCCNUTVDHRFDCAPDQAT EEKDDCYPDGVSA

CTMSP EEKIDCYPDGVSA
CTMS P
RERKNCGFPGVTA

AAQCPAVAVQKRIDCHPPGASQ
PPLAKCVAI PEDLRFDC YPEVTQEACEARGCVWCSAA
TTPEVCGAVPETHRFNC YPEITRSLCESRGCCFPPGK
PFWSKCTSVRDEEKMDCYDGVENCVRGCVWESSS
PPKCSSVPEAHRFDCYPEVTEELCRGRGCCFDGGS


CAAMEVYLRQDCHPPGASE
RAAPTRCD


| UniRef90_UPI0002C58B7D | $\text { RG\|V\|P WCFHP }{ }^{50} \mathrm{~V} \text { A V }$ |
| :---: | :---: |
| UniRef90-F7A375 | Q GQP WC F F P |
| UniRef90-UPI0003289307 | P GVP WC F K P L Q E |
| UniRef90-UPI0003289307 | PGVPWCFKPLQE |
| UniRef90-F6WCG6 | \GGQPWCFFP |
| UniRef90-K9IN | MGPPWCFF |
| UniRef90-UPI00045D5FE2 | MGQPWCFF |
| UniRef90_UPI00033411D5 | R GPPWCFF |
| UniRef90_UPI0002C66811 | P R V P WCFT P LRE |
| UniRef90-I3M0U3 | RGQPWCFFP |
| UniRef90-UPI000359C1EC | LR A P WCFFP L |
| UniRef90-UPI000388BBE3 | P EVP WC F A PLA K K |
| UniRef90_UPI00038BC90E | M GQP WC F F P |
| UniRef90-P04155 | R G VP WC F Y P N T |
| UniRef90-K7FDW2 | P AVPWCFY HLQVQ |
| UniRef90-K7FDW2 | P A V P WCFY HLQ V Q |
| UniRef90_L5MF58 | P EVPWCFFPKPVQ |
| UniRef90_L5MF58 | P EVPWCFFPKPVQ |
| UniRef90_UPI0003C8DF5E | RGQPWCFFP |
| UniRef90-G3NW31 | ERAPWCFYP |
| UniRef90_G3NW31 | ERAPWCFY |
| UniRef90_UPI0003834C2C | A GVPWCFYHRMVE |
| UniRef90_UPI0003834C2C | A GVPWCFYHRMVE |
| UniRef90-UPI00044404AF | M G Q P WC F F P |
| UniRef90-UPI000440E88B | Q NVP WCYF P |
| UniRef90_UPI000440E88B | Q NVP WCYF |
| UniRef90_UPI0003331F82 | T GQPWCFFP |
| UniRef90_Q5KR09 | S GVIDWCFYPKPEE |
| UniRef90-UPI00038409A2 | WGQPWCFFP |
| UniRef90_UPI0003C26D39 | PNVPWCFHPPPKK |
| UniRef90-V4AVQ0 | P G I P Y C Y Y P |
| UniRef90-UPI0003C285EF | P AVPWCFF |
| UniRef90_UPI0003C285EF | PAVPWCFF |
| UniRef90_UPI00038BFFA6 | R NVPWCFKPLQE |
| UniRef90_UPI0003D08E3B | T G V R WC F K P F S K |
| UniRef90-UPI0003D0E2D4 | Q GVPWCFY |
| UniRef90-G1NSK1 | PGHPWCFYPLN |
| UniRef90-UPI000441A760 | RTVPWCFKPYEKQ |
| UniRef90_UPI000441A760 | RTVPWCFKPYEKQ |
| UniRef90_UPI000441A760 | R TVVPWCFKPYEKQ |
| UniRef90_UPI000441A760 | RTVPWCFKPYEKQ |
| UniRef90-UPI000441A760 | RTVPWCFKPYEKQ |
| UniRef90-UPI000441A760 | R TVVPWCFKPYEKQ |
| UniRef90-B4X8D7 | R GVP WCFFPVAV |
| UniRef90 F7DPS8 | R S G N E C Y K P |
| UniRef90_F7DPS8 | R S G NECYK |
| UniRef90-F7DPS8 | R S G N E C Y K |
| UniRef90-F7DPS8 | R S G N E C Y K P |
| UniRef90-H2MA44 | E NVPWCFYP |
| UniRef90-H2MA44 | ENVPWCFYP |
| UniRef90-UPI00046C388A | P GVPWCFHPR\KN |
| UniRef90-UPI00046C388A | P GVPWCFHPRIK N |
| UniRef90_C3ZDQ9 | A G P P S C F Y P |
| UniRef90_UPI0003F17B86 | M G Q W W F F P |
| UniRef90_G1KRW0 | P K Q P WCFFP |
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| UniRef90-UPI0003319052 | P EVP WCFKPLQE |
| UniRef90-I3JDQ0 | E GAPNCIY P |
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| UniRef90-UPI00039562B9 | S GVP Y C H Y |
| UniRef90_UPI00039562B9 | S GVP Y CHY |
| UniRef90-F1NG93 | PNAPWCFF |
| UniRef90-F6YDB5 | LGVPWCFT P |
| UniRef90-UPI0003F080D2 | PGVPFCYF |
| UniRef90-UPI0003F080D2 | P G V P F C Y F |
| UniRef90_UPI0003F080D2 | P GVPF C Y F |
| UniRef90_V4B5J1 | K N TVWCFY |
| UniRef90-H0WTG7 | Q GQP WC F F P |
| UniRef90-T1E7F8 | NGVP WCFY P |
| UniRef90-UPI0003C1990C | R DVPACFFPL |
| UniRef90_L9JRQ6 | P R V P WCF Q P ALVN |
| UniRef90_G1SUN8 | P G V P F C Y F |
| UniRef90-G1SUN8 | P G V P F C |
| UniRef90_UPI000332FEEB | R GFP WCFLDP LT TK |
| UniRef90_UPI00038EA938 | R GVP WCFHKQQV |
| UniRef90_UPI0002BD0747 | S GVP WC F H P VA A |
| UniRef90-Q863B4 | H GVPPWCFKPLQ |
| UniRef90_UPI0002B415F1 | S NAPWCFFP |
| UniRef90-H9GHK5 | N GVP WCFY P |
| UniRef90_UPI0003C0FF0C | G GVP WC F Y P |
| UniRef90-UPI00032AF2DC | P G V P Y C Y F |
| UniRef90-UPI00032AF2DC | P G V P Y C Y F |
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| UniRef90-F7DF32 | A G P P WCFYP |
| UniRef90-F2U8G2 | QGTPWCFY |
| UniRef90_V8PHZ8 | SKEPWCFFP |
| UniRef90-A9UPK3 | Q DVP WC Y Y P |
| UniRef90_E9C9S7 | D N NPWCFNSNPPQ |
| UniRef90_UPI0004439DBD | P G V P WCFQ |
| UniRef90-UPI0004439DBD | P GVP WCFQ |
| UniRef90-UPI0003C843DA | P GAPWCFFP |
| UniRef90_UPI0003EC6592 |  |

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UniRet90-F7A58
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UniRef90-UPIo0039926B0 UniRef90-V9K7L2
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UniRef90 HOZ K3 UniRef90_HOZLK3 UniRef90_-13N540 UniRef90-E7FCP7 UniRet90_UPI00045D709C UniRet90-F4WH36 UniRef90-A0AO23G357 UniRef90-13KKL4 UniRef90_B3SDR7 UniRef90_Q87627
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 EKCSAGV K YPGASAENCSARGCVWESTT EKCSAVPEPL YPEVTK

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| EK C | $S$

$S$
E
W
HTR D C
HTR N C GFP GITA
CTDDP TCNVEPK
Q Q C
RTARAQC
RTARAQC
PPVNPCL
PPVNPCL
AAESQC
ETC

Q C S TCQ
$\qquad$
${ }^{H} P$

覀 | $\mathrm{T} M$ |
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AET

S S A QECS $\quad$ S K V N R R I D C
C AVAPADRVDCGYPGVTAT
TAKRQC

ADDVN NSRFDC
GPGETCV

KKGAGEC
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GASVCP

AP | LQQ |
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| UniRef90_UPI00038C1708 | TKAPACFFPK |
| UniRef90-UPI0002C427DD | NS CYYGNTV |
| UniRef90-UPI00045DE9BB | S Y $\square$ P WC F |
| UniRef90-F6X8J2 | F GAPDCYFPR |
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| UniRef90_E4YZ14 | DGEGWCFHP |
| UniRef90-UPI0003AB8640 | P GVP |
| UniRef90-UPI0003AB8640 | PGVPT CYY |
| UniRef90-H3C3X8 | EKAPWCFYP |
| UniRef90_UPI0002C63425 | SRAPDCYFP |
| UniRef90-UPI0002C63425 | S RAPDCYFP |
| UniRef90_UPI0003345171 | A GVP F C Y F |
| UniRef90-UPI0003345171 | A G V P |
| UniRef90-P23739 | 1 P WCFF |
| UniRef90-UPI0003C811B6 | PGVPTCHY |
| UniRef90_UPI0003C811B6 | PGVPTC |
| UniRef90-UPI000359BBBA | TKAPACFFPR |
| UniRef90-UPI000359BBBA | TKAPACFFPR |
| UniRef90-F7ADE4 | SRTP C |
| UniRef90-UPI0003F07D70 | SRAPECYFPRDV |
| UniRef90_UPI0003F07D70 | S RAPECYFPRDV |
| UniRef90-A0A058Z6V9 | T NAPWC |
| UniRef90-F1KSW9 | P S $\square$ P L C Y F |
| UniRef90-F7C1G8 | NS CYYGNTV |
| UniRef90-B2BRT2 | Y NTDWCFR |
| UniRef90-L5KWR7 | SAlPWCFF |
| UniRef90-E4XAG8 | $\square \mathrm{DVK}$ C Y L P L S |
| UniRef90_Q533G7 | R NTIWC |
| UniRef90-Q533G7 | R NTIWCFK |
| UniRef90-W5KC19 | PDGPLC Y Y G K T V |
| UniRef90_UPI00042A | A ANVSCYY |
| UniRef90-UPI00042ADB85 | A ANVSCYY |
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| UniRef90-UPI00044488A5 | S GAPECYFPRQDN |
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| UniRef90-UPI00022B79FF | TNSSRCFFPR |
| UniRef90-A7RXX7 | NGVPFCFHHL |
| UniRef90-G3PD24 | A GPPWCFYP |
| UniRef90-H2Y3D4 | S NFSGCYYP |
| UniRef90-G1SE90 | P GVP T C F Y |
| UniRef90-G1SE90 | PGVPTCFY |
| UniRef90-A9UW89 | WS SPECNF |
| UniRef90-V9KHV6 | ARTP CFYGRTER |
| UniRef90-Q8CH34 | EGADSCYYGNTV |
| UniRef90-UPI0003F0975D | T RAPS CF |
| UniRef90-A9UVU5 | HTLT WCYYPDAER |
| UniRef90_UPI0003C912C9 | $P G V P A C Y Y$ |
|  |  |

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P A A SPCATVQLLD
P D A SREK RFNCHPEQATRTACLSRGCFFDES $\square$ RFDCYPE GGS QQNCEDRACVWSETV K K S S A Q S A C TDVKK DK TD C GHVGGIT E DECTKK DCCYK EK

 DPTSM CARV PTNRIDCAFPNATAESCLAQGCCWDPK DPARVTNRIDCAFPNATAESCLAQGCCWDPK K PEPTETTPHDEKNRFDCFPEGATDETCQQRGCDWLPPT

$V$ V DLLEKF DCYP E DVVTEQLCVQRGCLLWEPT A
$C V E Y E E K D D C G Y Y G G T E G E C Y M R G C C W A P S P$
D C H P P MATME QCQSR GCVWQSS
$C D \square G G D D W R F D C F P Q G T A Q T E C E A R G C C W R P P D$ PTPTRCSAVPVLSRVACRNPRYNASDCTAMGCCFDSTD NE R I N C VVP D Q F T Q A V C A K R GCCCNN D S I ESEKDT CYPDAATQEKCTQRGCI WDTNT
 PTPAPSCDVAPQNRSACGWPGITPQECTSYGCCWLPPQ $P$ TPAPSCDVAP QNRSACGWPGLTP QECTSYGCCWLPP Q

QRTAAELCS



QCPTTGNCN $\square P D L V$
 QRIDCFYEKLTKEKCQSRSCVYDPTP P S P D T C S A A V K R E E D R L S S C A K A P V V S Q D L ESNAHCSDITNVQRLDCYPNGSNESGCIERGCCWNNEQ EDKI DCYPDGGTKEKCNKRGCVWEETV

$P Q C D L S S A L$
QEQCDLSSALEKFDCFPQDSSEEECDERGCCWRDTP


ADQCAAPIPSPRLDCYFPNATEETCLAQGCCWDA


SENEMFNCYPDAATEQTCCRQRGGCVVWRS S L L L K I N D T E K F N CYYP P S A S E E S C RQQRGC L WEP T A


P S P S VC



A S LPESERI DCAPQEVT
 PSPGVCAAI QS QDRLPC P G A D R C D S I P A WD R L P C A P S P I S


 TCAIDRSERVDCGANI KEP KP S E CLD C S CPD SKKI DCGYGSI TENECYEKGCAWCPAA K P P K G Q E CNLP A E LQL D C GP S T I LA E D CHALGCCY S S D CD A QLLTVDSKQRVDC GALA H
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PECPE $\square P$ Q S ERI DCTP GQQTEHDCRQLKCCWNVAD

A QCLDA GGV ARKACA LAALISQSACEAN GCCWAP TA

P Q C P K $\square$ P Q S E RV D C LP H RVVR DVCRR QKCCWD P A D A ECQLERLSERFDCHPVVASEDACLSRGCCWKPER
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UniRef90 U6PA79

KNMPWCF
PGVPPCYYP

EGAPWCYYH
ENEPWCFY CFYGLAV
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VDAPSCFY
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RVKP CYYGNTV
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| UniRef90-C3YF85 |  |
| UniRef90-K3WK60 |  |
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| UniRef90-U1P1V8 | P G ${ }^{\text {l }}$ P WCY F P |
| UniRef90_E9H648 | QSVPFCYYP |
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| UniRef90-D0NH79 | N G G l P C A |
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|  |  |
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| UniRef90-L1K4E6 | R S CF |
| UniRef90-F6U6Q9 | F GSMKC F |
| UniRef90-E7F5T4 | TSVGCYYPM |
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| UniRef90-H2XLH9 | VY DK WCY |
| UniRef90_UPIO003EC118D | P A C Y Y P M |
|  | T GTP K C Y |
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| UniRef90-H0XZP9 | T K VP F C F |
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| UniRef90-G4YHR2 C |  |
| UniRef90-F1KPW3 | Y G $\square$ P A C Y Y P |
| UniRef90-W5LXE7 | PGTS S C Y Y P L E E |
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|  | S MC |
| UniRef90-H2ST15 <br> UniRef90-UPIOOO1925398 | P $\square$ GP WCYK |
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| UniRef90_M3YMR4 <br> UniRef90-O42464 | NS CYYGNTV |
|  | C F Y G K TV |
| UniRef90-R7TN35 | S GVP WC Y H |
| UniRef90-W5N2P1 <br> UniRef90- G3PDM8 | SGG CYYPLNV |
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| UniRef90-U6HCA7 | A CY |
| UniRef90-Q27HF5 | P T $\square$ R CYY |
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| UniRef90-UPI0003C1AE01 | A EMP C |
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| sol25 | В В В В В В |
| sol5 | B B |
| sol0 |  |
| jhmm |  |
| jpssm |  |

