## QUERY

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UniRef90-M3XKQ0
UniRef90_V9KL93
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UniRef90_G5DD26

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30 CGCCATCALG ${ }^{40}$ CAALAL

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 VVPCEPCDDKALSMCPPPVGCQ LKEPGCGCCLTCALAE


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A

## VFRCPGCTAEROMC

 FRCPPCTPERLAACGPPPPCAELVREPGCGCCSVCARDE WRCAPCTEEKVALCPPPATCLERAQPAGCGCCPLCAKPE
 VVRCEPCDDRALSQCELPTGCELVREPGCGCCLTCALRE AFRCPSCTAERLAACPKVTTCAEGVREPGCGCCPLCARLE
 VVRCEPCDARALAQCPPPTGCAELVREPGCGCCLTCALRE WRCLPCSPDKLALCPPPASCREVTRSAGCGCCPVCALQL VIRCEPCELAARLLCKPPRDCAERVREPGCGCCMTCALSA
RCPPCTAERVACRSGAPCTELVREPGGCOSVCARLE WHCAPCTPEKLALCPPPASCAETALPAGCGCCPMCALPQ
FRCP CTP VFRCPVCSAERQADCPKLVTCDEVVREHGCGCCPVCALQLE VHCEPCDEKALAQCDPPRGC EAMVREPGCGCCRTCALLDD
 A THCPPCSEEKLTRCKAPVGCEELVREPGCGCCATCALSQ VVRCEPCDARALAQCAPPPT

RCDPCDTRALEQCKPVPECPEVREPGCGCCDTALRE CEPCPPEKLTNCKPPPDDCAEKLREPGCGCCVTCALSK CQDCAAERQSACAKAATCTDUVREPGCGCCPVCSRLE CAPCAPERLALCPPVPPDCPEARQPGCGCCQ1CALGP PGCGCCSVCARLE
 CPERCDR SRCPAPAGCPGGPVPDACGCCRVCGAEE ERQAACPKDETCAETVREPGCGCCPVCARQE

## QUERY

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QUERY
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UniRef90-A4IHA1
UniRef90-J9P870
UniRef90-A2RT60
UniRef90-13MP09
UniRef90-W5LH09
UniRef90-H2T2Q5
UniRef90-HOXD24
UniRef90_C4MCP0
UniRef90_UPIO0044446E9
UniRef90_C4MCP1
UniRef90_W5UHR9

FRCPPCTPERLAACGPPPD
VHCEPCDEKALSSMCPPS CPTCKPKAMQ

| F Q C |
| :--- |
| V |
| G $C P C$ | $V V G C P B C R C D$

$A R C P S S C C D$ TEAPELL

ค $A$ L $A$
 $\stackrel{A}{E}$ L $\qquad$

G C GCC GCGCCP

QCGCCS
$R C G C C D$
 T PGI $P A L C P$
$V S S C P$ S P $E L V L E P G C G C$
$S G Q T D D Q C G C$
$A G Y V P D R C G C$

RS A GCGCC $\stackrel{L}{P}$ M C A A L L L $L$
RCPARCD $\begin{array}{c:c}A & H \\ A & H \\ \text { V I } & G \\ \text { A A P }\end{array}$
$\qquad$ V


 | $S$ | $L$ | $C$ | $P$ | $P$ | $P$ | $P$ | $D$ | $C$ | $L$ | $A$ | $G$ | $D$ | $L$ | $L$ | $D$ | $Q$ | $C$ | $D$ | $C$ | $C$ | $P$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $S$ | $V$ | $C$ | $A$ | $A$ | $G$ | $E$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $R$ | $C$ | $E$ | $P$ | $A$ | $D$ | $C$ | $A$ | $G$ | $S$ | $P$ | $A$ | $L$ | $D$ | $P$ | $C$ | $G$ | $C$ | $C$ | $P$ | $V$ | $C$ |
| $A$ | $A$ | $Q$ | $E$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

$\qquad$ $R$ Qncp ${ }^{2}$ PA CAARCD VS LCP S P S SCP A R C P A P A
A A C K P P
FRCPPCTPESLAACKPPP
PPEPA GEA GWANGLARTHFPARGN
ARCPGCGQGVQT GCPRGCVEEEDGGSPAEGCAETAARRE $C P P R C D \quad V S K C P T P \quad S C P G G Y V P D R C N C C L V C A A A E$ PEGCVE E GAPRCTEARGCLRKE
V

## $A A^{A}$

ARCPGKCDGK
$\qquad$
P E G
$P Q P A D C$
$P G G C A$

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

E
A
E
S
A $G D$
$G P$
$G P$
$G D$
$G$
$G P$
$A$ ERF
A $P$
ARCPGCGQGAPAGC
 TCCRDWAAPRCRCSWVCARLDE

 | A | V | $C$ | $P$ | $A$ | $C$ | $D$ | $P$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $A$ | $N$ | $H$ |  |  |  |  |  |
| $A$ | $H$ | $C$ | $P$ | $P$ | $C$ | $E$ | $Q$ |

## H C



RCPGCGQGVQAGCQEGCVEEEDGAPPSCAEAATCALSK VPCQPCDQKALSMCPPPVGCQLRARSKRAGCCPVCARQV RA CP AECPGCGQGAHAGCPGGCMEEEGGLPEGCTEAGGCLRRE ARCPGCGQGAQAGCPGACVEEELPAEEGCAKAGGCFRRE APCPQLCDE SRCPPPAPCWAGEVRDQCGCCLVCASRE $A Q C P G C G Q G M Q A G C \quad S G G G C A E G Q P A E G C E E T G G C L R R E$

QCPSCEDGDPPACAPRAGCRAPAKAPREACGEGCARALL CPQVC AASQCPPPHACYYGQVKD DCGCCVVCAAGE LPCPAACE PSGCKAPSSSSSSSSCAEAKGCVGLARAP S P CPA CE PTRCPP LPTCPAGLPPDRCRCCRICAAAE
 $S$ MPCP DACEPTRCPPLPTCSAGAAPDRCRCCRVCPAA E K GCP S C R E SLGGA GRAPRD H DGQA G S T S M LA Q
CHPCTAEDLLNSCPVLEESCEEVVEPNCGCCMMCAKLE CPSHCDK SMCPTPKDCSTGQVMDHCNCCLVCASGE CPGCGQGAQA GCP GGCVEE EDAGLDACTKA EGCFRRE


 PGGCME SARCRGCGQGAQAACPEGCVEEDGAPPARCTEARSCPRRE


| UniRef90_D9ZZP8 UniRef90 |  |
| :---: | :---: |
|  | UniRe90-I3NBL4 ${ }^{\text {a }}$ GEACGVYTPRCGQGLRCYPNPGSELPLLQSLVMGVGTC |  |
|  |  |  |
| UniRef90-Q4RIN2 GGQCGVYTLS CALGLRCTPPPGEP |  |
|  |  |  |  |
| $\begin{array}{ll}\text { UniRef90-K9USK8 } & \text { GQSCGVTVGRCAQGLKCRPD }\end{array}$ |  |
|  |  |  |  |
| UniRet90-UP100044008D1 GAPC GGA ${ }^{\text {a }}$ | SGGK |
| UniRef90 G3R577 | A |
| UniRef90-H9GID9 | GEACGRADPPCGEGLQCRSFNAEP ERRGVCQ |
|  |  |
| UniRef90-13KS95 UniRef90 U9JRB3 | $\nabla$ |
| UniRet90_A9JRB3 | GEPCGGELPPSAEGLLCVLSPGEGAPASATVRRRGRC |
| UniRet90_-F60 | GDRCGTNKPRCGPGLKCLA VGAESNLIA\LENRGACQ |
| UniRet90_W5KUH1 | GEPCGRKEPPCGDGLECRSPAGKRLA |
| UniRet90-UP1000388B071 GEPCGGP PP C G G Q C |  |
| UniRef90 F1N2P8 UniRef90- UPIOOO2 | GXRCGVYTPRCGQGLRCYPNPGSELPLRALVHGEGTCEK |
|  |  |
| G3W | GDACGRDDPPCGDSLECGHPAGKRFADRA |
| UniRef90 W5M |  |
| UniRef90-UPloooosbc859 |  |
| iRef90 H3D2V |  |
| UniRef90-F6PGT7 |  |
| UniRef90-F7BZX9 |  |
| f90-F7CNC2 GEMC GV | GEACGVYTPRCAQTLRCYPNPGSEDP品ALVSGAGTCEK |
| $90-$ UPIO00328E5EB |  |
|  |  |  |  |
| UniRef90-M3YYH6 GEACGVYTPRCAQGLRCYPHPGSELPLLQALVLGEGTCEK |  |
| UniRef90-UP1000334 | GEVCGGAWGRCATGLQCLPASGPER G GRATC |
|  |  |
| UniRef90-Q6DBR |  |
| UniRet90 UPI0003F07FC9 |  |
|  |  |
| UniRet90-F6RQV7 GLPCGVYTERCAQGLRCLPRRDEEKPLHALLHGRGL |  |
| UniRef90-H3CEL1 |  |
| UniRet90 |  |
| UniRef90-G3PMT2 |  |
|  |  |  |  |
| UniRef90-H2MJC3UniRef90_G3VZ26 |  |
|  |  |  |  |
|  |  |
| UniRef90-D7PCU4 $\quad$ GMPCGVYTARCGSGLRCYPPRGVEKPLHTLMMGQGIDCMEL |  |
| UniRef90-17J402 GE[LC GV |  |
| UniRet90 |  |
| UniRef90 UPIO003F1160B GEQCGVYTPMCALLLLKCQPPENHKEPLQSLLLGRG |  |
|  |  |  |  |
| UniRef90 H2ZZ |  |
| UniRef90-13M |  |
|  |  |
|  |  |  |  |
| UniRef90-UPIo002B466E2 GTAYGVYTARCGAGLRCYPPRGEPRPLRTLMHGQGIC |  |
|  |  |  |  |
|  |  |
| UniRef90-I3K1R5UniRef90 M3ZJK3 |  |
| UniRef90-UPIO002039FD7 |  |
| UniRef90_-UPIOOO3F06E19 |  |
|  |  |  |  |
| $\begin{aligned} & \text { UniRef90-UPIOO } \\ & \text { UniRef90- UPIIO } \end{aligned}$ |  |
|  |  |  |  |
|  |  |
| UniRef90-UPI0003C8D558 GAACGLQEGPCGEGLQCVVSFGV PASATVRRRGLCV |  |
| UniRef90-6SPC |  |
|  |  |  |  |
|  |  |
| UniRef90-UPIO0033410BAUniRef90-UPI000328C79B |  |
|  |  |
| UniRet |  |
| UniRef90 -W5KBQ6 |  |
| UniRef90-UP100032AF265 GQPC GV Y TPACA |  |
|  |  |  |  |
| UniRet90-UP1000440F25D GE P C GVY T I S C |  |
| UniRet90_A41HA1 |  |
| UniRef90-A2RT60 |  |
| UniRef90-13MP09 GEACGGARG |  |
| UniRef90-W5LH09 $\quad$ GEPCASARD C SEGLTC SLIPEGA RPTTATVRRRGVCT |  |
|  |  |  |  |
| UniRef9-HOXD24 |  |
| niRef90-C4MCP0 |  |
| UniRef90 | GDPCGRNDLPCGDGLECKTLSASDAGKRRGS SRGVC |
|  |  |
| Ref90 |  |

UniRef90 UPI0003EC4B37 UniRef90- G5BIH3 UniRef90_UPI00046B47ED UniRef90-UPIOO046BA363 UniRef90 G3X2G8 UniRef90-W5LIV0 UniRef90-UPLO003C88265 UniRef90-UPIo003316C0B UniRef90 ${ }^{-T 11 J 70}$ UniRef90-UPIOOO3EBC068 UniRef90_WOJDD8
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UniRef90-I3KSN7
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UniRef90-UPIO00333FEB3 UniRef90 G3P7T4 UniRef90_UPI0003C8D225 UniRef90-B0V1B1 UniRef90_UPI00032A2469 UniRef90 H2Y754 UniRef90-UPIO0045DBECD UniRef90-G3SPG4 UniRef90 F6RTK3 UniRef90-UPIO002234A09 UniRef90-F6YQ22 UniRef90_M3VYS9 UniRef90 UPIO0032B05F7 UniRef90-UPIO00444054A UniRef90-UPI0002A480C0 UniRef90_W5Q5E8 UniRef90-F6ZXU8
UniRef90-V9L8T5
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