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 KPGSCPDDTGQCTQTS QKAGACPRKQAMCLRYEEPE QKAGACPRKQAMCLLRYEEP K R GRCPWI L L R CP L A N R R K P GF CPMI KI RCALF N P P N R C LT DA GCPGARKCCCIGS C
 RMKPGRCPVVYGQCLMLNPPNHCETDRQCVSNLKCCKGMC VK A GMCPRIIPA QCLLRYEEPE CAS DWQCP GKKKCCTMDVC VKA GMCPRIPAQCLRYEEPE CASDWQCPGKKKCCTDVC VK P GTCPTVMDRCAMFNPPAKCQSDTECPGAKKCCEGSC K P GTC P TAL G QCTTFDTTNHCTND LEECPGPEKC CE GPC
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 K P G L C P WI F L R C P L P K P P N K C WR D S H C P GVMKC CE G F C RKKPGKCPVVNGECLMINPPNFCEKDGQCEGKLKCCKTMC K K K P GK C P V V Q GQQCLI L N P P N H C E T D G Q C L D N L K C C C R T C
 K S K P G S C P V TL I R CAML N P P D A CLL N DVQ C P G A K K C CV G S C
 K PGSCPNI LIRCAMLNPPNRCGSDGECPGSKKCCE GS C VKKGSCPLVNIRCAMLNPPNHCLKDSQCLAQKKCFPGS
$V$ K K G S C P L V N I R C A MLL NP P N HCLLK D S QCLLA Q K K C F P G S
VKKGSCPLVNGRCAMLNPPNHCLKDSQCLAQKKCFPGS
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 K R GLLCPRVRI HCNLWNPPNQCWRDABCPGAKKCCEGFC $K P G V C P Q I Q \operatorname{R} C A M M N P P N H C L S D A E C P G A K K C C V G S C$ K S G S C P TVVLIRCAMLNPPDRCQNDADCPGSKKCCVGSC
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 K A K P GACCP F I Y P P A N Y L V Y Y E P P Q C H S D WQ C P K K Q K C C P GL C K P GTCPKTLI KCAMMNPPNACLRDSECLGHKKCCEGS C K P GTCPVVIGGTCSEM
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 KVKA G I C P I DS RLCFNADLP RCERDKHCVGNKKCCDVDC
 K GKPGACPFVRPVLCFAYEPPECQSDWQCPKRQKCCQGLC K GKPGACPFVRPVLCFAYEPPECQSDWQCPKRQKCCQGLC ERKAGRCPMVNAKCLMMNPPNHCETDGHCDSNYKCCKGMC
 KAKHGACPFMPPAMCLLYEPPQCHSDWQCPKKQKCCPGBC VK S GQCPP F DTPM GAI S C E I Q CA D DKRCS GDSKCCSNGC VKS GQCPPFDTPMGAI SCE』QCADDKRCSGDSKCCSNGC EKPGTCPPDNKKCHSLNPPNHCTQDNDCSASMKCCYTGC
EKPGTCPPINKKCHSLNPPNHCTQDNDCSASMKCCYTGC

QVEPGTCPVVVLRCKMHNPPNRCTSDSQCAGTDKCCDTGC

K AKHGVCPRPHVMCLI FEPP QCQSDWWQCPKEQKCCEDYC KAKHGVCPRPHVMCLIFEPP QCQSDWQCPKEQKCCBDYC


| Q | GKSCVSPVKA |
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| UniRef90_UPIO002C426B4 | GMDCF |
| UniRet90_UPIooo33169AA | GKTCMDP |
| UniRef90_UPI00045D7939 | GIKCL |
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| UniRef90-UPIO002BCDFE5 | GMTCL |
| UniRef90-UPIO002BCDFE5 | GMT CL |
| UniRef90-O8VII | GMEC |
| UniRef90-UPIO0038EC |  |
| UniRef90-UPI00038EC7FB | GIS CLDP |
| UniRef90-Q9X: | GKDCL |
| UniRef90-Q9X | GKACLNP |
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| UniRef90-UP10003318 | G 1 K CL |
| iRet90-A8 | GKACV |
| UniRef90-UPIO003289F | G11 C L D P |
| UniRef90-UPIO00328: | GIK CLDP |
| UniRef90-UPIO0033456 | GMACLDP |
| UniRef90-UP10003F074 | GMSCV |
| UniRef90-UP1000333D3 | GKVCI |
| UniRef90-UPIO004441 | G 1 K ${ }^{\text {L }}$ |
| UniF | GIK CL |
| UniRef90-UP10002C54 | GFRCL |
| UniRef90_UP10002C54F6D |  |
| UniRet90-P7938 |  |
| UniRet90_UPIooo333BE29 |  |
| UniRef90_UP10003 |  |
| UniR | GR |
| UniRef90-L5K11 | G |
| UniRef90-6V822 |  |
| UniRef90-A4K2S5 | GRACLNP |
| UniRef90 F7G0X5 |  |
| UniRef90_F7G0X5 |  |
| UniRef90-F7G0 |  |
| Uni | L |
| UniRef90-UPIOOO3F13288 | GMACLNP |
| UniRe90-O26 |  |
| UniRet90-UP100046B21BA |  |
| UniRet90_D3DMB8 | G |
| UniRet90-L9KG | GKVC |
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| UniRef90-UPIOOO4405EE6 | GRDCMNP |
| UniRef90_M3VVJ5 | G |
| UniRef90-UP10002C43FAD | G |
| UniRe990_B0LSK5 |  |
| UniRef90_K9IGUO | G |
| UniRef90_UP10002C | GNA |
| UniRef90 UPIO0045 | GMTC ${ }_{\text {GK }}$ |
| UniRe990-V8N7R | NVQCMDP ${ }^{\text {a }}$ |
| UniRef90-UPI0002BCD742 | GRACD |
| UniRef90-UPI0003FODC18 | G HV C M |
| UniRef90-G11 |  |
|  |  |
| UniRef90-D3DMB3 | GRACL |
| UniRet90-K91-W | GKACV |
| UniRef90-1PN3E6 | GKGCI |
| UniRef90-13N3E6 | GKKACL |
| UniRef90- ${ }^{\text {A4K2 }}$ |  |
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|  | GKACVEPEKA |
| UniRet90_D3DM | G |
| UniRef90 A4K2U5 |  |
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| Uni | GKVCV |
|  |  |
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EK

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KPGHCPEFEAACLVA
EKPGSCPVFEVORMDPPDKVDDSRPDLLAKCCNHDC
KEKAGGCPPDEEPCLMLNPPDKCDHDSQCDGPKKCCEGDC KKRICPR川RVKCE KKR1CPR1RVKCE RPGACPAVGLLEAS KPGNCPLVEFOCLMTNP

K

## $$
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$\qquad$ EKSGGCPPDDGPCLESVPDD KKYGDCPKDPQNRLEALCL EKWGGCPPDDGPCLQVTP
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Q EKWGGCPPDDEPCL EKLGGCPPDDEP
$K A G V C P E P A T E$ KAGVCPEPATE
VKKGQCPRFPYKFRM
VKKGQCPRFPYKFRM VKKGQCPRFPYKFRM RPGVCPTANPE
KKSGSCLLKFQGKCLMD RRGYCPVMQNPLQKLPCLLN
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 EKQGTCPVMTRWCLLTGFKSICQNDGECPGNEKCCTSFC RPGVCPAVGPE KDGRCPWVQTPGTAKAPASPCTMDCD RPGSCPVVGLETSAL
QVKSGTCPVVPFRCHTLNPPNPCTLDAECPGLLQKCCPSSG QVKSGTCPVVPFRCHTLNPPNPCQSDSQ
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 EKSGGCPPDDGPC LSVPDQCMDDSQCPFHKKCCYRAC EKSGGCPPDDGPC MLSVPDQCMDDSQCPFHKKCCYRAC
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$E K P G L C P R P Q$

| UniRef90_E5S2K7 |  |
| :---: | :---: |
| UniRef90-E5S2K7 | GTRC |
| UniRef90-G1LBZO | GNSCF |
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| UniRef90-UPI0001CBB87B | GRVCVD |
| UniRef90_B3M0L7 | GPMCVE |
| UniRef90-A0A044RG77 | SRECLK |
| UniRef90-R7UX67 | GHVCVE |
| UniRef90-M3VVJ6 | SNKCL |
| UniRef90-M3V | NKCL |
| UniRef90-B4NE | GPVCVE |
| UniRef90-A8P1 ${ }^{\text {d }}$ | SRQCLK |
| UniRef90-UPIO002034ADC | GAVCVN |
| UniRef90-E3LN18 |  |
| UniRef90-G3WHP5 | GKTCMAPE |
| UniRef90-G3WHP5 | GKTCMAPE |
| UniRef90-K1P636 |  |
| UniRef90-UPIO0035A1D1B | GKK |
| UniRef90 UPIO003F050 | GHVCA |
| UniRef90-UPI0003F05C4E | GHVCA |
| UniRet90_O9x |  |
| UniRet90_-_6W6D4 |  |
| UniRet90_UP1000333D |  |
| UniRet90_UP100 |  |
| UniRef90-UP100033180E | WYHCVDP |
| UniRef90_UP1000388CB | GRACVY |
| UniRef90-UP1000388CB | GRACVYP |
| UniRef90-A0A016TGX1 | S |
| UniRef90-L8Y5V9 |  |
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| UniRef90_W4W |  |
| UniRef90-A4K2S4 | SFKCVS |
| UniRef90-P97430 | GKVCL |
| UniRef90_UP10003AB5CE8 | GKKCL |
| UniRef90_UPP0002C476FC | F R |
| UniRef90_UPP0002C476FC | FRQ |
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| UniRet90_Q8 |  |
| UniRef90-V8NSE5 | GTHCS |
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| UniRef90-UPI0003F124E1 | GFRCV |
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| UniRef90_UPI00038BC656 | FRQCVP |
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| UniRef90_UPIOOO38350C1 | G |
|  |  |
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| UiRe90-9KG781 |  |
| UniRer9o-How | G |
| UniRef90-F1LM48 | G |
| UniRet90-T1PJS6 | GP |
| UniRef90-UPIO003D0FF52 | GY |
|  | NRQCA |
| UniRet90_G3WIU4 | EKKCMTPLIS |
| UniRef90-UP1000298E9BA |  |
| UniRe90-_SYKL5 | A M |
| UniRef90_UP1000383D2A1 | G |
| UniRef90_UPI00042BBFFB |  |
| UniRef90_UP100042 | GL |
|  | GHHCVAP |
| UniRef90-UPI0001CB9ADD | GTACMEPV |
| UniRef90_UP10003C915EA | FR |
| UniRef90_UPP0003C915EA | FR |
| UniRef90 UP100033342E6 | GL |
| UniRef90-P22075 | G K |
| UniRet90_UP10003F135D2 |  |
| UniRef90-L5K | GROCM |
| UniRef90-UP100022348CB |  |
| UniRef90-UPIOOO35A1I | GFVC |
| UniRef90-UP100035A1D06 | GFVC |
| UniRet90_K1S1C | G |
| Un |  |
| UniRef90 R7VDK9 | N |
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## UniRef90-F1SDR4

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GSCPRVRVKCEVEE VKQGD

CPPERASGFAAA
CPRDRVKCEMA
CPRDRVKCEMA
EKPGVCPADNIRCIKSD QKPGTCPDGDDPRWMAACL REK GGCPPDDGPCLQL
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 RPGACPEKAVEALDIS CMFDLDCPEHKKCCETSK RAGSCPSVSARQARLSCDDNCVYDHDCDEVHKCCPSAC KPGVCPQLGFPLHQSSPRDACVSDFHCPGDLKCCVNGC
 EKKGSCPQIDLAFPQLGCVNKCQEDSQCPSNMKCCLNGC KQRRCPAFREAGEAAACVDSCSADQDCKGALKKCPNGC SCPKMRVKCEV EEKYQCTRHRHCSDNMKCCMFGC VKAGSCPEDRMHCLSPTQH DCHTDSDCKGKKRCCRTAC ERPGMCPKPTGDTLNECDVEMCETDAECSEGEKCCRNGC
 KPGYCPRTSMTPFEAACLDACVDDSRCPDLAKCCPHDC EKEGVCPPDNVRCDREELP QCHRDRNCEGPKKCCYWHC EKPGVCPATTPPGELDPCFFPCSSDRQCPGKKKCCTDEC VKSGTCPTDDGCVSVKDNGCSSDDTCPGDFKCCSNNC

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UniRef90_UPI000443BC29
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KPGSCP
K P G

KCPRIREKCE
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VK Q G DCP P VAA E GA I
K N GQCP I LGHYEQNNC
EKPGKCPDI PMACRVPKHR
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K P GVCPA LG PGPSTVP
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K P GHCPWPTGPCLL K K DACSRDSDCTGNKKCCKY GC
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K S G
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K AKPGRCPAVTG G CPEKKSWFHCQRDDQCKENKKCCSSAC
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K EK S GVCPFESR】CYRSD DP RCGQDQHCLRNKKCCYVEC
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