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VNDVWYT EAEULYPDTCCGNNRANLIWRKFVCPGINVKCVQYDEHVIS


SPTLPVTCGRETGLLHKEKMGK

## K

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## QUERY

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P


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PKHFVH ${ }^{\circ}{ }^{50}$ G T $\square$ K DWKRA ${ }^{60}$
 P SEFEAALS GRASSKDWKRSI RYGGRTM HTLIDEEGVLTPHA
 PNEFET LA GRA SSK DWKRS I RYGGRTMLQCVLDED GLLLMA HA
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 PREFEVEGGCAKFKNWKPKEFEVAGNRAKSKNWKQS

| $P$ | $D E$ | $F$ | $E$ | E G K R A H T K K WK E T |
| :--- | :--- | :--- | :--- | :--- | :--- |
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G GHGRSKNWKLSVRCGGRTLRWLMEKCEMCRDG

PREF E V K GRGTK SK W WK R

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P N E F E I E G G G R N A K N WK R N I R C G G T T L G E K L L
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 GREFE IE G GRE RWKNWK LSSV R C G GWP L W Q R L MKECAV C R D G

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## P

## \section*{P} <br> P

$P R$
$P K$
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$\begin{array}{ll}L & \text { K F E D E } \\ P & \text { T E F E I K }\end{array}$ $P R$
$P R$ PRE

P $\square E F E T F S G R A S C K D W K R S$
LK
PMKFEI KGNRGDSKNWRQS
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GE DF C CD ${ }^{T}$ C
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K S K

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HDK VCSNTCR

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PFClDCEGC
HEEHCSFKC

## Q

K L C S CK 1 C

| $K$ | $L$ | $C$ | $S$ | $C$ | $K$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $D$ | $S$ | $C$ | $A$ | $C$ | $C$ |

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H H T T CSFKC
PSNKCEVCSR KNCTCVKC KNCTCVKC

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LLCECVKC LHCDCECC LHCDCECC

HTHTCVQMC HNE $\square \mathrm{CTGRC}$

LK C G C G Q C

GKF\|CCVC
GKFICCVC
GTLFCCDTC
LLCACHDC
$\begin{array}{llllll}L L & C & A & C & H & C \\ V \\ V & E & C & G & K & C\end{array}$
VLCECGKC

HDKVCTSTCR

LLCKCKRC
LLCKCKRC

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GKLF NCCRC
GNLTCCDDC
GRLVCCDTC
PVCLCEVC
HDKVCSNTCR

H S
GKLLF NCSRC
HPNQCSAKCQ
LK CNCPLC
LKCNCPLC
$\stackrel{\rightharpoonup}{\mathrm{N}} \mathrm{V}$
$\mathrm{N} V \mathrm{C}$
H D K VC S N T C R
HKEFCTGRC
HKEFCTGRC
QSCNCAIDC

GK LD C C DTC GKLFCCDT
EDCACPKC E DCACPKC
E DCACPKC HDKVCSNTCR

GELDCCDGC GKLENCSRC

GELFCCDTC
GTLFFCDTC

PSCSCS
GELICCDGC
GELICCDGC
H

GQLFCCDTC

 GELICCDGC

GKLFCCDSC


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UniRef90 A8J085 UniRef90-Q00XM1 UniRef90-K8FF04

VVPGACGAVEG\|LDQQVFESGGGK KC| QVGGEFYT GSSKKCIQSEDKWFT

VT CENKEGVMDTEKDKKG


ENCTECRGLWFT KGVKLGGEFYA
 VKCGTKRGGLDVEKLKKG VK CVKFRQWCT SSELPVKCGSVVAKMHVELFLCPGDHQPCCEYKGCLYS
 VKCGDKKGWMDVEKLRKGSK
VPGSRGAVEG LIQQVFMSGGSK IPGARGAVEGILI QQVFESGGSKKCIQVGGEFYK
 VPGAHGAVEGGLIQQVFGSGGSK KCVQVGGQFYT VPGAHGALEGILIQQVFGSAG
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 VPGARGAVEGYL QQQVESGGSKKCVQVGGEFYT VPGARGAVEGILIQQVFESGASKKCIQVGGEFYA VPGTRGAVEGLLIQQVFESGRSK KCVQVGGEFYT AEVRVDLVCGPARGTLVLPKGYKQKQEYVVYPDGRKVS

 GGSKKCVQVGGEFYT GN | $G$ |  |
| :---: | :---: |
| $G S S K K C$ | $L$ |
| $G G S K$ | $Q$ | EGNGGAK

VPGAHGADEG LIRQVLESGGAK KCLQVGGEFYT
PGGSKKCIDQVGGEFYT
VPVCGDTNGVLEDKKKLQERVIKLPS
 ELPAGCGKVEEVLIQQVDESGGAK KCDKVGGEFYS PGARGAVEGTITQQVFESGGSR CGQAGGEF TVEVDCGTLRGTYDVAKYHLLGGIDREA EVPVTRGS EGMLMKHVLDPSHSKTGSRAGDKPYT ASSEVPVTQGTIKGILIKHTLEPGSSKVGSKAGDELYA $P L L T V T C G E A K G T L H K K K L K Q G Y Q L Y K C L H C E G R N L S S$
$P E L V V C N G M Q G F L V$
$P$ SPQLPVTCGEVKGTLYKE LLAQAWIATKTAQEKGDYHS SETCTQAETRWSS
 ASPPLPVGCGGMRGMLLLVRYAAPRASTPGVMAE GNVVGLFHPDRYLKG
Pr VGCGGMRG


lupas_21
lupas_14
jnet
cont
solo
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jpssm


PSKFEDPSG GKSKTRKTLVVRAKGQPHQKNEDECAJVICRDG PREFEDEGDRGASKNWKLSI RCGGYTLKFLMER DLESHN PNEFQKHGGCQSYKNWKISIIRCEGFYLKDLIRLKYLEAPQ PNEFQKHGGCQSYKNWK IS I RCEGFYLKDLI RLKYLEAPQ PPAFEEFAGRGACKKWKNSI CHEGRPLTHWFAKGDL
SSKFEDPGGKNKSRSQKPSVRTKGASLQKNDDECAMCRDG PSKFEDPSGNAKNKSLKPVVRAKGTQHQKNEDECAVCHDG PSKFEDPGGKTRSGGLKTLVRAKGPQMQENEDECAVCRDG PSKFEDPSGNAKNKTRKPVVRCGVPTLQKNEDECAVCHDG PLEFCRTGPGADEGNWAQSI WHMGVPLANLIQLGILRPHP PLEFCRTGPGADEGNWAQSI WHMGVPLANLIQLGILRPHP PKHFVHLAGKSTLKDWKRAI R L G GI ML R
PPEFEKLAGKEPCRKWKSTIFYNELPLQFWFEEGYLT
PKEFTVRANKDKQKDWKGSIRTGKSNLR
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PSKFEDPGGRGSGGGLKPLVRAKGQLHQKNEDECAVCRDG PSKFEDPSGGKRAKGAQSTVSGGGEPHQKNEDECAVCRDG PEEFMKKSNVIGGTGWERNI RSHGESLWNLMEWQVLKKHP PSKFEDHSAKSKSGSLKPLVRVKGPTLQKNEDECAVCRDG PSKFEDPGGGGKSKGLKTLVRAKGPPLQKNEDECAVCRDGG $P N E F Q K F G G K D S Y R N W K G S i \quad Q Y K G K S L G V L I N K$
PSKFEDSGGKNKSSGPKPLVRAGSVPHQKNEDECAVCRDG PSKFEDPNKTRSGSSLKPLVRAKGQLHQKNEDECAVCRDG $P G K F Q D P G N K A R S G S S K P L V R A K G Q L H Q K N E D E C A V C R D G$ PSKFEDPSG GKSKGLKTLVRAKGPQVQKNEDECAVCRDG PSKFEDPSGG PSKFEDPGGK $\square K A R S L K T L V R A K G T T L Q K N E D E C A V C R D G$ PGKFEEPGGKNKSGSLKALVRAKGAHQQKNEDECAVCRDG PNKFEDPSGNLKNKSLKPVVRAKG
PAAFERDGGKEKSKSWKNSCAFNGKTFKRWVD
PS QFERDAGKGSSKSWKTSVFSEGRAFRIWMESN
PEEFVKEEPTLTDGLWKRDILCHGKTLNFLDDVCYACHCG PSKLEDPGGRARSGSLKPLVRAKGQPLQKNEDECAVCRDG LREFEDKGKREGSKNWRLTVRCFNWTLGHLIKVG
PTQFEAFGGRGSHKNWKLSILCGGYKLRDLIE ECMVCKDV $P S K F E D P G G G R S S G G L K P L V R P K G Q P H Q K N E D E C A V C R D G G$
$P G K F E E P S G K N K T R S P K P P T R T K A T Q H Q K N D D E C A V C R D G$ PGKFEEPSGKNKTRSPKPPTRTKATQHQKNDDECAVCRDG
PS QLEDSGGKNKLKSPARAKAPGGSELRTNEDECAVCRDG YMGEKARLKDWKNAVRDNGVQVRKHDDAGHLTFWN PGKFEEPSGKNKTRSPKPATRTKATQVQKNDDECAVCRDG PSKFESDAGRGSAKKWRDSLRVRGETVGEWDDR
PSKFEDRGAGKSRTRGGRSVLCGRASPQKNEDECAVCRDG S GKDEETAGSHKASHQKREPNTRAVDVERNDDECAVCKDG PSKFEDPGGGRSSGGLKPLVR
PRKDEDPGGRAGDGGLKTPVRAREPPHQKNEDECAVCQDG PTEFER $\square G G R Q A T K K W K Q S \square R H G G K S L G E W D$
PTACEEPEARSRSHSLKPPAQP
KENEDECAACGDG TATCEEPGARSRSRSLRKASQSSGEPHQENEDECAVCGDG P DAVKVKWEKSLQRKNSMRKKRRDLKSNMDECEVCRDG PTEFERVSGKAASKKWK
PKGLLEMAGKRAKSKNWRQPLESEVS VTLRVLQPDGSLVCHDG RSNFERVGGSKMAK WYRSI RVDLEPDGE WLER PAKFEEKSGVKTRRWKRTIK PTEFERLGGKGTAKKWRQSLR RSRFEKI GGSPMAK WYRSI RVVGEP $\square$ GS W $\square$ T RHG $\square P$ V $V$ T ATEFERLSGKGTAKKWRQSVR



| UniRef90_M3YF49 UniRef90_UPI000273CF10 | GELICCDGC |
| :---: | :---: |
|  | NTLV |
| UniRef90-F6Z737 | T S K |
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| UniRef90-UPI0004446ED8 |  |
| UniRef90-K7FWV1 | GELICCDGC |
| UniRef90-UPIO0038C59E3 | GELICCDGC |
| UniRef90-F6SLV5 | GELICCDGC |
| UniRef90_UPIO004545163UniRef90 W5N196 | GELICCDGC |
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| UniRef90-W5N196 | EDCSCVKC |
| UniRef90_V8NUX3 |  |
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|  | GELI CCDGC |
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| UniRef90-UP10003C8D85A | GELI C CDGC |
| UniRef90_UPI0003C149AB | Q S Cl C D DC |
|  | GELLCCDGC |
| UniRef90_UPI00046B91DA | GELICCDGC |
| UniRef90-G3P0D4 | LLCNCS $\square^{\text {C }}$ |
| UniRef90_W5N1B9 |  |
| UniRef90-O43918 | GELICCDGC |
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| UniRef9O HOX3E5 G |  |
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| UniRef90_E9Q441 |  |
| UniRef90 C1FF76 |  |
| UniRef90-F1R6N2 | VD L R C C D G C |
| UniRef90_UPI000328FE77 | GELDC CDGC |
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| UniRef90-H3AA98 | GNLTCCDDC |
| UniRef90-F6UXD1 | GELICCDGC |
| UniRef90-UPI000273BBAO | GELICCDGC |
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| UniRef90-K1QRF8 | HEKMCTGRCQ |
| UniRef90-G3VMC2 GELICC C G C |  |
| UniRef90_Q00XU4 |  |
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| UniRef90_UPI00045D656A |  |
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|  | GELICCDGC |
| UniRef90-H0XXP5 G F L Y C C D |  |
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| UniRef90-UPI0003F0B684 R R L L Y C D |  |
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| lupas_21 |  |
| upas_14 |  |
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    PELP
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