## QUERY

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UniRef90_Q38VS5
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## QUERY

UniRef90_W6T7Z9 UniRef90-UPI000361F442 UniRef90-Q6G0L3 UniRef90-K2JWC2 UniRef90-A8U119 UniRef90-Q16DLO UniRef90-JOL4E1 UniRef90_C2EW10 UniRef90_UPI0002492B98 UniRef90-Q03GC2 UniRef90_UPI0004077809 UniRef90_UPIO00466A50B UniRef90-Q74IB5 UniRef90-A9IN26 UniRef90-IOJTM7 UniRef90-S1R5L1 UniRef90-E6YTN4 UniRef90-G8PDR8 UniRef90_UPI00037BBFB9 UniRef90_F3LOF3 UniRef90-H1LGK7
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LY G VWR V VD T G
 GRTIMELGRRGKYLLFHDSQNETVLSHLGMSGSWRDYSAA GRRV DGLRRRAKYILVDLDDGTCWMI HLGMSGRMLGSNDG GKRVERLRRRSKY L LMDLDSGETWLVHLGMSGRMLVSGDP GLTI K E M KRRGKYLIFNFNEDISMVSHLRMEGKYFVRQAG GQTIETVDRRGKYLLFRFSNHLTMVSHLRMEGSYYTQPVD GK K F EK I D R R GK Y L L F R F S G EL T M V S H L R M E G K Y S V K S S E GKKILNVRRRGKYLLDDFSGDYTMVSHLRMEGKYSVV GQTVENINRRGKFLLFQLS DFTLVSHLLRMEGKFRVFPAE


## G N S G G G G N G G G G N G G G  <br> <br> G

 <br> <br> G} GRRRV LQ L R R R S K Y I L A D L D S G E S L L D D L GMS G RMMLGR F V H

## 



 GQRI E GVVT RRGKY LVVFALLEGGDRAIVVHLGMTGRVLVVADA G

## G













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E K I D R R G K F L K K F V F T $\quad$ D Y V L V
 GRRRLDVSRRSKYLLGDIDSGDVLVMHLGMSGSFRIINDH



| QUERY | $F$ L Q R |
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| UniRef90_W6T7Z9 | GL K |
| UniRef90-UPI000361F442 | GL K |
| UniRef90-Q6G0L3 | L L K K |
| UniRef90-K2JWC2 | L L A K |
| UniRef90-A8U119 | L L S |
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| UniRef90-M9RPY7 |  |
| UniRef90-J0L4E1 | CL K K |
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| UniRef90-S0KQF4 | SIA |
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| UniRef90-D4DVA7 | L L Q |
| UniRef90-B9QZB4 | Y |
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| UniRef90-R3WF31 | G |
| UniRef90-D4HZB9 | FL Q R |
| UniRef90-W8S4G6 | LLS |
| UniRef90-A9CWQ7 | WF |
| UniRef90-D3A5K7 | LLEK |
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| UniRef90-Q837G3 | G |
| UniRef90-A0L837 | LL A K |
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| UniRef90-A3UI36 | Y |
| UniRef90-M7DAP2 | LI A |
| UniRef90-A3CP91 |  |
| UniRef90-E2CE75 | LFA K |
| UniRef90-M4XHA5 | LLR K |
| UniRef90-I2BB49 | FLS K |
| UniRef90-UPI00028A2283 | PL H K |
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| UniRef90-G7LQ78 | FLQR |
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| UniRef90-B8KL34 | FL A |
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| UniRef90-UPI0003700D96 |  |
| UniRef90-B6JCQ7 | F L K |
| UniRef90-G5JYIO |  |
| UniRef90-AONUG4 | F FR |
| UniRef90_UPI000367B40E | PLS K |
| UniRef90_Q38V55 | $\mathrm{G}\|\mathrm{L}\|$ |



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UniRef90 U4TDT6 UniRef90-U4TDT6
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UniRef9O-A7BUX4
UniRef9O D2UGX8
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UniRef90-X2H3G1
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UniRef90_Q8EPE6
UniRef90_D5EJH0 -
$G L P|V L A| V|R R R A K Y L L L| E F A S G \quad T|L L \bar{V} H| L G M S G S L R \mid L V A A D$ GARVSGLSRRAKYGLI HTDRGQTLVFHLGMSGRWRIDPAT GKTI GRIETRGKAMLTHFSNGLTLYSHNQLYGVWRVADVG GRRVVEA G R R A K Y LLAA D LD G GEVVMILHDLGMS GSDRII E G GA





 AREVVLA VVERRGKYLLVEVDAG WFIVVHLGMTGTLRVLPA G GREVTAVDSWGKALLTRFDDGRVLYSHNQLYGVWKLHDAE NRQVVS FSRRAKY L L LDDLDSGDVLVMMHGMS GSFRWIE TE




## Q

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 $G R T F Q G V E R R G K F L R L L D L D G L L V S H L R M E G R Y G L Y R E E$


GRTVEAVGRRAKYLVVRLDGGLVMLGHLGMSGRMTIGALR G Q K V R QV E T R GKALLIHEDNELVIVSHNQLY GVWMVRNAH




 NQVI K QVLRRGKFLI IELSEG CLI SHLRMEGKYHFY Q GRVI GEVRRRGKYLLLACQGPEWLMIHLGMTGTLRDYPQA


 GRSIVALLGRRAKY LLLI DLDNGTTII SHLGMS GSFRIIEVE Q GATVVSLGRRAKYGLIHTDRDQTMIFHLGMSGRWRII
 E Q TI H DDRRK GK F L L F DLD E HV LV S HLLRME GKY GV H D R K GQRV EALSRRAKYLVADLSSGDALIMMLGMSGRFDVVFPD


 $G N R V Q A V R R R A K Y L L I D D A A G G T L I I D H L G M S G S L R V I M A K$




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 $G Q T P T A V R R R R G Y M W L V L D S G D M L L A H L$ G M S G Q M M V V QP Q G GRTVTSLGRRAKYLLADLDSGDVLLMHLGMSGSFRVVGTA
 GATVTALGRRAKYGLIDTDRGDTLIFHLGMSGRWRVDPA GQKVVVSVDSWGKALLTRFED DHVI Y SHNQLYGVWRIMRRG
 $G Q P V R G V S R R G K Y L L I D F D A G T V L I H L G M S G S L R L V P G E$




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| :---: | :---: |
| UniRef90_G2J032 |  |
| UniRef90 JoM ${ }^{\text {d47 }}$ | KVAETNRVLRVRLQTAKKALILLYSASDLELLDQGQL |
| UniRef90-A7IKJ3 | VKGRPGRHDHVV |
| UniRef90-A0A02 | PPGDFHRHDHVVFHLETPEGERRRFGFMDLARREDIAAHA |
| UniRef90-R8AZ | TPLLP HDHVELELDSGDRLR |
| UniRef90-D9SC49 | TAPQPHDHFDLLLDNGCLMRLRRRFGAV |
| UniRef90 R9CE37 | DPOPDKHDHVDVFENGYQL |
| UniRef90 Q5WEG7 | D EKTKHTHVVFSFTDGSELRYKFGTMHL |
| UniRef90-IIYHF2 | KPAKHDHVDITFRNGL |
| UniRet90-D5XDV9 | RAKHTHLVFHDSDD |
| UniRef90-W4DBA4 | DP LDKHTHVLFHFTDGTELRYQFGTMHLFQMGED |
| UniRef90-B9B30 | GVPVAAKHDHVDWDFDE FVLRFRFGAVLWHPREDV |
| UniRef90 UPIOOC | QRSLRVRLTAAGRSASLYSAS |
| UniRef90-G8PL59 | Q |
| eef90 | MV |
| Ref90 |  |
| UniRef90_E1NC |  |
| UniRet90-UPIod | QKHDHVVLDLDGGARVTFRFGAMDLMPTEGVEAHW |
| UniRef90-L5NA | M EKPKHTHVIFHFTDGTELRYNFGTMHAFRKGEESSVK |
| UniRet90 B BYKA0 | TDGSELHYNFGT |
| UniRef90_UP1000363 | DAASTVYFGT |
| UniRef90-E1SW50 | GK |
| UniRet90_U4TDT6 |  |
| NOE | EKHT |
| UniRef90_E3I | DKHTHV |
| UniRef90-LOF7U7 | H ${ }^{\text {HV}}$ |
| UniRe990 UPIOo03F63 |  |
| UniRef90-H8L |  |
| UniRet90_0 | VIETGSGHVLARRFGSVDLVPTQALDS SG |
| UniRet90_UPI00036 | KEGEPDKHTHVRFHFTDGTELWYRFGTMHVFPKGAEFSQE |
|  | PGPHDHVEWVTDQGISSVRRFG |
|  | (kRQLRLAI HNAQKSAL |
| UniRef90-B5HFA4 | ARWGPSHQ |
| UniRef90-A0A023CMA2 |  |
| OF2K7 | KQPAPDKHDHVDFIFADNTLLRYRFGAV WLPGVAEHHE |
| f90_UP100038 | PRGKDEKHDHVVFHLIEGAKGLARRFGFMDIARRDTLASHA |
| UniRef90_D4E |  |
| UniRef90_E1VLE0 |  |
| UniRef90_A4IRP4 | EPLDP HTHVVFRFTDDSELRYRFGTMHVYAKEE |
| UniRef90 S4DB76 | AP LISKHTHVESFDDRSQLRYNFGRMTLV |
| UniRef90_S1NFT5 UniRef90 $19 C 0 Q 2$ | QEPAPNOHVDLLERGADGSTLRFRFGAVLWLPDSALL |
| UniRef90-H2FY69 | AGKHDHVDIEFANGKLLRRRFG CLLWTREAV |
| UniRet90_Q1QPJ4 | VGAFHHPRDHVVLRLSSGKII T YRFGFMKIVARSALDDEP |
|  | TKHSHVIFNFRDGTQLRYKFGRMSL |
|  | KHDHFLIDKTADGCCVTRRFGSLDL |
| UniRef90-F7ZOJ8 | KHTHMIFHFQSGKEL |
| UniRef90 W6R6U7 | A |
| UniRef90-O2N7Y8 |  |
| UniRef90-P19210 | KHFHLFFKLDDGSTLVYQFGTFDLDDRKQEEAY |
| UniRef90-UPIo0036AE | HTHITFRFTDGTDLRYRFGTMHLQEKGTEAT |
| UniRef90-B0UR | GRPGQAKHDHVVFALSNGARVTYRFGFMDLVRRA |
| UniRef90-F7SRV | S |
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| et90_B4RC |  |
| et90_Q4U | HDHVDISLIM GRVLRFRFG |
| UniRef90 UPI | EP KLKHDHIDVDFTDGTRLRFRFGCFLPITGQTDSSH |
| UniRef90_O1N4 | PYPDPKKHEHFDIEFDD CLVRFRFGAC LWQAADEVDSR |
| UniRef90_UP100040B5B67 | TPPRAHDHVDIAFDAAGGRLRFRFGC |
|  | APHKHDEMDFELANGKQVFYDFGK |
| UniRef90-UPI0003B3213F |  |
| UniRef90-Q9A131 | VP DNKHFHVFFELKNGSTLVYQFGTFDLTAKSQLSA |
| UniRef90-A6DF | RKKHEHISTRLDNDQ |
| UniRef90-UPIO00248C4DF | KHTHVVFHFTDGTELRYQFG |
| UniRef90_J9DD | AKAHDHVVFHMSSGARLVFRFGLIMLVVAG |
| UniRef90-D2UGX8 | , HDHVDMS |
| UniRef90-Q87T81 | KHDHVD |
| UniRef90-UPI000237D83A | PARHEHLVIETAQGARCGRRFGMVDL |
| UniRef90-UPI0003B3B7EF |  |
|  |  |
| UniRef90-UPI000375A9FB | RATIT $\square$ D DGTDIHFTFGY $\square$ RV |
| UniRef90_S3X4E1 | RVL DFDDGDQ |
| UniRet90 UPI000344 | (ex |
|  | PRGKDEKHDHVVFHLDGGARVIYRF |
| UniRet90- UPIOOO2488596 | KHDHLLTETESGRRLARRFG |
|  | DHLLIETADG |
| UniRef90-UPIOO | R SPR |
| UniRet90-UP100037E |  |
| UniRee90 UPI0003B | APLEP HTHLFHLADNRELRYQFGRMTVP |
| UniRef90_UP1000376 | LD S G |
| UniRet90_V8G8W4 | ASKHDHVDIIFEDG |
| UniRef90-12NH80 | AGKHDHVDLITESGIILRYT |
| UniRet90-X2H3G1 | QEAE KHDHIDLVLENGVLLRYRFG |
| WWOH2 | S |
|  |  |


| UniRef90_G2J032 | LL ${ }^{\text {A }}$ |
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| UniRef90-JoMJ47 | F L Q R |
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| UniRef90_A0A021XDU3 | F FR |
| UniRef90-R8AZR5 | L L |
| UniRef90-D9SC49 | L L V K |
| UniRef90-R9CE37 |  |
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| UniRef90-Q5WEG7 |  |
| UniRef90-I1YHF2 | LI |
| UniRef90-D5XDV9 |  |
| UniRef90-W4DBA4 | P $L$ N K |
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| UniRef90-UPI000288965C | F L S R |
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| UniRef90-B1YKA0 | P L A |
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| UniRef90-E1SW50 | L L N K |
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| UniRef90-LOF7U7 | S L A R |
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| UniRef90-U9VP14 | FLS K |
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| UniRef90-F0F2K7 | L L |
| UniRef90-UPI00038107B1 | F |
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| UniRef90-E1VLE0 | F L Q R |
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|  | UniRef90-Q5YS09 |
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|  | UniRef90-UPIO003C7578D |
|  | UniRef90-B9JZF5 |
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|  | UniRef90 ${ }^{\text {C }}$ - ${ }^{\text {CH67 }}$ |
|  | UniRef90 U4K |
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|  | UniRef90 D5US7 |
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 en livill PEGPEVRRAADALAKAVAGEPLVQAWFAPPALKRHEKKLV


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| UniRef90-H2KO | ERWRPAYQ ${ }^{\text {RALILGTADRTAVGYRLQVL }}$ |
| UniRef90-UP100034985B2 | ERPATGRSLKVALETSRKALLLYSATDIEMWPTEQV |
| UniRef90-Yok | QFSPPEKHDHLDGFGDGRVVRRRFGAV WWLDGDVN |
| UniRef90-F3LE11 | KTDAPQKHDHVDI |
| UniRef90-Q1NMI2 | EPPRKHDHLVIKMGTDNKSVDCRRFGLVAVY |
| UniRef90-UPIO003786 | ARVPPGDQVRLILANRDCTALGRKLGMVDLV |
| UniRef90-UPI00037E | TPPL KHDHVDLALSDGRALRFRFGLL WTPDPPARHA |
| UniRef90-UPIOOd | KTSDS HARVIFHLQGGASLVYGLGT HGIRPEERAML |
| UniRef90-UP100047D1582 | QPWRPAFQ RVVLSTARYDAVGYRLPVVELVRTADEA |
| UniRef90-R7Z8N5 | EEAKFKKH1HATFHMSDGGYLIYRFGELLRFLEAQUEDHA |
| UniRet90-14W8R8 | APLGKHDHVDIALERRAGRVLRFRFGCLLWQPPGE THE |
| UniRef90-C6C6R1 | Y $\$ EPDKHDHVDLVLDSGKVLRYRFGA  \hline UniRet90-UP10003 & PPPEYEVRAV  \hline UniRef90-F2R5E8 &   \hline UniRef90 E9CN & NQD  \hline UniRef90-Q3A3F2 & TPPAA HDHVDI ALESGRTLR  \hline UniRef90-R4PN18 & HPNDPDRSTRVDITFDDGSHLYFNFGWMKLHPTLEVPNDD  \hline UniRet90_UP100036FE &  \hline UniRef90_R4TCY6 & A  \hline UniRet90_E7AY & EAEKKHDV  \hline UniRef90_M3BYJ22 & ERR  \hline UniRet90-UPIO003606 & RKM  \hline UiRe90-M1FH & QLRFAVVGSDKAAWLYSASDTRLVRPDDLEQVV  \hline UniRef90-R7XV42 & AGDEKHLRVRFLLGFDTVAGR  \hline UniRef90-UPIOOO3 &  \hline UniRef90-UP100037FBD28 & HAHESHPHLRARLLLDDGLSVWF  \hline UniRef90_A5F407 & FP AAKHDHVDLVMTSGKRLRYRFGAWLWCAPDE SHE  \hline UniRet90- ALAOL110 & TPAQKHDHVDLVFTL HTVLRRRFGALLWHEGADVEAHP  \hline UniRef90 UPloooth3255E & SFAYPERHLEAQFILNNNKALRYKFGTLLELSKNEYKNDP  \hline UniRef90-K7A3Y2 & TPVIKHDHVDVVLTNGVCLRFRFGAC L  \hline UniRef90-O5YS09 & APVE KHAHIRAALDDGSELRFTFGGWALAPLAEVDG  \hline UniRet90_R6UV & EP YDKHVHVILQLSDGRQLRYHFGKMYLYERADVSSY  \hline UniRef90-B1VG60 UniRef90 E6W4G9 & KPRDT HEHVLLCLGSGQ  \hline UniRef90-R9BAT2 & E EKRKHDHLILQFDD TQLRYRFGCILWWDAETEAK  \hline UniRef90-A3N3S8 & QQPA GKHDHVDLITQDGMVLRYNDPRCWLWTKN AEQHE  \hline UniRet90_M00K63 &  \hline UniRef90_UP10003C75 & ERWRPGHQURAL LGTAA ${ }^{\text {a }}$ ( AVGYRLPVLDLL |
|  | ERSRDEKHDHVIFHLSEGDPLRRRFGFMDMVERRHMDRHA |
| UniRef90 R7WKK9 | APDESKHLH1RTRLDS |
| UniRef90-U4KN07 | EPR DKHEHVIFY岛DDFTMDTRKFGTFDLR\KEDTYKT |
| UniRef90-UP10003B3866C |  |
| UniRef90_UP100037 | RWGPA WQVRVVLVTAEQVA |
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| UniRef90_G7UT | A HDHVDLALDGGRVLRFRFG SLLWQAPGT |
| UniRef90-C9RD |  |
| UniRet90-D7GEI2 | AP俍AARHARVVITMDDGTQLRF |
| UniRef90-V9XBE5 | VPDE KHDRIRAVLDNGAD |
| UniRef90_E8PLA3 |  |
| B | TALPPQCRVVVRFV DDGPELRFADQRM |
| UniRef90_A0 | K HLRIRAVLDNGADL |
| UniRef90-UP | ELIE KHTHAIEKFDPDVYLHYRFGCLLWVPNGQ GHP |
| UniRef90-UP100037F5D2C | FPAEKHDHVDIVDNGLRFRDPRRFGAM LWHSGPPDTHP |
| UniRef90-L8D | PD KHLRIRARLIDDGTL |
| UniRef90_UP100047E5C6E | APPRDAR |
| UniRef90_UP1000 | GRWRRNPQLRALVAASDWTALGLIRLGMLD |
| UniRef90 UPI00028A2DD2 |  |
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| UniRef90-LODQ | P LTRP HDHLSFRLDDGFEIRRRFGCCLPLP DPPRDHP |
| UniRef90 WoSJ65 | AEKHDHFDLLFAIKGKSVALRRF |
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| iRef90_75XPG5 | PLKKHDHIEFVLESGKALRRRFGACLWQAPGEC HT |
| niRet90_R6J714 | PEKKEKHDHVMIETDKATLVFRRFGMLTYAETSGL |
| UniRet90_E8RND4 | PRHLHVVLATKEGV |
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| UniRet90-R6HOLO |  |
| UniRef90-B114C1 | EPFP KHTHLVLHLDQGVTDLRQFGRASLVPAREVRRVP |
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| UniRef90_D6Z422 | DPPR KHDHLVLHILNDHANDGRRFGLVAVCAPAETTAPA |
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| UniRet90 Q6MCT3 | TPASP YVRIQFNFENGDQLRFHFGRWYLVDVEE\\|IGHP |
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|  | degkvirfragsvlequgdop |
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| UniRef90- S2VIUA | DNGRVLDF |
| f90-UP10003653 | VPRPP HTHGVLVLHSGRELRFRFGRMGL |
|  | DSRAAGVDLGVLE L R R D |
| UniRet90-A2BUV8 | N N |
| et90_098 | KPKETLKHIQAIFYFENGSELHYRFGTFHI |
|  | D ${ }^{\text {a }}$ |
| niRef90- F9L480 | G |
|  | RP $\square$ Q KHVRIRLFMEGDRELRFTFGKI WWVPPKE |
| UniRef90_A4GJG4 |  |
| R7V | RIL |



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UniRef90 ${ }^{\text {D7CY }} 12$ UniRef90-D7CY12
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$\qquad$
D6266

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## P

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## P

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UniRef90-W4KPH0 UniRef90_UPI0004048788 UniRef90_UPI000372483B UniRef90_U2T6L1 UniRef90_A9TFS2 UniRef90_S4NGJ9 UniRef90-W5VX99 UniRef90_W5Y288 UniRef90_G4V1F8 UniRef90_UPI00036158E3 UniRef90_D5C3U3 UniRef90_K0SV88 UniRef90_V7P549 UniRef90-K2ENA3 UniRef90_M2UCV6 UniRef90_H5X0C7 UniRef90_UPIO0037E0513 UniRef90_D4YP54 UniRef90_UPI00046E68BF UniRef90-IOV261 UniRef90_C5T369 UniRef90_UPI000364978E UniRef90_UPI0003B4AF3C UniRef90_A8N258 UniRef90_UPIO002192F48 UniRef90_D6ZBC0 UniRef90_UPI00047B31B6 UniRef90_UPI00046A81FA UniRef90_UPI00035D287A UniRef90_E6J533 UniRef90_E8WSN7 UniRef90_UPI00047A4069 UniRef90_UPI0002376553 UniRef90_D6ZHP0 UniRef90_UPIO004624683 UniRef90_B2GGB3 UniRef90_U5GP93 UniRef90_D9W9K2 UniRef90_M3EII3 UniRef90_UPI000363F0D4 UniRef90_D5BBQ2 UniRef90_UPI0003B4C3C3 UniRef90_K7S611 UniRef90_T5KP87 UniRef90_S0E5F6 UniRef90-17IWT7 UniRef90_G1WZT8 UniRef90_Q1IT12









 G A T L T A A A R R G K F L W L P L A A A P V V L G G R I T R V WR R A K LI V L D L T L A D R Q N S H L R F T G G L L V D D G T

 GA P V D G V S R H GK F V DVVDVD GTHLVVFHLARA G WL R WY D P G



 GKEFA G $\square$ EAVGKNLFAWF GS GACVHVHFGMA GNWAVF DAA



 Q A K I T T G V


 GRVME E CFADVGKHMFA QFE D DF WLRRVH LG DY GA W
 $G L T I A G V S R H G K F L D I A A G D L H V V L D L A R A G W I R W R D A P$
 GRAVTGAGRHGKHLDLDCDGLHLVVHLARAGWLRWADAP GYYCENVWPYGKHLFMQF GEQILHTHLKMEGQWIHYEGD GKK VVSAGTQGKYFWMELSKAPHLVMHFGMTGWDHMKPDE
MAARGVSARGKH L L I E L D DA WQL RTHLGMYGTWHQYAP G $K R Q L K E T Q R H G K Y L F V S L D D G D W L V L H F G M T G Y L Q Y F K H R$

 GREVVT GATRHGKHLDL EC GQAHLVVHLARRAGWLRWLPAA GAVLEGARAHGK QLFLDFAGDRVL RSHLGLYGAWSFGGTD $G V R I V S V E R R G K Y M W M P$ LA D E WALLAMHLGGMS GQARDHEAE
 G Q HMVA L R R R G K Y L LI D L D K GL LL L H L GMS G S L R F DR D Q








GQRVL GL R R R GK Y L L A D TS D G L L L L H L G M S G S L R F G H GARLGAAVRRGKFLWFP LLGDLALVMHLGMS GQLRVESRG GRVV EDAQRYGKVFY LTLSGGRHPVMHFGMTGMLLQ
GRVL T R S RA HGKHLY L D FS DVLVLRSHDGDYGA W
$G K T V$ V A L R K GKNL WL QLD SPPFPSFQFGMAGAVRSAVND

 DNAFESTSRDGGKYLFLKLKK NGVLVMHFGMTGK LDYYQHD GRKVLEVGRIGKSMWMDLD GPDAPRDLDGMAGRLVGLGPE





## UniRef90 D3F2S4

 UniRef90-D9WBG6 UniRef90-D6B633 UniRef90-xowsR7 UniRef90 A0A059MWB7 UniRef90-J7IQW7 UniRef90-G4NCS5 UniRef90_D9T3U0 UniRef90- Q2SRLO UniRef90-UPIO003C7FBA6 UniRef90-UPI0003B36D18 UniRef90 H8ISW1 UniRef90-M3CFG6 UniRef90-D1BV51 UniRef90-D7W995 UniRef90 C1AB7C UniRef90_UPI0003B3A0C3 UniRef90-E8X289UniRef90 UP10002D26013 UniRef90-UPIO00255F785 UniRef90-E8W794 UniRef90 ${ }^{-}$W4ROF2 UniRef90 UPI00037B1769 UniRef90-W9X2Y9 UniRef90-H6RL39 UniRef90 U7M081 UniRef90- D3FDG9 UniRef90-I2GQT5 UniRef90 FOYAX7 UniRef90-UPIO00465E386 UniRef90-A0A010РM90 UniRef90-W6TY09 niRe990 UPI0002DA8BB UniRef90-H5XUT4 UniRef90-C4RHBO UniRef90 D2PRV6 UniRef90_Q021F3 UniRef90-D8PBJo UniRef90-UPIO002EE032C UniRef90 U9UH98 UniRef90 UPI00036AF7D3 UniRef90-R7Y|A1 UniRef90_D5SQJ5 UniRef90 W4KPHO UniRef90-UPIOOO4048788 UniRef90-UPIO00372483B UniRef90 U2T6L1 UniRef90 ${ }^{-A 9 T F S}$ UniRef90_-s4NGJ9 UniRef90-W5VX99 UniRef90 W5Y288 UniRef90-G4V1F8 UniRef90_UPIOOO36158E3 UniRef90 D5С3U3 UniRef90 KoSV88 UniRef90-V7P549 UniRef90-K2ENA3 UniRef90 M2UCV6 UniRef90- $\mathrm{H} 5 \mathrm{XOC7}$ UniRef90-UPIO0037E0513 UniRef90- D4YP54 UniRef90 UPI00046E68BF UniRef90-IOV261
UniRef90-C5T369
UniRef90_UPI000364978E UniRef90-UPI0003B4AF3O UniRef90-A8N258 UniRef90-UPI0002192F48 UniRef90 D6ZBC0 UniRef90-UPI00047B31B6 UniRef90_UPIO0046A81FA UniRef90_UPI00035D287A UniRef90 E6, 533 UniRef90-E8WSN7 UniRef90_UPIO0047A4069 UniRef90 UPI0002376553 UniRef90- D6ZHPO UniRef90-UP10004624683 UniRef90-B2GGB3 UniRef90-U5GP93 UniRef90-D9W9K2 UniRet90_M3EII3 UniRef90 UPI000363FOD4 UniRef90-D5BBQ2 UniRef90_UPI0003B4СЗС3 UniRef90_K7S611 UniRef90-T5KP87 UniRef90-SoE5F6 UniRef90-171WT7 UniRef90 G1WZT8 UniRef90-Q1IT12

RWRRAPRRAWLVLRARGSEVVEFDGPVLELMTESR



A DQWPPKYWRFHLEVQDGTADARRFGRVRLVD
T P L R P GKP I A VRVRLD DGS
QYAYKKSWLKAEFLLDNNLVARFGFGTLNLYNKS TGHAVVGQVRWRLTASARTADLRGPNVCELLGPGEVDT

APLRPGKALRVHLGTP GEAPGFDLTE
APPRPGKALRVRLAGGAG
RDPWAHPHLRVRLHDT
DNWG QIRLHISNGTDAANDRGPQFCKLLTDDEVDA
LPTSEFAYSCVAMSLGDGRTLHYRLGTVALMPEARFLEY
PD RAPWGQVRLVRTD GTTAA DLRGPQTCRLDTVEQQA
$M P E P R G A L R L R I W T K T D W L E L R G P T D C S L W N A E$
APDQRHLRLRLPVTAADGAARELRF
$T M \square R P$ GK S I A L R V R L D D G A
TPPRPGKALRTVLDTGGDGFDL
$D Q L D R T K Q V I I S F G S Q K L C F L G L R L G Y L H L L T S D Q L T E$
A P P R P GK A L R V V R L S D P E G R Q
$H W P P K F M K ~ F M L K M K S E D ~ G E V D M R R F G R \square R L V P A A E \square R Q H S ~$ A P PKPGKP LALLRVHLD DGATD

REETRGQIRI RI DNGTQAAQLRGPQFCLLLTEEDYQA

VDRP RFARIVVAFSNGFNLGF
DEPETTATTRLRLAGH
A P P K P GRA ARVVRLSGEPGTGPGFDLTDLAVWUVGDPAEVP APAQ KHL KI T L E L G
Q QVK H Q II SLRFSTGDGFVL
F DKQKHDHIVVRF S K D AI LVYKFGTWELVQS QDVERY SEKMLP GRASVVFGLS D GSVL F F T L G Y L

T P V $V R P G K A C R V V L D D D E S G F D L T E A G T D A V Y V V R D V A E D P$ K R Q P V A A F E F D N G T L T T L T E A G T I H V L D A A P E T A
$T$ KHPHHTHFVLHLDGCSE\|RYRFGRLSLLDQAGLERY TPPRPGK
P NEWPPKFWKFILTFED
WP P D P VGAVRVRLLT DRVCADLRGPTVCEADTPAETAAH TE Q WP P K F WK F V L E T A E A F V V D A R R L A R WP PRFMKFLH
A P PRPGKALRTVLTGGDGFDLT
$E \square G T T K R \square A \boxed{V}$
TGRPGKGPLAARLVLDDGTGL
DEEEAFPT TKVVHLVLSTGVELAFRFARVRLLE
PAPPPTDTDRLRLANDTTCVDLRGPTTCALI TPPE

K WRKPGFSARVVLRLAD DEVVGHSLGNVDVYPIDNYYDH
HDKWPPKYWKFKI ETED GDEMAFRFGRVRVVD
A VWKPEY QA WAVL R LAA DRVLVVCFHPRELLA WQPRPE GR GDP
$K D S P P D \quad T G L L I G F Q N G Y Y L N F$
SEPEVRATTRLRLE
$A A E D R H Q R L V V S L D Q G E \quad L R Y T D D R K L R G V W L A D D P$

EAEWPPKYWKFI LQLQEAFVDARRLARIRLVDAAAED
$P P R Q G K G P L A L R V H L G G P G F D L T E A G T L A V W I V H D P A E V A$
D P L H P H TRAVFD
E D R WP PRFVVK L LRFD DGGE LAARRLGS $\square \quad L L R N D P E N E A P$ A P PRPGRALRVRL
APPGV HDHVDLVTSKGVLRLRRFGAL
SAAPPKP
SGRPGKGP LAAARLVLDDGS GFDVTELALYVVRDPAEVP

## $P P T G Q V R L R \square S D G E T A A D L R G P Q W C R L V T E A D R E$

$R T P V R D Y R V R A V L A A A D V T A L G L D L G V L E V L D R A R$ $D V P D P G T H D H F D L L T T$ Q GVLLRLRRFGAVVYATHEDA GE

## A P T G Q VR L R $\square$ T D GHT A A D LTH GPQWCRLITEEERA

DPPAPVGQVRMRVGAPAHWVDLRGPTRCEVIAEAEVGA A LD R LQ HPV LTVAF S DGSAL
$G L A P A G A H D H F D L V T D Q G T L R L R R F G A V$
A TLHRKPHERLRFTLDNEKDLVFTFGHVELRP

S D E WP SKYSK FF VQQLD D G L E L S F RFA KVR L L E D P A S KP


EEAP RFERVSFAFDRGR LAFDDPRM
$\begin{array}{lll}D T P & K Y T Q L L K L I F E D H S K L A A T C C P R \\ G V G G & A\end{array}$
$G V G G$ G $G$ A $V G P A D G L Y F K G \square D V L D E D D$
$P V S P V Q G Q V R L R T E N A G S V A D L R G P Q W C R L L T D E E R Q A$
 $\begin{array}{ll}H D Q W P P K F W K F Q F K T E G S E V D A R R F G R \\ A & R\end{array}$

VA LLKGRNY L A A LDD F D D G S LVLT E A G A

UniRef90 D3F2S4
UniRef90-D9WBG6
UniRef90-D6B633
UniRef90-X0WSR7
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UniRef90-J7IQW7
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UniRef90 T5KP87
UniRef90-S0E5F6
UniRef90-17IWT7
UniRef90_G1WZT8
UniRef90-Q1IT12
UniRef90_IOARG2
$\mathrm{G} \square \mathrm{AR}$
$\mathrm{G} \square \mathrm{AR}$

LLA R
$\mathrm{G} \square \mathrm{AR}$

F L S K
$\mathrm{G} \square \mathrm{AR}$

$S \square A R$
$G \square A R$
$\stackrel{P}{\mathrm{G}} \|_{\mathrm{A}}^{\mathrm{A}} \mathrm{R}$
$\underset{\mathrm{P}}{\mathrm{G}} \prod_{\mathrm{L}} \mathrm{A} R$
P L K

## UniRef90 F6EMC1

 UniRef90-N1QNS2 UniRef90-C1A643 UniRef90-UP10003C7F956 UniRef90-C7MDW6 UniRef90-L1MJ13UniRef90 GOHC41 UniRef90-H1Y7Z6 UniRef90-17KJY0 UniRef90-G3AYN2 UniRef90- 88 E499 UniRef90-LTVVO9
UniRef90_C7R2Y2 UniRef90-G9ZD21 UniRef90-A0A021VW91 UniRef90-L8DID6 UniRef90_U1GS07 UniRet90-ABTLU66 UniRef90-U1PUV4 UniRef90_S3AUP6
UniRef9O_UPIOOO37685F8 UniRef90-BokVC5 UniRef90_UPIO00479FFD6 UniRef90O-UPIOOO174699D
UniRef90-UPIOOO35DC9D1 UniRef90-UP100035DC9D1 UniRef90_M1W988 UniRef90-J3PJN7 UniRef90-UPIO003725BFF UniRef90-UPIO0029A0C62 UniRef90-UPIO004771F84 UniRef90-A5PDL6

## UniRef90_C8X6E5

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UniRef90
B8FW39 UniRef90_UPIOOO47E5415 UniRef90-UPIOOO46717B5 UniRef90-UPIOO040DE027 UniRef90_G7GS32 UniRef90-R7SQT6 6 UniRef90_G7WBVO
UniRef90-UPI00047E6AAC UniRef90_UPIOOO36C206B UniRef90-A9TVE8 UniRef90-B8HGG6 UniRef90-14W 186 UniRef90_UPIO003708640 UniRef90-F8C234
UniRef90
A6WW4A3

PELPEVEAI AHFLRKHAVGMGI AR DDVSQSVLKTFDPALR
 $P E L P E V E Y A A S Q L R D R V L G Q T V Q A V R V T H A A P S T D Q Q A D V$
$P E M P E V A L I A D L R A R M V G A V V A D V E P A E A V L K T Y D P A L R$
 PEGDSVFQLASRM QFLVGREVLHTDLRVASVATAATTM
 $P E G H V I H G L A R D L R R A F P K G R A L K A S S P Q G R F S S S A A L I D$
$P E V A E V A H V C A Q L R N I I G Y R I T G A S L L F P S T K R I N S L L D ~$

PELPEVQAHAERLTESFRGAVLSRVPFNFTALKTAVPRPD
PEGHTVHRLARTFANVFGGHTVHVTSPQGRFEQGAALLN
PELPEVEADARFLAERTAGRTADVAVVAVSALKTFSADLV
PELPEVENARQVVEKALGGRVVVDVDCRPHMPGEDAHALK
PELAEVARIVHYMRKHLVGKTLSKVIAAYGKVAEFQKALA
PEGQA HRLARILSGFLAGRVVAASSPQGRFAEGAARLD PELPEVEALKDFLAERLPGRTVRRMLVAVNVLKTYDPALE

 PELPEVQADADFVDGRAAGLDIARVDVALAVLKAADPALA
 PELPDMMLYLDALQPRVHDQRLEQVRIANPFLDPPIESLD
 PEGPEVHGLAMGYDERLAGAPVRSTSPQGRFAEEAGEVD


P
P
P
P

| P |
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| P |

PELLPD


PEDGEVARTVHYRRKHVVSRTTKT
PEGHTVHRLARTFGEVFGGATVE
P
ELDEVEAARRAVEDHCKGD DCRASVADDAPFDMQRRLV PESPEVEALARFLDGEVSGREARSVDVLEFRVAAPPSSLV ELPEVLTLVRQLNESVKNRRILKVWPPSGEPEEYDKALA

PEGPSSLV L L R E A A A RF A GR K V L R V A
 P ELP E V G A I A A F L D D R I A GLDPI R R V DV A L A A L K T A D P A L T

## P

 P E V

## UniRef90_F6EMC1 UniRef90-N1QNS2 UniRef90 ${ }^{-}$C1A643 UniRef90_UPI0003C7F956 UniRef90-C7MDW6

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UniRef90-UPI00035DC9D1 UniRef90_UPI00035DC9D1 UniRef90_M1W988
UniRef90-J3PJN7 UniRef90_UPI0003725BFF UniRef90_UPI00029A0C62 UniRef90_UPI0004771F84 UniRef90_A5PDL6 UniRef90_C8X6E5 UniRef90_UPI00047B6417 UniRef90_G2YRX5 UniRef90_L8TP72
UniRef90_C5BXH6
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UniRef90_G9MPD6
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UniRef90_U2IOJ8
UniRef90_D5UWD4
UniRef90_J0N8T6
UniRef90_F0XMD2
UniRef90_UPI0002D8C70E UniRef90_M5FPG7 UniRef90_A0A023AX43
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UniRef90_UPI00040DE027 UniRef90_G7GS32 UniRef90_R7SQT6 UniRef90-G7WBV0 UniRef90_UPI00047E6AAC UniRef90_UPI00036C206B UniRef90_A9TVE8 UniRef90_B8HGG6 UniRef90_I4W186 UniRef90-UPI0003708640 UniRef90_F8C234
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UniRef90_UPI0003672C3B UniRef90-UPI0003B71EF9 UniRef90-I3ZKL7
UniRef90_E2NSM7 UniRef90_U1PX53 UniRef90_FOYCJ6 UniRef90_A0A021W4L4 UniRef90_UPI0003FB812C UniRef90_A0A023WWW6
UniRef90_UPI0003B31840

ERTVV S G VVQRCGKYLLALVCDSEDFLLVFH|LARAGWLRWSDAL

 GWCVV Q E V $V$ R P R G K H L L L


 GAVV EKVGRHGKYFWI RFNNQVAMLMHFGMTG
GRYVVNVGRYGKVFY IV LD G GKMPVLHFGMTGMLQTPRTA GRPLVEVGRRGKY L LAARFGPVTVVVVHMMQGGRLLVDDKQ GAQLVHAQAYGKHLFLGFES LRWLRVHLGLYGSWTFHDTW GCVI NHVARRGKHELLAHSDDPHAPCI
GRPVLDVVRRHGK WLVDLTTD GPHLLAHLSRAGRWYDAVPA G GQLTVACRRGKAMWCETSSGPTLGIDLGMGGRVIVTAPD GK K G GA GQQGKYF WFVMD KPPHP LMHFGMT GWL
GHRVES LIRR $\square G K R \square V I G L D G E L F L V L H L M D A G R L Q W A G A G$ GLTAFHAQAWGKHFFMPFDGPAWLHVHLGLYGRWSFSGPA GAVFSGVVARHGKFLDLMTDEGPHLVVHLARAGWLRWQDPA





 $G Q P L V T A G Q V G K Y L D M T \square G G G L A V T H L S R A G B W L H Y R E B$
 GH LLD AAEAYGKNLFVHF GDRAVHVHLGLAGKLAB VGDG

 GRRRLVAATDA WGK QL F L GFAPA L W WL R V H L GMY GA WT FA G D A QSRLL RADAH GKHLEID FDVDHIIVIHLGLIGGTLQFEPA G GS A I A T WHRR GKY L L A E LT P S $\quad$ R


 $G Q T V T G A G R W G K Y L G V Q A A P L W L I A H L S R A G W L R W S D$

 $G L M V A G V G R H G K F V D D D C D G L H L D F H L A R A G W L R W S E T A$ GSRLD R A E A F GK HL F L H F D D E HI I Y I H L G L I G H L R F E D R E
GATVTGTDRDGKYFVLWTEKEGARVVHLSRAGWLRW
$K Q I L L G A E A H G K H L F L A F G P Q V W L R I H L G L Y G S W T F D G D S$ GKKVLSA GS Q GKYFWWVLDS QPHPVMHFGGMTGWDHDKDA D

 GRTVVEAARSRGKHLLVVVGPD GTLIHIHLKME GRDHVLRA G


 AKRIVAAHRKGK QLWL ELDDEPPSV CFQF GMA GAVRSAVK D GASFTGARRHGKHIELTLD GRSLVVSLGRHGWMRWDAA

 GRTVQAVRTWGKHFLVELDTVALBI HLLMFGSYCI




 G Q P IV V A L H T W WGK H LLL I E E L NTKLI SIKKRK GK Y LI F F F E K E F L L F H L GL T G A F F L F N D K GRTLTAA H R R GK SMWCD TS G GP A L G I H L G M S G R I FVVS S A G
 K A KL T S S A TH GK QML FK L S G D K WL G V HL G M T G S L H D N C S N GRRLVAMHSWGKHFLLAFD DFSVRIMFMLFGSYRINERK G G QVTDVARHGKWLDLAVSPPLHLVFHLSRGGWVRWSDA
 GREEI L A A R S WG K H F L L L E F S GQVFISSYAHGKHLLAAFAPATWLHTHLGLYGAW
D RALERVRCKGKFIVFELAGGASLWSTLGMSGGWTLRAG
 G QVV R GF R S W G K H L L I E L E D D V S V

UniRef90 F6EMC1 UniRef90-N1QNS2 UniRef90-C1A643 UniRef90-UPI0003C7F956 UniRef90 C7MDW6 UniRef90-L1MJ13 UniRef90-G0HC41 UniRef90 H 1 Y 7 Z 6 UniRef90-17KJY0 UniRef90-G3AYN2 UniRef90_S8E499 UniRef90_L7VV09 UniRef90_C7R2Y2 UniRef90_G9ZD21 UniRef90 A0A021VW91 UniRef90-L8DID6 UniRef90_U1GS07 UniRef90_A8TLU6 UniRef90 U1PUV4 UniRef90-S3AUP6 UniRef90_UPI00037685F8 UniRef90 BOKVC5 UniRef90 UPI000479FFD6 UniRef90-UPI000174699D UniRef90_UPI00035DC9D1 UniRef90 M1 W988 UniRef90-J3PJN7 UniRef90_UPIO003725BFF UniRef90_UPI00029A0C62 UniRef90 UPIO004771F84 UniRef90-A5PDL6 UniRef90-C8X6E5 UniRef90 UPI00047B6417 UniRef90- G2YRX5 UniRef90-L8TP72 UniRef90_C5BXH6 UniRef90_C8NS74
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SPAAPKPP ${ }^{90}$
WPPEPKWTKWLIKCDAEGDVDARRLGRISLVDADDIRNHS
 A GPRPAATIRAVLTAEDGRADAYDVKQVRLVRTADED DRWKPGYKARVVLAVDGTEAVGFELGFVRVFP $V \operatorname{V} P R G Q V R L R E A D D T V A A D L R G P Q R C A L V T P V E E D A$ SE QKYTII ELLFDDDTGLTLS
EPVGK $V$ RLVLLTGAADLHGPQWCRLCTEEDAAE
STDWPPKFMKF ILH DEDSVTDARR $\square G R \square R \square$ SAKPRNGQARFVFE SGRALLL
T $\square$ PEPRGQVRVR $\square A$ TAHAVADLTGPTACEVLTYEQTRHH
$T T P R P G R P \square A D R \square R \square D D G S \quad G F D L T R D A V H V V D D P A Q V P$ RPTDKPEWTRFSMTFDDGGQLRRRLGRVRL
APDPGKKGL AALDFDTGTLIL
AVPEPGATVRLRLEAEDLAADLTGPARCEALDGQGVRA
TPPRPGKALRVELSDADGPGPGFDLTRLAVYVVRQVTDVP
DAPEVAHA!
E KKDKWTKIVFKNGDEKY $\quad$ KKFQFGK $\square K V L D E K S \square S E$
N $\square$ KHQII KLEFEDG
QPYEAAKHDHLVLHLRDRALIFRQFGLV
SPAPPRP
GAQWPPKFWKFHFTTDDDPAVARRFGRVRLVD
EDQWPPKYAKLQLETENKVEVAYRFGRIRLVPGDEDRKHT
KEDRPNRTTQIEITFGEDLVLYFRLGYLHLHEAEDLLAH
TK L PGKMGLAAFDFTNGS
$\square S P A P G K P G R V R V R \square S D G S$
DDPPDHTK LLIRRFEGDRRLAFQRK DGHVRVID
A A RP $\square T G A G R W R V E N E R G Y A D \square R G P Q A C K L V D D A G \square$
EEVWPPRFSKFS L Q T A GAFTDSRRFSR】RLV
A A GQLKMAVRCTFTGPDG
QFTGPH
ETRGQ $\square R \square H \square S D G A V A A N \square R G P Q W C R L I T D E E$
REWELGARGRV
DRWRRAGHTRVVLDLEGAEVVGHDLGLVEVFGVDD HAPEE $\square G A D R W R L S T E Q W T M D L R G P N V C E L K S P T Q V A A$ $T \square 1 / R P G K T A A D R V A D D G S$ GFDLTELAVYVVRDPADVP RQARKREWDRFTVTFDDGGQFRRRLGRVRL

QPR HRHDRVVFRFPDG ELRYR
IAA QWPPKFWKFHISTDDKETLDARRFGRVRLVPGESTRKHS VEAPDTGADRWRLGADDGDADLRGPNVCALKTPDEVAA PPGRSPDAVRVRFSDD
$K$ VWG Q
AFTAPH
LWPPRFWKFHLQAEADDKVELAFRFGRVRLID APPRPGK
ASAWPPRFMKF I I HVTSGPAVHRRDGR DR L
K K KPKHSHVVFNWSDRRRLVYRFGTVDWCR
ERWRPAHTVRLVLRAGDTEVVGTELGLLRALTPAEADG
ENEKKS LHVHVVFSLNNNKHLVRKFGKVT LLENDE
STQVAH
AAVAAHERAR TTF TDGGHD $\square$ RFD
EDEWPSKYSKVHLVLDTGVEMSFRFARVRLLQDPRL
EPPEPVGGVRFRMYNEHADADLIGPNRCELISNEE
$K$ VPENY QLMMELDDGQALVF
DTRKPDKP LRIGLGFAGGRELNF
$A T P P$ A
TPPRPGGAVAVRVH
S QVP PK P
WP PKFMKFV LDH QGEDDEEDPRR LGR $\square R L$
SAGAPKNH QLLI EFDDGTALVF
PPARGALRMRWVADGPDGWTDLRGPTACEVLADPDVDA
S QLRMGKAVRCTFAGPDG
TEEFPSKYWKVH LK L D T GVEVAFRFARVRLLD
$D \square A P \quad R \quad$ L $\quad \mathrm{L}$ GFDEGELNFYN
RRDKPARLSLRMADGGEL
$\square T \square K K K K H F \| L G F H F E K Y K L I$ YF DFGK $\square$ KMAK $\square E E \square S T \square K$
PNPVKEEWYRFTLDFEDGGQLRRRDGRVRL
AKLAGRNNLAAFDFPNGSLVLTEAGT
GFADAH

T A A D P P P P T LA T L A F D DGGDLLT DAGD LGVWA VDEPREVP PLPEPKGLLRAVMQ
EAAPr R L SLQFAGGDELNF
HPHAR $\quad$ A $\square R \square A D D D E V R \square W Y H D \square R$
EERPAAPRVSLRFALGD
KTPP RLTLVFDDAELNFY


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$P \square K$
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E L K

$P E L P D L V V I R E R L L L E L P G E\|L Q G V D V V D P\| V V R L E E T Y S$ $P E L D Q V E Y F R Q F I Q E H L S L D T A V D A S S L F P K M E T Q P D Q V V$


E $\square$ PESRTDAK QAADVLAGRTVTDVKFTWGDPAAYKELLA FTGKK L LSVEFYYPQVR LLEYEDT


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|  |  | GRRVLALRSWGKHFL EF RGFSLRVHMLMFGSYRLDERK

 RRYFAEPRRHGKWLLIATAAPPTLLLHFGMTGSLQ WCAHG
GRRFARADRHGKWLLLAFEGGPVLALHFGMTGSLRWQAPP

 RKYPGRARAWGKHLFWPFECNTWLHIHLLGLYGRWAFA GLG NKKDNA DKTWGKHLLLCFDGFTIRIHFLLFGTYRDNE GNEFVGTHQDGKYLLLKLKKNGFLVVHFGMTGKLDYFKHD RAALTRTEAHGKHLFLGFRGFHWVHIHDGLFGKVGGFAA GAA EGAEGFGDYVEVRFSNGCKLCFNDGVNVRLDKTEA
 GATVRGARRHGKWLDLVTDGAAHLVVFHLARAGRWYEELPK DRWVLGVRRRGKQLWLELGGGACCLIHMGMTGAVIVQGVA GRQILFI ERRGTDLIWHLDDGRRLVLQDG

 HKKVI RVQRYGKYLWLELSSPVVYII HFGMSGSDAHRKTD QQNVLA WRRWGKHVLI ECAH FSVRIHFLLFGSYRT NKKIIAFKSWGKHFLICF KGFTVRIHLLMFGTYRDNEKK GSTVESAEGFGDFAEMAFDNGKRLCFNDGVNARLV GKKVLSAAGYGKF LADMPLGDDEAVVTH|LGMSGQMLLRVPG


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