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 SGI NKRALALGGEVYCFMADEDVAKKAAASGTTRAVASMD
 SGVTRRRLPKDNDVVCTLNDPRTPDLAREDGTTRTAAAMH SGI NKRILKYGGEVYCLVGDPEVAREAKERGVTRSMVAME HGIIKRHLMHDNKLLCAIADEATRTLAGDMQNTRSAAAMD NGVTRKRLPADNVICTLGDPRPALAAQLGTTRSAAALE SGVTRRRLPASNEVICTLNDARVPSLASSLGTTRSAAALE EGITRKRLPADNPVICTLWHSEIPELARQMGNTRSAAALD

 YGVTRARLPADNHVLCMLGEASVPGLAHELGTTRSAAALE

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\begin{aligned}
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& S \\
& \hline
\end{aligned}
$$ AARLPANNEVICTLRDPRTPMAAEIGNTRSAAAMR HGVTRARLPRANDVICTLGDPTVPALAARIGETRSAAALE SGMNKRALKELNSVECYVGLEEVFKLAKEKEDTRSMAGVE AGINKAALKKLNCTVCFMADEDVAEYAKEHNTTRACASMD SG| NKKVMEFGGEVCCFMSDPDVAETAKKNGTTRAVASME

 SGI NKRALEKLNKAI CYVNLPEVHVEAKEKGDTRSMAAVH


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 SGVTRSRLPADNEVLCFLDDPRTPGLAADLGTTRSAAAVE SGITRKRLPADNEILCTLRDPRVPELAERLGTTRSAAALD

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## H <br> S

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 H G V SGIN KAALKKKGCEVKCYVAHEEVAKIAKERGITRSMAGVE
 A GITRARLPRDNQVICTLRDPRTKELAEAWGTTRAAAAVS
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 IPVGFVGAAESKEALLEAAPAPCVIVRGRRGGSAMTAAAL FPVGFVGAAESKAELAANSGVPFITLHGRRGGSAMATAAV VPVGFVNVVQSKEMIMETDVPCVVAKGRKGGSNDAACAC VPVGFVGAAESKREL EKLDVPFITIRGRKGGSNVAASIV
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 $V P V G F V N V V Q S K E A L M Q T N P Y V V A R G R K G G S N D A A C I C$
$M P V G F V G A E S K E A L A D N P G V P A A T V H G R L G S A M T A A A V$
$M$ MPVGFVGAAESKEALADAPGVPFATVHGRLGGSAMTAAAV


 VPVGFVGAAESKEDL DQLNIPYIRVKGRKGGSTVAAA I FPVGFVGADESKAALAENTGIPFLTVHGRRGGSAMAVAAV
$M P V G F I G A B E K D A L A A D S G V Y V V R G R R G G S A M A V A A V V$

 $\checkmark P$ VGF GAA VPVGFVNVVESKELILRSDVPHIVARGRKGGSNVAAALC 1 PVGFIGAAESKEALANDLDLRSVVVHGRRGGSALACGA11 VPVGFVGAAESKQLLAEHAGLEYKVVHGRRGGSAMTAAAV FPVGFVGAAESKAMLVETSGVPFVTNEGRKGGSPVAVSIVV | MPVGFVGARESKDALIEAGDVPFITLRGRFGGSAVAAATV |
| :--- |
| $V \mathrm{~V}$ |
| 1 | LPVGFIVGAESKEELMLTMDAPHAVARGRKGGSNVAAAIC




## \section*{$<$}

$\vee P \vee G F$
LPVGFVGAE
l PVGFVGAAE
 IPVGYVGAAESKDALAENSGVPFVVVRGRRGGSAMVAAA VPVGFVGAVESKTALADHSRLEHLVVHGRRGGSADAAAAV $M P V G F V G A A E S K E A L M E A T G I D Y A I V R G R M G G S A M T A A C V$ MPVGFVGAAESKGALREYGRIPFVIVKGRKGGS
LPVGFVGAAESKQALADNPGLPFLVVHGRRGGSAMTVAAV VPVGFI GAAESKDALAND LGLEYLVVRGRRGGSADTAAAV 1 PVGFVGAVESKQALAAYRKIPFVTVHGRRGGSAMTAAAL CPVGFVGAVESKDALWQAAPAPCVIVEGRLGGSADTVAAC MPVGFVGAEESKEALLAAGDIPFVTLRGRFGGSAVTAATL
 VPVGFVNVVQSKELLLELNDTPSIVARGRKGGSNIVACIIC VPVGFVGAVESKQALADNPGLEYLTVAGRRGGSAIVAGAV


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N
 NGITRKRLAENPVICTLNEPEVPADAQQINNTRSAAAME HGVTHARLPADNAVICTLRDPRTPELAKNIGNTRSAAABD QG| TKKRLPTTNAIVCSLNDPEVPTVAKRLGNTRSAAALE AGINKTALKTGSEVYCFMADEDVAKAAREAGTTRATASMD
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 AGGNKKTLTFGCEARCFMSDEDVAAEARRLGVTRARGCMD NG|TRKRLPANNPVICTLNEPEVPEMAR1 ENTRSAAADE EGUTRARMPADNPVICTLQDPRVPELARELGNTRTAAALE
 VGINAGKLGAGGKVYCFISDQDVAQEAKEKGSTRAAVCME SGSGKKRQKHGGDLHCYIADEDVSVEAKKQNTTRA\|ISMQ AGINKTALKLGCEALCFMSDPETAEAAKLSGTTRAAASVD EGVTRARLQAANPVICTLNDAGVPELAKQLGNTRSAVALE
 SGINKKALNEDNCVQCFVSREDIAREAKDRGDTRSMAAVE VGVTAGRLPAGNEVRCYLRDERVPDEAKEWGTTRSAAAVS SG| HKSTLEFGGTARCFMSDPEVARLAKERQTTRAWVSME
 RGVTRARLABNEVLCTLHDARTPALAERUGNTRTAAAVE TGUNKRRLEFGGQAFCLVADETVAKEAKAAGDTRSMAAMR AGINKNRMRTGGQVYCFISDDDVDAEAKATRRTRAAVAME AG| NKRKMEYGCEVHCYMADEDVAREAKERKVTRAVVSME AG DRRRLOKANTVICTMNDPAVPAKAKALLGTTRSAMAVD HGLTKRMMSQPPLCYLNDPRVPPLAKQRGETRTMASLE EGVTrARLPHNNQVICTLNDPSVAGLAAEMGNTRSAAALE



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UniRef90 R5QXI4 UniRef90_R5QXI4
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 VPVGFVNVVESKEDLFIGGNTPY| TARGRKGGSNVAAADI VPVGFVGALESKVELARLAPSPYLVVHGRRGGS FPVGFVGAAESKQALAESTG\|PFLTLLGRRGGS VPVGFVNVVQSKEMILSLPDTPFIVARGRKGGSNVAAATC VPVGFVGAAESKQALAESHVPNIAALGRKGGSNIAAAIV


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FPVGFIGAA

## F <br> F

 TPVGGFVGAAE APVGFVNVVQ GPVGFVGSAQr -

## A


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 FPVGFVGAAES V GF GAAESKHALASFADVP
 APVGFVGVVES CPVGFI GAAESKEEI EKDDIP VPVGFVNVVVSKEALATLHDPVTVRGRRGGSAITSSAL

L APVGFVGAAE FPVGGFVGAVE VPVGFVGAA VPVGVGAAESKELLHTTATVP VPVGFVSAAESKEELAKL DVPF

## A

 | $F A$ | $G F$ | $G$ | $G A$ | $E$ |
| :--- | :--- | :--- | :--- | :--- |
| $M P$ | $G F$ | $G$ | $G A A A$ |  | FPVGFVGAME



| UniRef90_U3GUC7 | A L $\mid$ A A EKE |
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| UniRef90-UPI00041B37AD | NAL A S D R E |
| UniRef90-14YWT8 |  |
| UniRef90-LOR778 | N A L A |
| UniRef90-UPI0002890A87 | NAI M |
| UniRef90-D0GL59 | H G I L Y Q |
| UniRef90_UPI00034A618E | NALAKEEE |
| UniRef90-F2JUU7 | NAL |
| UniRef90-UPI0004769F63 |  |
| UniRef90_UPI0002F267C1 | $N A\\|S\\| L A D$ |
| UniRef90-R8W5L2 | N A L Q ${ }^{\text {P }}$ |
| UniRef90-A5N645 | N A L L Y M |
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| UniRef90-R5T9Q9 | NALLY Q |
| UniRef90_G9Y6L3 | NAILY |
| UniRef90-A8MG24 | NALLYM |
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| UniRef90-F6EP19 | NAIA |
| UniRef90-K9RFI7 | NSLMQEEQ |
| UniRef90-G8NQ14 |  |
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| UniRef90-K7WN35 |  |
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| UniRef90_UPI00036F75EB | N A L L R |
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| UniRef90-D9TRK1 | N ALL LYM Mie |
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| UniRef90-W0FGJ0 | N ALL |
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| UniRef90-S0FM84 | N A L L Y |
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| UniRef90-H6N2L8 | N ALAS P E E |
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| UniRef90-J3HLK3 |  |
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TGUSKPALKHNSEAHCLIRDEKVAEMAKELGVTRSIAAMR
TGGSKPALKHNSEABCLIRDEKVAEMAKELGVTRSMAAMR




AGGNKSRKYGSDVHVFISDEDVIDAAARQENTTRAUVAMR

GGVTRQRLPADNLVLCTLNAPAVPGLAVNDGNTRSAAADE
TGINKKRLEFGCQVECLI ADETVAAQAKAAGITIRSMAAMA AGINKRVLKYGGEVLCFMADEDIAKRAKENGTTRAVASME AGVTKRMMHQGGEPLCFLNHSKTAELIKKKKSETRSMAALS SGlVRARURFGNRVVCHVSDDDVAGEARERGDTRSVAAMR ThGKKKAFGGTVHCLVADPDVAARAKAEGITRSMVAMR
 SGVNKKKLAGGEAHCFMSDDDVAEAKERGCTRAALCME SGVTRARLPASNAVLCTLAADETVPDLAEESGONTRSAAAME
AG| NKKVLKYGGEVLCFMADEEVARIAKDNGSTRATASDD DGU DRNRLPADNAVLCPLTDERVPGLADEDGNTRSAAAVE AGUNKSALKKGSEVKSYVDDPETMEUSRKCNDTRSMAAI SGINKRSLALGGEVHCYMADETVAKLARERGTTRAAVSME SGURHR ARANKVDCTLNYPEVPERARQ



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| UniRef90-UPI000478ED83 | VPVGFVNVVWAKELFLNSDVPYITNGRKGGSNI |
| UniRef90-E2ZC06 | VPVGFVNVIQAKERIMTC KVPY |
| UniRef90-R6QVN | VPVGFVNVVQSKE LIMDAEVPYIVARGRKGGSNIAACIV |
| UniRef90-E3GJ | APIGFVGAAESKEALDEALGVPYVRINGRKGGSPVVAA L |
| UniRef90-X5JPE8 | FPVGFVGAAESKAALAANTNVPFFTLHGRRGGSA】ATAAV |
| UniRef90-K9> | FPVGFVGASESKATLAKNSDV |
| UniRef90-UPI000370C6C | PVGGVGAAESKEQLMKRSLVPYITVAGTKGGSPTAVSVV |
| UniRef90-UP100047A8ABC |  |
| UniRe | VPVGFVNVVESKEIIMK TGI PYVVARGRKGGSNVAAALC |
| UniRef90 K91 | FPVGFVGAAESKQALATHQQ:PFITVHGRRGGS |
| UniRef90 UPIO00478BE | VPVGFVGAAESKEELKK YDIPY LTSGRKGGST |
| UniRef90-UP100037D347F UniRef90-R6PSA0 | VPVGFVGAAESKDFLAEVSPVPYITVRGNKGGSP |
| UniRet90_R6PSAO | MPVGFVGAAESKDALWQAHGVECITALGGRMGGSAVTSASC |
| UniRef90-A1ANH0 | LPVGGFVGAAESHEA |
| UniRet90-K2MB19 |  |
| UniRef90-EOT | VGAAESKAELAANDIVPYTVEGSKGGSPIAAAAV |
| UniRef90 UPIOOO3B3AF40 | VGFVGAAESKRALANDLGLDYLVVHGRRGGSAVTAAAV |
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| UniRefo- E15150 |  |
| UniRet90-E315L5 | TP |
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| Uni | VPVGFVNVVASKELIDDTGVPCUV |
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| UniRef90-SOFUJ7 | FPVGFVNAAESKALLLE HD |
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| UniRef90 M1 WUT1 | MPVGFVNAAESKYLLM SRDIPYIAVEGRKGGSAMAASVI |
| UniRef90 W9H2 | FPVGFVGAAESKAELAANRGV |
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| UniRef90-D6Y4M0 | 1 PVGFVGAAESKLALVGSGL |
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| UniRef90-C5VNN8 | CPVGFVGAAECKEEVEKLKLPM TVRGRKGGSG A C C V |
| UniRef90 K2JUT7 | FPVGFVGAAESKAELAGNRGCDFVALRGRRGGSAI |
| UniRef90-F9TVE1 | TPVGFVKADESKQALTEQNQVPYIASLGRKGGSP |
| UniRef90 Q | VPVGFVSAKESKES L KLTS |
| UniRet90_D3E214 | MPVGFVNASESKETLLAQSTIPY VARGRKGGSPLAAATV |
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| UniRef90-A3Y655 | MPVGFVGAAESKQALWKALNVECITLLSRDGGSAVSSASC |
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| UniRef90- J1J | CPVGFVGAKESKIALENNFDIPYVVVHGRRGG |
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| UniRef90-D4KVY7 | VPVGFVNVEVAKEMIL HTDVPCIVNRGRKGGSNVA |
| UniRet90-R5UKP1 | VPVGFVNVEAAKELILKTDVPHIVNRGRKGGSNV |
| UniRef90-UPIOOO4791 | VPVGFVNVVEAKELI INDKDVPYIVNRGRKGG |
|  | VPVGFVQAAESKDQLQRMTDQPA |
| UniRef90-R6KMW7 | VPVGFVNVVQSKELILTLEEDPYMVAGGRKGGSNVAAAIC |
| UniRef90-A1HPW9 | MPVGFVNAAESKEL DQKDIAY TIKGRKGGSALAACVV |
| UniRet90-M3USS5 | APVGFIGAAESCAALAARADLEFITVTGRRGGSAITAAAL |
| UniRef90-15B064 | LPVGFVNAAESKAALVETNIPYISNVGRKGGSNVAASVI |
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| UniRe | VPVGFVNVVEAKE LILQSGVPCIVARGNKGGSNI |
| UniReego-SOJECC | APVGF NVVAK |
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| UniRet90-UPIOOO3757545 | VPVGFVGAAESKDALIEANCVPYITVRGNKGGSPI AASVV |
| UniRef90-M6C | VPVGFVSAAESKEAVLEYSDIPYILTRGRKGGST |
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| UniRef90-K0B4K9 | VPVGFVGAKESKEYIAEFMDIPTITTKGTKGGSNVAAAIV |
| UniRef90-FOKDX1 | APVGFVGAAQSKEDF EKGPVPMITVRGRKGGSTV |
| UniRef90-R4YK14 | MPVGFIGAAESKQA |
| UniRef90-A6LKWO |  |
| AOBD | VPVGFVNVVEAKE LIL L S DVPYIVNEGRKGGSTVAAAIC |
| Q3 | V |
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| UniRef90-F7V361 |  |


| UniP | NAVVMY $\square 1 \square$ |
| :---: | :---: |
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| UniRef90-E2ZC06 | NALL Y ${ }^{\text {a }}$ |
| UniRef90-R6QVNO | NALLYMDD |
| UniRef90-E3G | N A ML |
| UniRef90-W8T | N |
| UniRef90- U5JF $^{\text {U }}$ | NALAKEEE |
| UniRefo-UPI000370c6CE |  |
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| UniRef90-R6GAH5 | N A ML |
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| UniRef90_Q2S8A9 | N |
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| UniRef90-UP100016CODCE | NSLLY |
| UniRef90-A3Y655 | NALL |
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| UniRet90_M3USS5 | NALASPVE |
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| UniRe990-F6DJWg |  |
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| UniRef90_R7FD00 |  |
| UniRef90 SoJE |  |
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| UniRef90_M6CY23 |  |
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 | $M G I$ | $N S A G V Q Q L G C Q Y C F M A D A E V A K K A K E K G T$ |
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 SGIN KTRRGQYGCECRCYVSDPRVVEMAKNQQDTRAAVSMED





 A GLNSERLDAYGCTYSFI SDPEVDQRAKENNSTRADESMR A GLNNKKLTAGVQADCRIADPSVAAEATRTGQTRAMVTMR A GINKASLRFGGQVHCFMADPDVAAEAKARGQTRAAVCME
 S GUT RKRRLPADNEVICTLRDPRTPDVAAA WGTTRSAAAVVS A GINKKTLKFGGKVLCFMAEEDVAREAKDRGDTRAAVSME






 AGUNRRALEALGCDLCYVDDPEAVADARERGUTRSMAAME




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| UniRef90_I3IMS9 | N A L I K L A |
| :---: | :---: |
| UniRef90_S6GI07 | NALLR |
| UniRef90-F5TGE3 | NALL Y |
| UniRef90-UPI000369BCB3 | NALMYD ${ }^{\text {a }}$ D |
| UniRef90-D7GX05 | NALMYEA |
| UniRef90-D7A4K1 | N A L A |
| UniRef90-B9M7U9 | NALL $\mathrm{L}_{\text {M A E }}$ |
| UniRef90-R9L8X5 | NALL Y |
| UniRef90-UPI0004640A85 | NALL Y M L D |
| UniRef90-G1WJT7 | NALLYQ |
| UniRef90-C8W691 | N A L L Y L A |
| UniRef90_D5XFJ3 | NALLNLAE |
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| UniRef90-F0SZ30 | NALIY |
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| UniRef90-E4T7K3 | NALL |
| UniRef90-F9MM97 | NALI Y M |
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| UniRef90-D9S0S7 | NALL Y |
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| UniRef90-H0ULM6 | N AL ${ }^{\text {a }}$ Y |
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| UniRef90_R9T4X3 | N A ML Y Y K |
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| UniRef90-E4RKA2 | NSILYM |
| UniRef90-C4GBH0 | N S L L Y Q ${ }^{\text {L }}$ E |
| UniRef90_Q746P4 | HALIRLA |
| UniRef90-C7LQ54 | NALLKL A |
| UniRef90_B7IHF9 | N A $\mathrm{L} / \mathrm{F} \mathrm{R} / \mathrm{L}$ L]E |


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| :---: | :---: | :---: |
| UniRef90_F8ACC3 |  |  |
| UniRet90 C7BRX5 |  | EQNSFAII HEHPDYRFVDEMQEAVIKRVI |
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| UniRef90-H8L512 | F DY $\square$ RDGA | QSFAl 1 RAESDLSGIPADIEKLAVRVI |
| UniRef90-Q3A7A4 |  | RSFAl\| DQETPAHAFTPEQWPVVRRMV |
| UniRef90-A0A059KHS6 UniReigo UPI00047A8E40 |  | EHDSFAI DAEAGPHRYTPAQWPIVRRM1 |
| UniRef90-UPIo0047A8E40 | $\begin{aligned} & D P A \\ & \square P A \end{aligned}$ | YQQSFETVRREAALEQFPPGAQGLVVRMI |
| UniRei90-UP10003762686 |  | I |
| UniRef90-R7HCN5 |  | EKQSFAl |
| UniRet90-AOLCD1 | -RAGRQ | Q V VRRM |
| UniRef90-UP10003632BI | PHDYETDGAAI | YRASFAT RAEADARFSGAEEVAAVRMI |
| UniRef90-UP1000462E6DB | Y Y Lid P A | YAESFRQI RAETDLSNLPENAHDLAI R Li |
| UniRef90-N3A946 | T N PQ |  |
| UniRef90-E8RER4 | P | RII ERELGPTTFSPEEFAVVRRAI |
| UniRef90-A9GQ661 |  | WQVvRR |
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| UniRef90-B8G728 |  | A ARSFAII RAELAERGLPQPLATVVERI |
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| UniRef90-H5TH44 |  | YRQSFATI RAEADLSGFNPDVAGVVVRMI |
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|  |  | EDGSFAII DEEAGTHEFDPSQWQ। VRRVI |
| UniRef90-O1JZ | $\checkmark$ S | A |
|  |  | - |
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|  |  | EGAQWAVARRMV |
| UniRef90 UPIO0035C1227 | $\mathrm{D}_{\mathrm{P}}^{\mathrm{G}}$ |  |
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| UniRef90-A1ANJ8 | P | Q V VRrav |
| 55 | A | TV A V R M |
| UniRef90 A6FMQ4 |  |  |
| UniRef90-A0A011 NZ | G ${ }^{\text {G }}$ | GQ ${ }^{\text {a }}$ |
| UniRef90-F8B079 | GA | RTAVRM1 |
| UniRef90-D1PMB5 |  | I |
| UniRef90_UPIO0046C | G ${ }_{\text {a }}$ | A VKR |
| UniRef90 UPIOOO34A: |  | VEQSFAII DREVGEHDLGFQKYAIARRVI |
|  | -GQE! | RTI ESELKNKDIPLGRKWALLHAI |
| UniRef90-K9T2 |  | GNHSLNSWEYAI ARRVI |
| UniRef90 L8M3G6 UnRef 0 - |  | VGEHGLSAAEYAI ARRI |
| UniRef90-E1IGF6 |  | VELA AVVERTi |
| UniRet90-F5X8M5 |  | RTI EKELHRQDWPLDHKWALLHAI |
| 17 | K G | V |
| 11 C |  |  |
| UniRef90-UPIOO03708E | DADE | YRESFATIRAEADLRSLPADVVRVAVRMI |
|  |  | , |
|  | MDYLTEPQE | V |
| UniRei90-UP10004756472 |  |  |
| 相 | 硡 | A |
| UniRef90_E0M | MDYVSGPAA | YRASFEEVQQDERLAKLLSGNMRTVATRLI |
| UniRei90-UPIOo03B3A4EF | $\square 1 \mathrm{KNPA}$ | Gli lip ema lv Frali |
| UniRef90-D1 |  |  |
| UniRef90-D3SFT7 | GA | EEALDRFPQELVPAVVRML |
| UniRef90 F8DQ12 |  |  |
| UniRef90-B6F |  |  |
| UniRef90-G4E |  | I |
| UniRef90-D5B | Y S Y $\square K D P Q T$ |  |
| UniRef90-U5P4D5 | NPS St | EKKSFQII QSVIDQ DHPGYEEEAIIKRAI |
| UniRef90-B3E | E | D Q |
| UniRef90-A3J | NPALI | YAESFATIKGEADLDAISPEAQDMAIRLI |
|  |  | Q\| READDLSRFDEEAHDLVIRIVV |
| UniRef90-NODXC7 | YVTDGL | RRSFGMI RDEADFRDFAPDLVTVATRI |
| UniRef90-UPIIOO04103DFB |  | D |
| iRef90-K9YRT2 |  |  |
| ef90-R6ZIE5 |  |  |
| $1698 B 0$ |  | 1 |
| - |  | $1$ |
| iRef90_UTJNL4 |  |  |



UniRef90 F8ACC3 UniRef90_E2ZJL1
UniRef90_C7BRX5 UniRef90-12JP96 UniRef90_D4H1Y5 UniRef90-A8U381 UniRef90-C8XIZ8 UniRef90-A0A010YS94 UniRef90-H8L512 UniRef90-Q3A7A4 UniRef90-A0A059KHS6 UniRef90_UPIO0047A8E40 UniRef90_X8K4Y0 UniRet90_UPIOOO3762686 UniRef90 R7HCN5 UniRef90_AOLCD1 UniRef90_UPI0003632BD3 UniRef90_UPI000462E6DB UniRef90-U3A946 UniRef90_N1ZPA1 UniRef90_E8RER4 UniRef90_A9GQ61 UniRef90-R7RML1 UniRef90-A3V182 UniRef90_B8G7Z8 UniRef90_L8AXU6
UniRef90 V6HAY2 UniRef90_UPI000373F61C UniRef90-H5TH44 UniRef90_UPI00047C6B29 UniRef90-T2IGR5 UniRef90-D8PF07 UniRef90-Q1JZW7 UniRef90-F5YLB1 UniRef90_C7P145
UniRef90_G9RQF5 UniRef90_UPIOOO2897EBA UniRef90_A0A017HUL2 UniRef90_S7V1X5 UniRef90_UPI00035C1227 UniRef90-U2QDM4 UniRef90_UPIO003944AC8 UniRef90_A1ANJ8 UniRef90-D5UPP4 UniRef90-A6FMQ4 UniRef90_E2MWT4 UniRef90_A0A011NZN8 UniRef90-F8B079 UniRef90-D1PMB5 UniRef90_UPI00046CE780 UniRef90-F2J5E9 UniRef90_UPI00034A2BEF UniRef90_UPI00037379EC UniRef90-K9T264 UniRef90_L8M3G6 UniRef90-UPIOO03794626 UniRef90-E1IGF6 UniRef90-F5X8M5 UniRef90-A8FV17 UniRef90-T1DQH8 UniRef90-14CF34 UniRef90_UPIO003708BA9 UniRef90-A0YLB6
UniRef90_S7TFI4
UniRef90-F4XRI1
UniRef90_UPIOOO4756472
UniRef90_C7D637
UniRef90-EOMLL9
UniRef90-U2IR69
UniRef90_UPI0003B3A4EF
UniRef90-D1Y565
UniRef90_D3SFT7
UniRef90-F8DQ12
UniRef90-B6FXU9
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UniRef90-Q6ARS7
UniRef90-N0DXC7
UniRef90_UPIO004103DFB
UniRef90-K9YRT2
UniRef90-R6ZIE5
UniRef90_UPI00031698B0
UniRef90_U2QL31
UniRef90_F6B832

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120
A GI TKPGLKKLNEA $\quad$ CYMADPAVAEAAKQAGTTRAVAAMH SGINKTLLHQGCESRCYMSDPRVVAMAKAQGDTRSMAAVD






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 S GI N K M K L N A L L C E Y C L V A D E R T K E L I A K E K E I T R S M A A V E








 S G I S K V R L L A R F G R V $V$ N C H V A D P D V D H G V T R T R L P A D N DV L C L L R D D R V P A L A A R I G NT R S A A A V D



 Q G 1 NL VAAKT F NN P V I A A A E Q A S I A D

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## V

 A GLLL K G A L E R L L E E A K C Y Y

 | $S$ | $G$ | $L$ | $S$ | $L$ | $A$ | $R$ | $L$ | $R$ | $Q$ | $V$ | $C$ | $P$ | $I$ | $V$ | $C$ | $H$ | $V$ | $A$ | $D$ | $E$ | $E$ | $V$ | $A$ | $R$ | $Q$ | $S$ | $R$ | $E$ | $T$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $G$ | $L$ | $P$ | $R$ | $S$ | $L$ | $H$ | $A$ | $V$ | $R$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $A$ | $G$ | $V$ | $I$ | $R$ | $R$ | $R$ | $L$ | $P$ | $A$ | $G$ | $N$ | $A$ | $V$ | $I$ | $C$ | $T$ | $L$ | $S$ | $D$ | $P$ | $R$ | $V$ | $P$ | $E$ | $I$ | $A$ | $R$ | $R$ | $A$ |
| $G$ | $T$ | $T$ | $R$ | $S$ | $A$ | $A$ | $A$ | $V$ | $E$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



 N AI I A K N L P S L N P L V C T L N D T GVVE E H A R T I S N T R S A A A V D

 H GIIT R A R LLP A D N P V I IC S LLR E E G V A A A A E R L G T T R S A A A L E

## S




 $H G V I R R S A L P A E N K V V C R L N D P K V R E I A R R D E T T R S A A Q I D D$
 AGI IRSRLPAGNEVVSLI GDPSLPELARRLGTTRSAAMVE
 $V G F N R T M M A S L G K S F C Y V D H D N A Q T M A K K L G I T R S A W G I R$ S GVIR S RLPRDNEVVCHIKDPSLADEARAKGVTKTAAAVD




| UniRef90_F8ACC3 | NALI |
| :---: | :---: |
| UniRef90-E2ZJL1 | NALIY SA |
| UniRef90-C7BRX5 | NAILYR |
| UniRef90-I2JP96 | NALLR |
| UniRef90-D4H1Y5 | NGLLT L A |
| UniRef90-A8U381 | N A L $\sqrt{\text { A }}$ R |
| UniRef90-C8XIZ8 |  |
| UniRef90-B7KFT7 | NALL |
| UniRef90-A0A010YS94 | NALLLYG ${ }^{\text {P }}$ E |
| UniRef90_H8L512 |  |
| UniRef90-Q3A7A4 | HALCEL |
| UniRef90_A0A059KHS6 | HALLSLAE |
| UniRef90_UPI00047A8E40 |  |
| UniRef90-X8K4Y0 | NALLYAA |
| UniRef90-UPI0003762686 | H A MLA L A E |
| UniRef90-R7HCN5 | NALFYMA |
| UniRef90_A0LCD1 | HAL |
| UniRef90-UPI0003632BD3 | NAL A G GRE |
| UniRef90_UPI000462E6DB |  |
| UniRef90_U3A946 | N A L A |
| UniRef90-N1ZPA1 | N A L L Y |
| UniRef90-E8RER4 | NALLRDA |
| UniRef90-A9GQ61 | HALL |
| UniRef90-R7RML1 | NS I I Y M |
| UniRef90_A3V182 |  |
| UniRef90-B8G7Z8 | $N A L L R L A$ |
| UniRef90-L8AXU6 | HALLLLA |
| UniRef90-V6HAY2 | HA |
| UniRef90-UPI000373F61C | NA I L Y |
| UniRef90-H5TH44 |  |
| UniRef90-UPI00047C6B29 |  |
| UniRef90-T2IGR5 | NSLLIL A |
| UniRef90-D8PF07 | HALL |
| UniRef90-Q1JZW7 | H A |
| UniRef90_F5YLB1 | N A L L R M A E |
| UniRef90-C7PI45 |  |
| UniRef90_G9RQF5 | NALLY T A |
| UniRef90_UPI0002897EBA |  |
| UniRef90_A0A017HUL2 |  |
| UniRef90-S7V1X5 | N A L A E L A |
| UniRef90-UPI00035C1227 |  |
| UniRef90-U2QDM4 | NALLYAAE |
| UniRef90-UPI0003944AC8 | N A V |
| UniRef90_A1ANJ8 |  |
| UniRef90-D5UPP4 | NA LA Q E E E |
| UniRef90-A6FMQ4 |  |
| UniRef90-E2MWT4 | NA\ATAKE |
| UniRef90_A0A011NZN8 | A L L G L A E |
| UniRef90-F8B079 |  |
| UniRef90-D1PMB5 | NALLY TA |
| UniRef90-UPI00046CE780 |  |
| UniRef90-F2J5E9 |  |
| UniRef90_UPI00034A2BEF | NALLVLA |
| UniRef90-UPI00037379EC | NALLCFDD |
| UniRef90-K9T264 | NALL VLA |
| UniRef90-L8M3G6 | NALLILA |
| UniRef90-UPI0003794626 | HALMQLAE |
| UniRef90-E1IGF6 | NALLRLA |
| UniRef90-F5X8M5 | NAILCYND |
| UniRef90-A8FV17 | HALMVEA |
| UniRef90-T1DQH8 | NSILCFDD |
| UniRef90-14CF34 | H A L C S $\square$ A |
| UniRef90_UPI0003708BA9 |  |
| UniRef90-A0YLB6 | N A LMVLA |
| UniRef90-S7TFI4 | NALANQA |
| UniRef90-F4XRI1 | NGLMVLA |
| UniRef90_UPI0004756472 | N A L A |
| UniRef90_C7D637 |  |
| UniRef90-E0MLL9 |  |
| UniRef90-U2IR69 | NSILT LD D |
| UniRef90-UPI0003B3A4EF | NALI Y EA |
| UniRef90-D1Y565 | NALL Y |
| UniRef90-D3SFT7 |  |
| UniRef90-F8DQ12 | N A V I |
| UniRef90-11AWM8 | NAI ASRAE |
| UniRef90-B6FXU9 | NAI L Y S lie |
| UniRef90_G4E8J7 | HALLSLA |
| UniRef90-D5BRB1 | N A $\mathrm{A}_{\text {A }}$ |
| UniRef90-E6W0S4 | NGLL |
| UniRef90-U5P4D5 | NAI I Y Q M Q |
| UniRef90-B3EBS2 | HAL |
| UniRef90-A3JVH7 |  |
| UniRef90-Q0G5H8 |  |
| UniRef90-Q6ARS7 | N A L L H L A |
| UniRef90-N0DXC7 |  |
| UniRef90-UPI0004103DFB | N A L A R E |
| UniRef90-K9YRT2 | NALL |
| UniRef90-R6ZIE5 | NAILTLDD |
| UniRef90_UPI00031698B0 | NALMTLVD |
| UniRef90_U2QL31 | NALAS RAE |
| UniRef90_F6B832 | N A L L Y LD |
| UniRef90_U7JNL4 |  |


|  |  | $40$ |
| :---: | :---: | :---: |
| UniRef90_R5E0C7 | Y E Y M N P N DI \| E K H S F E |  |
| UniRef90-T0ZJB3 | GRRIEHDSFAIV | V R EA GPHTYSDA Q W Q V V R R M I |
| UniRef90-L8LPC8 | HP L L Q S F El | D REIGGQHSLSLQEYAI ARRVI |
| UniRef90_W3ASX2 | EPKDI ERRSMEI | R E EL D R R GL P A V E A PV I E R CI |
| UniRef90-F3ZW41 | M A H $\mathrm{T}_{\text {T D P K V I E N T S M D I }}$ |  |
| UniRef90_Q217J | YAYEKDGAA YARSFAI | R A EAKLARFDPADEKV AVRII |
| UniRef90_B7JUI9 | HPILLEQSFTI | D QEVGQQHNLNTLE Y A I A R RVI |
| UniRef90_Q8DME5 | HP I AQAS FA I | DREIGPHPFDPPSYS L L R R I I |
| UniRef90_R6W781 | K V G Q S M $\quad$ DK S F R T I |  |
| UniRef90-H1LK54 | Y $\square$ T I P N K I T EK S F VM I |  |
| UniRef90_G8UMU8 | GQEI MMESFRTI | EGELKRKD DA L D RKWALLHAI |
| UniRef90_E3DP28 | NP Y El E A K S M R M | DQEIG K L D C S E S EL K T I K R VI |
| UniRef90_U5P3L9 | M N Y $\quad$ K VS NQ I E E A S F El | DQEHPDIVFDNPHEAVWKRVV |
| UniRef90-I2B7S6 | M K Y IQ SPQTI ENESFHI | RERPD Y R F A S P L H E AVI CR R V I |
| UniRef90-D3EPR0 | HP I T T K S F A | DQE $\square$ GQHDFDALEYKVVRRVI |
| UniRef90-W6K5M6 | F D Y LR D P A Al Y A Q S E T A | ARAECDLS A LP Q SLLHALALR L V |
| UniRef90_K4LFA4 | D PGAI T A L S R A | E D N $\square$ GEERFPG G E GEIVRRVV |
| UniRef90_UPI0004695494 | PHPI EAESMRI | D Q GRDWS DVPD DHQ V L K R L V |
| UniRef90_U5EHA9 | S Y LT D GAEI Y R R S F A TI | R A E A DLLA GFPADVEERVAVR M I |
| UniRef90-E5CEP9 | GQEIMMNSFRKI |  |
| UniRef90-B4W282 | HP L LEQSFA II | DQElG EHRFTPDEYA IVRRVI |
| UniRef90_F4KKT4 | DEEKVGQRI M S ESFR |  |
| UniRef90_UPI00034513CB | HPITTEQSFA | DREIGGSHNFTPAEYA V VRRVI |
| UniRef90_W6LY87 | F D Y LCD P D EI ERQSFVQI | $R$ Q 1 T D L S R D A D Q Q V A M R L I |
| UniRef90-G2DZE0 | RA GRAI EA T S F Gl | DREAGPHDYDPEQWAVVRRMI |
| UniRef90_Q2RJH8 | LS D PRAI EARSREI | A A RVGDLGLLEPGARALVTR\I |
| UniRef90_UPI00036C3D33 | G Q D I $\square$ R S F R T | D S ELKNRDIA LD K K WAL L H Al |
| UniRef90_Q2WAM6 | WDS D P A EI Y RQS F A T I | RAEADLIARMPTDLADLAVRVV |
| UniRef90-W0E612 | NFLTDPAQI ERDSMSF | H Q N L Q R V W N A Q L L K V V ERL I |
| UniRef90_UPI0003B77B5B | R M P Q E I E N R S L G I | D S EVPPEPRFA G VEWEVVRRM। |
| UniRef90-K8GPY3 | A Q SLLA | DREVGEHTFSPAEYEIVRRVI |
| UniRef90_R9JIG5 | P E E I E K R S FEII | T E ELR R I S LP K E E EFI T K R V I |
| UniRef90-H1HTH5 | PEEEI EAESFRRI | S E ELGGD RLLFPA G V D L V V K R V I |
| UniRef90_UPI00047205E7 | Y E Y $\square$ R D GA A I Y Q R S F A T I | R A EA D L S AF T LE Q A AVVVRl |
| UniRef90_UPI00045EA1EE | GRRI E HDSFAIVV | DAEAGPHPYQADEWQVVRRMI |
| UniRef90_D5ES05 |  | AKELKRQDYPLDDHKWAL LHA |
| UniRef90-M4YUK9 | M | VKELNGRT WPEPEFS IV KR C |
| UniRef90-T0CKS5 | N P M M | Q G I I D $\quad$ IRPD Y IEEKI I K R A |
| UniRef90-K9H8F0 | Y D Y L R D P A I Y A ESFAAI |  |
| UniRef90_UPI00037ED321 | GRT】E Q A S FA | DAEAGPHSYDPE EWAVVRRM। |
| UniRef90-F9CXM8 | M Q M | D DEIGTHHYNEKEWPIVRR\I |
| UniRef90-B3QW17 | G Q S $\quad$ M R K S F Q T | Y GELQ S H D Y P T D K L WA M I H TI |
| UniRef90-M1PT52 | P Q Al E GESFRI | AKEFDQKD\IP E Q F AVI QRVI |
| UniRef90_K8DYT7 | DVIWQP A DI ERTS LTS V | E EF L R P L Q L P P GEK AVVGRLI |
| UniRef90_C4XI34 | P D A I E A A SLLA I | D S EVPPEPRYDGPRWDVVRRLI |
| UniRef90_UPI0003B663DF | PAEI ESRSFAII | D A ElP EPRFD GP LTWQVARRCV |
| UniRef90_X0WZQ9 | El Y R R S FEML | R A E SGLRDLPA GIIA K V A E R L V |
| UniRef90_UPI00040ACD80 | T D A HKI EAA S Y QKI | Q E I I G V VF TDP Y Q E A V L K R V V |
| UniRef90_UPI000365CD5C | E F L L P P VEIA K K S M T I | E ENLPL A Q WP P L E R EVVLKR I I |
| UniRef90-B0C3F5 | HP I LQQQS F AT | DREIGSHHFSVQQYAVLRRVI |
| UniRef90-F3YZH1 | D PAEI ERRSMA I | ESEAKP IP F S EVEWPIVVRRM1 |
| UniRef90_B4S8C8 | H D G T R P G Q S I M $\square$ N S F R T | A GLLKR DD HACDAKWAL L L T T |
| UniRef90_A3CL58 | M T Y $\square$ Q NPSSIEEKS FQl | QS MI D Y VF H S EMEES I I KRAI |
| UniRef90_A5UQT6 | A AKI A A R SFAl | RAELEQRGFHVELDAVVERII |
| UniRef90_R5AZ68 | $\square \mathrm{K} \square \mathrm{GQQA}$ I M T E S F R TI | ERELSNPNLPI D TKWALLHAI |
| UniRef90-B8HMP9 | H P I LQQS F ALI | DQEMGEHRFGPEEYQVLRRVI |
| UniRef90-Q1NI56 | PEAI EEESFRI | A A E IGEHGLDA A T WAVVRRVI |
| UniRef90_W4M9W6 | PHEIVLES FRII | ESEVGEHTFDAHEWPVVRRII |
| UniRef90_K9T2F8 | A Q S L A I V | DSEIGDTELDAPAEYEIVRRVI |
| UniRef90_L0GZN3 | D Y $\$ R D GA A ! Y A R S FA TI & RAEARDA R F T P E E ERVAVRVI  \hline UniRef90-E0QIL4 & Y IT NPSEIIEKK S F El & D E I I G Y F K S S FEEKI I K R ClV  \hline UniRef90-D3P9W3 & GLLS I K E S F D I &   \hline UniRef90_UPI00029A0998 & G RQUMNESFRTI & LK NLNVENQP LD H T WV SLLHCI  \hline UniRef90_B1X0N1 & A Q S L A M I & DREIGETVFS PA E Y EI V R RVI  \hline UniRef90_Q60516 & GRR\EHDSFA IV & DAEAGAHAYGPEQWQVVRRM1  \hline UniRef90_Q8KFE0 & GQSIM S S S FRA & A ELMKP DSRPTDERWAVMHTI  \hline UniRef90_UPI00035F2401 & GQGIMMES FRT &   \hline UniRef90_UPI00046D83DC & Y DVA P HEI E $\square$ R S FEI | ES LAADLT R F A PAEKALVQRVI |
| UniRef90-14BKK4 | D Y IR D A GEI Y RQSFA TI | R DEADL S R F P A DVARVVVRLI |
| UniRef90_U9W334 | HPITTAESFAlI | D QEDG P H NWPPEEYAI I RRA |
| UniRef90_S5L884 | M N Y $\square \mathrm{K}$ NPAKI EEKS FEl | Q Q I I D $\square$ R P D Y LEE E AI I K R Al |
| UniRef90_F9UA48 | GALI E Q T S F A Ti | DAEAAPHAYDPDQWTLVRRLI |
| UniRef90-101594 | PTAI TERSFALI | REELAA Q GFAPPFDVVI HRI I |
| UniRef90_UPI00035D4092 | PHPIEAESFRI I | A E GRDWTPFPQDQLTIL QRLV |
| UniRef90-E9V0A2 |  | P A D A ERLAVR M I |
| UniRef90_T2G853 | D P A A T | D QEA GVVHPWT GPA WAVVRRLI |
| UniRef90_L0A3M7 | PYE PHPIEAESFEI | GRERDWSDVPAEHRGVL Q R LV |
| UniRef90_T0XP42 | R L P E El E A E S F RII | D ERLLS GMAFDQGWHQVVRRAV |
| UniRef90-A1VA49 | P DEI E A R S F Al I | DAEAGDKPFTGRDWHVARRLV |
| UniRef90_D6Z402 | P A DI EAESFRII | DREHGAHPFDAATWSVVRRVI |
| UniRef90-Q2JHP9 | P I T A A S FRQl |  |
| UniRef90-W7XVH0 | K LG R R I M N E S FRTI | LENIDVSS R S L A H T WV AL H CII |
| UniRef90-K9WC10 | HPI MEQSFAVI | DREMGKHNFNSAEYAIVRR\I |
| UniRef90-K9YMR5 | NPI DEK S FAII | DEDVGQHSDT F SEYEI ARRII |
| UniRef90_UPI0003104188 | $\mathrm{Y} \square \mathrm{T} \square \mathrm{P}$ N K I T $\mathrm{T}^{\text {C K S F V M I }}$ | Q DEl DKHFNNEVEEA I I K A il |
| UniRef90_C3JD36 | GQQI M M E S FRTI | EREMRHPEVP ID R R WAL F HA I |
| UniRef90_C1D340 | P I EQQ S F El | E T L R D WS KVA ASDRYAMQRLV |
| UniRef90-UPI000469E304 | GQDI M ${ }^{\text {Q S S F R T I }}$ | E K ELIK N P D I P L G K K WS ML H A I |
| UniRef90-J2Z7W4 | E Y $\square$ T T P NLI T E K S F R M I | HEEI A A TRPDYKEKAII T TRAI |
| UniRef90_R6PZR9 | M | A AELAELGGDP P T EAVVRRVI |
| UniRef90-UPI000475C24D | VH Q S F A M | D GEIGAHGFSPAEYAIVQRM। |
|  |  |  |






| UniRef90 R5E0C7 | N A L L Y M |
| :---: | :---: |
| UniRef90_T0ZJB3 |  |
| UniRef90_L8LPC8 | NALLILLA |
| UniRef90-W3ASX2 | NALLY |
| UniRef90-F3ZW41 | NALL I EA |
| UniRef90-Q217J1 |  |
| UniRef90-B7JUI9 | NALLILA |
| UniRef90-Q8DME5 | NALLELA |
| UniRef90-R6W781 | NSILTFDD |
| UniRef90-H1LK54 | NAI |
| UniRef90-G8UMU8 | NAVLCFND |
| UniRef90-E3DP28 | N S V L Y MLE |
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Y A T A D F D Y K S L I A H F S D L A L L A S G A A A L A A R T T I I H A T A D D $\quad$ E $\square$ A $K$



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E Y S S D K I E
HPIFSSESVRR R K R CDLS HL P P L S R A I T E RIV

D Y L R DAA EI Y R R SFAVI RAEADLDARFPA DVARVVVRLI ERVV $\begin{array}{llll}P & E & D \\ P & H & P\end{array}$
PHP
N Y I R
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N PG
D WH S SD DQ S LHQ LD QE L G D HP F A K E G Y N I S L L T S R R L A R R Q V V G D R

Q G YEI A RKSREIVVRKLI DLA S LLRDE EAAAVVERIV
 R E GYQ SR


NA A E L A A QRRE MFVVHA A QL A HLLP

 | $K$ | $S$ | $L$ | $D$ | $A$ | $A$ | $I$ | $V$ | $A$ | $M$ | $I$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $S$ | $L$ | $K$ | $S$ | $S$ | $I$ | $I$ | $T$ | $R$ | $V$ | $V$ |
| $T$ | $A$ | $E$ | $E$ | $K$ | $V$ |  | $Q$ | $R$ | $C$ | $I$ |


 HPILLQSFAVIDREI GKHNFS

E GFSI SSRSRSLAREAVGNA $\qquad$ | A | P E P A | $V$ | $R$ | $R$ | $A$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

H P I A A A S F E 1 V
REVVH P I E A E S Y R I MR S L V D D S H L G P L S R A V A ER V A




 Y VM S P E E IDERNS DE L V R R E L N T D
 H P $\quad$ M T Q S S L A A L

 H P I F L E S I K YI R S K L G N T G L D Q T Q Q S I L E R I I






 H P I E E E S Y RI L R S RI D L G HLLPRLSRAL AERVI M E Y $\square$ K N P M M I E S K S F E I I Q G I I D E I R P D Y I E E KI I KR A I



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UniRef90_T2RD29

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120
AGITAR ETVVPLADPRAAAVARRTGSTRTAWGUE A V
 Q

| A G |  |
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| A G | T |  |
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| S |  |  | PRQETFANPVYSAMDADTRP

$\qquad$ QKDOSKA AASMR

 $G G E C R C Y D S D P R V V R A A Q$
$G A T V Q C L M N D G R V V A R A R$ A S IT QK
A G $\qquad$ RYDNIYNY IKNEEADK $\square$ AKKEQ
$\mathrm{V}_{\mathrm{G}}^{\mathrm{G}} \mathrm{I}^{\prime}$ Q A A $\qquad$ GHQSEVIDCALDHGLT

A GL
CVL


A GI A Y $\square Q E T$ $A N P I \mid F C G L$ EVVVPL QNAE DPD LAAHRWGLT




## A GITRR

A GVNKKRDSAGGKVLCGLSEVKS A
S GLK K SLLS SLETASCLVHDPETHLLAE
A GLSKVYEKYDNKVICYVAEPEVKYLAEASGMTRSAAGIVR


## A

| A G G | S K R Y K | E |
| :--- | :--- | :--- | :--- | :--- | :--- |
| M G | R K K | E H T |

A GVTARR


A A I RPMA QRTLGVPVRTV LDEWAPTLAPSGSTRTAAGLL



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 <br> <br> }| E |
| :---: |
| Q |
| V | A GI I R R Y L P CDNEVVVTLNDPRTPEHAQA GNT A AVAPMAARTDGEVRCLLD WA

$G V V N L L R A T F A N P V Y C S$ AVEGVEVA
A AAAPMAATFSNPVHSVL QWAPPQAPEGQT
A GLLRAKNVTVA
ACIDRTQDTFVNPVYCR VDYGESNGDDT
QCA Y D GLDNTKDT
SGI NKKRLEYGGQVYCFMSDEDVAQAAKKNGTT
VGLSKFYLKYENEV $\square C Y$ Y AA SPMAKRTDNNI ECDLDMAPASDS DNTSDTTRSA DGMK


 | $A$ | $G$ | $R$ | R K T |
| :--- | :--- | :--- | :--- |
| $H$ | $D$ |  |  | A GII YNSNLL Y Q E P L S FLLGKASVISS A K T S K Q

 AGMRYAYQ A GIT GR GHQCPVVKKAIGNG SELAAETGMTRTAAA GIR TTLDQTRLAHLGNPVTTLIDDPHIAGAADA EQAFWQDN A A L D Q T RLLA HLLGCLVVT TLIDDNSHIITTVVTEA EQAAFWQH Q A GITRR D AVCAI K D P A A P K L A A DLG T T
SGITTAR
E CVVCRI T D P Q A A R L A R E E Gll
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| UniRef90-E6VS53 | N A L C V L A |
| UniRef90_K9Q130 | N ALI |
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| UniRef90-G8PEL6 | NA L |
| UniRef90-F4B855 | NEI I R Y A |
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| UniRef90_W1JAR4 |  |
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niref90 x8DWZ8

HP【VEESFR【】DQEVGQHNDSLEYQTARRVI DLCDRPVIEQDLISKLV HPПETESYRПMRARADFAHFPPLTRAVVERVV
PAEIEKRSFEITTEELGDTHLIPGTEPIVKRCII ERVVHPTEEESFRRLRARVDTSYLAPLTRAVVERVI
 REA $\square K \square A R K S A E \square A R K \square 1 P G D G Y K E D T V H L L H Q L V$ ME ПEHVPQDПERRSME\｜DDEEGGEITПAPEKLAVVKRV DY $\square R D G A E \| Y R R S F S I I R E E A D S A V P A D L E K L A V R V A$ DLSAVPADLEKLAVRVA NLSDRSEDEDDLSKV EAFAESLQ RLLPDLSDRSEDEADLLAKLV EYTEDPYEDEERSMNYI LPNLDVK DAREKRVIGKAV DWHAVEARILSEIDRKIGEHSLSPAEYEIVRRII HPI EAESYRRLRAACDTSGLAPRSRDVLERIM MRQTTNGRNI ENKSFSDIDEEAGPHSFSQEEWEVVRRIV YDYIRSGDAIYERSFAIIRAEADLSRFTEDQAEI AVRMI UVENPEEปEETSMAYIAKALGLNVEKCHALVASRAV DLSNRSEMEDDLLSKLV
GAR $\square$ TRESFER $\square$ CAEVDLARFGPGARRVAARIV VQDPDETEEESMGFVAKALRLNRDDWRDRLKARAA HPI EQESYRILGRSVDTSGLPVLSRAVVERLV
HPIFTES $\square R$ RILREYGETGLEPLPQQVLERLV
YEFLTNPRETEQKSFATIESLTGLGNTP EDQVIKRAI RVPHPIESESYEILRRRVDTGGLGPDSRAVVERLV EANSLLALDQEVGKHRFSPAEYEVIRRVI HPDFSESLRLTEAADPLEGLSVPERDVVLRLI

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ESQQQT

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HT T A DFEFKR LIKFCY QPVEAADTAFRSGAPDITDVSMVA YASGNPEVVNSLYVSRGALDVALEALKAEASLVADVRMVH HSSGDPSLAALLKFSPGACDAGFQALKAGALILTDTMAAA

 YATADFEYKDLI QFSDQAI EKGTAAI A ARTSIVVDVASV


 HS T GDI EF QHLI R C Q N DPVVA GARAVEDERPVVTDITMAK HACGMVD DVRDL RFSEGAGAAGRAAL KAGAPILDDAQMVA
 HATGDPEFA HLMRFANDPVAA GAEAVLDERPDVVTDVTMVK HTAGDFSVQNLIEFSEGACEKGLQALTKGAPILTDTDMAA
 H A C G M V D V V Q D L R F S P GA G A A G R A A L A K G A P I L C D A R M V A
 LH S M G D I



 HA GADFS LAASLVTVGGTTVPDLAARLHR GGRLVEDVSMLA F S T GDLLEYASVI NFANNPLSNGFAALETRVPIMVDTPVI Q
 LA CGDVSSLASFI RFSPDAI KAARETLSTRCTVVADVSAVN HTTADFDWLDILWFS ADALE QLCDALRXPC I YT DT TMAL HVS A D L E Y AVVDLVT GE E H L A R GLDA A L R A GA PIVA DE Q MVA
 $T$ C G QVVDVAE HVVA Y T D DVVVARAGAA L A A GAP V L C D S S M V A

 HTSADFDYAKNLMFSEGAVEKALDAIVNGAVIVTDTMMGK


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

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 Y A S G N L E I I A K M V HS A M L
 H T T A D P T WA G D L L V D E Q A L A A G R Q A L A A G A P
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