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| QUERY |  |
| UniRef90-D4Jd | KRMAAGDFLRGYSIETGKRF |
|  | KRMSATDYLKGPKIQAGDDF |
| iRef90-COZF | KRMSAL |
| UniRef90_UPI0003B467E5 |  |
| UniRef90 R5Y154 | KKRMDAGAFLRGYTIEPGEIVF |
| UniRef90-UPI0003F96A7D | KKRMSVKDFLDGYSVTAGDKL |
| UniRet90-H5SUF | KRRMSGRDFVNGYKVQLGARL |
| UniRet90-F5WZ97 | KPRMSVVDFLNGRK |
| UniRef90-R5DG59 | KKRMDAAAFLRGYQMETGTVL |
| UniRet90_R5 | KKRMTTDAFLRGYQVTEGSFL |
| UniRef90-UP100035D8E02 | KRRMSAEELLRGQTVEAGNRF |
| UniRef90-UP100046561BE | GKPMGADEFLRGAKLVKGDRF |
| UniRef90-R6SB05 | KKRMDAGA |
| G2 |  |
| UniRef90-UPIC | KKRMSAGDFIRGNHLAVGERM |
| UniRef90-S2Y | KKKMSAEEFLRGTGLQUGDQF |
| UniRe90-E3DZ21 |  |
| M1 | RKMDAASFLRGNTLAKGMKF |
| A9H | MMEADAFLRGQPVPVGRL |
|  |  |
| iRef90_UP100024 | KKAMDAAAFARSGQLAPGTVL |
|  | RMEAGAFLRGYSIKEQTKL |
| UniRef90-F2PE | AMSAADLLNSRRFEPGTQL |
| UniRef90-G5JMG66 | KMNT |
| B5N |  |
| UniRe990-A4/M47 |  |
| UniRef90_D4LK93 |  |
| R5NK |  |
| UniRef90 R8W5 | RMSACDYLRGHAIPVGTQF |
| UniRef90-K2JZN8 | AMEADALLRGYPLPKGTIL |
| UniRet90-F4A9 | KKSLRVEEYIRGNSIDVGSLL |
| UniRef90-F3SB | RGMMEAGDFLRGQAI APGTRL |
| UniRef90_V653X7 | MEAADLRGFALPRGSIL |
| UniRet90_R5WQD4 | KKRMDAASFLRGYQVEPGTVL |
| UniRef90_UP10004 | P M E |
|  | RMNIAAFAAGRHIEAGAKL |
|  | RMPVSAFLAGNSI GAGDKL |
| UniRef90-UPIO0036 | KKKMAAKDYIRGHGLQLGDQF |
| UniRef90_UP1000: | R M |
| UniRee900-S3J016 |  |
| UniRet90_UP10003470 | V |
| UniRef90_M1Y | KMNAQDFLAGHDVQLGDRF |
|  |  |
| Uni | AMPAAEWLKGVRLPEGTVL |
| UniRef90 DSHBA8 |  |
| UniRet90 R6HM45 | VMD ${ }^{\text {a }}$ |
| UniRer90_Q39QC2 |  |
| UniRef90_A8IQL6 | KQPMSAATFLNGNDVPKGTRL |
| Uni |  |
|  |  |
| UniRet90_R6E4M6 | Q $\square$ KEG\\| I |
| UniRet90_R6MB25 | A |
| UniRef90_F9VA | KPKMDIVSFLNGLGVNIGDQF |
| UniRef90-F9HIUO | KPKMS\ADFLNGAGLAVGDKF |
| UniRef90-W8SMS6 | KPPMATADWL RGARLSPGTML |
| UniRef90-EOSIT9 | SMSAQDLLNSRRFTPGQUL |
| UniRef90-UP10003822ED3 | ARRMDAAAF |
| UniRef90-D6 | SKAMGAADFLR |
|  | GKRMDIATYLN |
| UniRef90-Q8 | SRKMGIREYL ${ }^{\text {a }}$ GHN |
| UniRef90-UPI0003B31D56 | KREMNADDFVRGYRL |
| Unil | RUSAEDF |
|  |  |
| UniRef90-UP100035FFEB7 | KQRMSATDYL |
| UniRef90_F6DM91 | SKKMEAQAFLRGKPILPGTVF |
| UniRef90-Z5XMW5 | KKPMAVSDFL |
| UniRef90-ToD | KKRMIVSEY KGNDISTGIVL |
| Unip | D F |
| UniRef90_UP10003F8309C | RMSAQAFLNA |
|  | YMQGSQLAQTLGL |
|  | KKPMSAQDLL NSRR |
| UniRef90-UP10003B35D13 | KKRIKAEEFV |
| UniRef90-UPI00041E0515 | KKRMDASSFLRGAG |
| UniRef90-S9884C | KAPMEATEMLRGNP |
| UniRef90-G8MORO | MSVEEYICGHK। |
| UniRef90-W4RJ33 | KMDAKQFLLGA |
| Un | KKRMPVKAFLLGHKVEDGTLL |
| UniRe990_E6RH5 | KKPMAINDFLNGRSVTPGTVL |
| UniRef90 UPIO0047DDFF9 | SRRMSYMEYLRGHRVEEG |
| UniRef90-Q11LC8 | GKPMAAADLQNARKLTPGTQL |
| UniRef90- ${ }^{\text {CoOLI56 }}$ |  |
|  | GGOLAHALGLVKGALL |
|  |  |
| UniRet9 | A |
| UniRef90_UP1000373C88E | RAPQEIDAFLRGYPLAPGDRL |
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## UniRef90_UPIO004633890

 UniRef90_R1GPL6 UniRef90-A3TW66 UniRef90-A0A024Q1V0 UniRef90-D7CLQ5 UniRef90-B1C3R8UniRef90 E3GA80 UniRef90-E8RL84 UniRef90-UPIOOO377F48C UniRef90-V5SC06 UniRef90-G9QML7 UniRef90-F7V7D7 UniRef90-NOB6D7
UniRef90 O 6 D 001 UniRef90-F2F672 UniRef90-UP1000468023A UniRef90_UPIO0047AFF47 UniRef90_UPI000361B489 UniRef90-A4CKH7 UniRef90 UPLOOO37E2D63 UniRef90--11XFE1 UniRef90-R8ASY3 UniRef90-LOEF93 UniRef90-L7VJQ0 UniRef90-B9M2D5 UniRef90_J3FBU4 UniRef90 W4V163
UniRef90 Q1H4YO UniRef90-UPIOO04217970 UniRet90-A9KM98 UniRef90-A7NNY4 4 UniRef90-M1TRT2 2 IT
UniRef90-GOVRT9 UniRef90-E1YDP4 UniRef90_R6ZWV9 UniRef90-UP100037BD6FF UniRef90_M5DLD5
UniRef90-11ZJM6
UniRef90_UPIO0041305C4
UniRef90_J8TFD8 UniRef90-S7WQV0 UniRef90-L8D3B8 UniRef90-Q6AQ97 UniRef90-A0A014M633 UniRef90-UP100047AE5E6 UniRef90-RTNNC8
UniRef90-D9s312
UniRef90-B2JJU4
UniRef90-UPIOOO40B6E31 UniRef90-F5LF67 UniRef90-O3AC19 UniRef90-W5YDB5
UniRef90 W6N4R1 UniRef90-UPIO003B50DD9 UniRef90-UPIo003726A69 UniRef90-N9VM68 UniRef90-D3E5T3 UniRef90-UPIO004724B25 UniRef90-R6ZR77 UniRef90-UPIOOO421D38A UniRef90-W4FOF2 UniRef90_Q11H35 UniRef90-18U592 UniRef90-UPI00037C1B9D UniRef90-UP100047D242B UniRef90-F8GHW6
UniRef90-F7QG70 UniRef90-R5F312 UniRef90-H8KRE7
UniRef90-R5RM55 UniRef90-UPIO00478616C UniRef90_A3UFC4
UniRef90 R5LID5 UniRef90-R5LID5
UniRef90-UPIO0036B6E8D UniRef90-UP100004640DOD UniRef90_UPIOOO3809639
UniRef90_UPIOOO3811532 UniRef90-K2NP91 UniRef90-UPIOOO4759086 UniRef90-D8MPI7 UniRef90-F7NQW5 UniRef90-D4GNTO UniRef90-R8BODO UniRef90-Q62MT4 UniRef90-R4K403
UniRef90-K6BWC5 UniRef90-UP100035E4C2A UniRef90-R5JZV6 UniRef90_LOFB34
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 $P F P G A W T T L G E Q R L K V W$ NPWPGAFAFFREEQVKI W
 NPWPSAYTRCHGKTLKI W
 H P WPVAYTTFEGANFKVW
 PWPGDVFT FHGEKI K V L
 N S WP IA A T L WQ DK M L P FAGGYT LL NGEVFKVW
 NPWPVAHTLLNQQRFKI Y
 N P WP SA YTA WN GK VI K L W NPWPSAYTYYK GKTLKLW
 D P H
 N P WP A S Y LQLT Q G TVVK L W NPFPMAYTLLGDERIRVL
 P WP VA Y T S FEGKP L K V W
 N P WP V S Y F T 1 P Y P A A WT E L E GK I CKI Y Q P WP GA Y T V R S G V E V D P F P GGAATLD GAVLKLW W
 NPVPGAYTVFRGKKIKI W NPWPGVAYTVLGGGEIIGI L PFPGAWCMMGEERLKLL
 $P Y S G G F T L W N G E V F K V W$
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 PFPGA WF E MEPERVVKVL NPWPVAHTY LNENRFKVY
 PFPGAWF E $\square$ G GEPVRI K N P WP S A Y TMWNGKTI KI W PYP T A F T E LD G L L T L L L F N P WP S A Y T R L
D P WP G A WT T PFPGAYFELGDKPVRVK
 PFPGASTTLGTETVKLW P WP VA H T L WK GERFK I Y NPDPGAFAFFRGKRVVKW PWPGTHSTLHGEPLKVL $D P W P$ P
$N P W P$
$\qquad$
 D P FPGGAGTLDGATLKLW

 Q P WPVA Y T K M N QK TVVRI Y

HPWPGAYTTFRE ETVVKVR


| UniRef90_UPI0004633890 | $\text { K K R M T A K DF }{ }^{90} \mathrm{~L} \text { LG Y H L } \mathrm{L} \text { N VG D K\|L }$ |
| :---: | :---: |
| UniRef90-R1GPL6 | KKAMSAAD IL NSRRFEPGTQL |
| UniRef90-A3TW66 | K GAQDAQEFLRGRPVARGA |
| UniRef90_A0A024Q1V0 | K K R M S VK E Y L Q G S R I K Q G K V |
| UniRef90-D7CLQ5 | K K R L P A S EFI K G Y RV'TPGL |
| UniRef90-B1C3R8 |  |
| UniRef90-E3GA80 | GVYMQGA QLA Q A L GLV GGALL |
| UniRef90_E8RL84 | K A A QEAAEFLDNGVGLSVG |
| UniRef90_UPI000377F48C | K K R M R A Q D F Y G Y R L K ED D R |
| UniRef90_V5SC06 | K R A M T A G D F LRGFTIP P K G T R L |
| UniRef90-G9QML7 |  |
| UniRef90_F7V7D7 | KKRMDA GAFLRGNHLAVGD L |
| niRef90-N0B6D7 | K QPMKA A DFLRGARLAPGTHL |
| niRef90-Q6D0 | K K VMS A Q DLL NSRRFVPGN |
| UniRef90-F2F672 |  |
| UniRef90_UPI000468023A | K K R M L I E D F L R GMRL |
| UniRef90_UPI00047AFF47 | RS L L A GDFLRGFAVPAGTTL |
| UniRef90_UPI000361B489 | K G GME TVA F L N GYPLPK |
| UniRef90-A4CKH7 | KRRMPVSDWLNGTEL |
| UniRef90_UPI00037E2D63 | KRRMKASECACGYSL |
| UniRef90-I1XFE1 | K K A V ${ }^{\text {P }}$ |
| UniRef90_R8ASY3 | K K P M P VQ DLL NSRRFE |
| niRef90-L0EF93 | KKAMPAAEWLKGMRLP |
| UniRef90-L7VJQ0 | GKRMTVEQYLCGHEIKPGDRF |
| UniRef90-B9M2D5 | K K R L P A G D F A GYK |
| UniRef90_J3FBU4 | K P Q M A VT DF L N G L G L K VG C Y F |
| niRef90-W4V163 | S R R M T I E E Y I C GHRMDEGE I |
| UniRef90-Q1H4Y0 | GKRLLQAKDFLA GNPLCPGDRF |
| UniRef90_UPI00042 | K K C M D D D A FL R GY HI GE GAVL |
| UniRef90_A9KM98 | KKKMLA GEFLR GYQI NA G D L L |
| UniRef90_A7NNY4 | K R P L P A A D WRRGVRLT |
| UniRef90_M1TRT2 | KKMMKAAD WARGV HL E Q E A KF |
| UniRef90_GOVRT9 | RKRMATA QY L Q GVTL T A GERLL |
| UniRef90-E1 | GKRHN $\square \mathrm{K}$ D Y L C G C |
| UniRef90-R6ZWV9 | KKRMPAGDFLRGMQMKEGDLL |
| UniRef90_UPI00037BD | K K P M AVA DFLNGRAF K V G T K L |
| UniRef90-M5DLD5 | K K A M V A DVING |
| UniRef90-I1ZJM6 | KPKMSIT D F L N G A GLKLGDRF |
| UniRef90_UPI0004130 | K K R M A I Q DLL R G M K L |
| UniRef90_J8TFD8 | K K R M EVS QFLR GANVV |
| UniRef90-S7WQV0 | K K R M DVGDFLRGNS |
| UniRef90_L8D3B8 | K K P M A Q F L N |
| UniRef90-Q6AQ97 |  |
| UniRef90-A0A014M63 | K K A MKAQDLL N S R R |
| UniRef90_UPI00047AE5E | K |
| UniRef90-R7NNC8 | K K K M S K F L Q G H K L |
| UniRef90-D9S312 | RRRMKATEFLVGHVLNEGELF |
| UniRef90-B2JJU4 | GKRLPVRDFLAGSTLA A GQRF |
| UniRef90_UPI00040B6E31 | GKPLLTIE QYiN GHKIEKK K K L |
| UniRef90_F5LF67 | KKAMEAA QLVRGSSMEKGTVL |
| UniRef90-Q3AC19 | GKKMSWESFLNGYRPLVGETF |
| UniRef90-W5YDB5 | R GMMEAA DFLRGQAVTPGTRLL |
| UniRef90-W6N4R1 | K R CMSVDEYI R G N S I EKGLIL |
| UniRef90_UPI0003B50DD9 | K R PMAAGDLL R GWK |
| UniRef90-UPI0003726A69 | GKA】S I A D W C |
| UniRef90-N9VM68 | KKPMTV Q D L L S R R F TVGT T L |
| UniRef90-D3E5T3 | KKAMDAA QFVRGTS LT A GTVL |
| UniRef90_UPI0004724B25 | K K R M D D D FLRGNRL NP |
| UniRef90_R6ZR77 | K K R V L TREFL L G Y Q V E |
| UniRef90-UPI000421D38A | GKALSSVTEFLNGRSL A GEHF |
| UniRef90-W4F0F2 |  |
| UniRef90_Q1IH35 | G K A L A F S DLFNS R R |
| UniRef90-I8U592 | KKPMSAADFLNGRALAVGQQL |
| UniRef90_B9J8C6 | GKPMAAADFLRGTPVAAGT |
| UniRef90_UPI00037C1B9D |  |
| UniRef90_UPI00047D242B | GKRMNAAAFAA GRSQLI GECLL |
| UniRef90_F8GHW6 | GKKLSS A DFLA GNNLQPGENF |
| UniRef90-F7QG70 | K P P M K A A F L N GTPLKP |
| UniRef90-R5F312 | K K R M D P A F L R G P P P |
| UniRef90-H8KRE7 | KKRMKVDEFLRGYRLS |
| UniRef90-R5RM55 | KKRMETEAFLR GYKVERGKRLL |
| UniRef90_UPI0004786 | $R \mathrm{RTMPADDWARGQRLRVGLRL}$ |
| UniRef90-A3UFC4 | K G VM DAK A F L N G VDVVPK G TVL |
| UniRef90-R5LID5 | GKHMDVEAFLRGKKPAKGTVL |
| UniRef90-UPI00036B6E8D | SRRMPA GEFLRGFPVSAGERF |
| UniRef90_UPI0004640D0D | GKRLPASEFLRGFPLQPGMVL |
| UniRef90_UPI0003809639 |  |
| UniRef90-UPI0003811532 | KKS L $\quad$ PVSEWLK GTQPQVGERF |
| UniRef90-K2NP91 | GKPMEARDFLRGAKLERGTRLL |
| UniRef90_UPI0004759086 | GKPLDAFADVYNSRRFAVGTVL |
| UniRef90_D8MPI7 | GVYMQGS Q L A Q T L G V |
| UniRef90-F7NQW5 | KKAMKVMDFLNGRAFQPGQ\L |
| UniRef90_D4GNT0 | GESVT G T T LA GQLGLIVGQHL |
| UniRef90-F2J2P8 | $K K P M S G A E F Q R G A K L Q A G V V L$ |
| UniRef90_R8B0D0 | ARAQTANDLINGGKLLPGQEL |
| UniRef90_Q62MT4 | GKRDPAREFLA GAPLAVGQRF |
| UniRef90-R4K. | KKAMRVNDYIR GNTI EAGVVL |
| UniRef90-K6BWC5 | GL L Y LS GVQQLAREFGLVQGSRL |
| UniRef90_UPI00035E4C2A | GKRLP V VA W WLR GFELPA G SVL |
| UniRef90-R5JZV6 | KKPMDCAAFLAGNKLKTGQ |
| UniRef90-LOFB34 UniRef90 ${ }^{-}$B9EB94 | KKTMPARDFFLGRHAHVGEGF KKRMDAASFVAGAKSQVGMKF |

UniRef90 UPI000468A535 UniRef90－E9SEQ5 UniRef90－UPIIOOO46EE9BB UniRef90＿UPIOOO34854A0 UniRef90－H3VNN2 UniRef90－G2FUS7
UniRef90－U2Q4M5 UniRef90－R9PFH4 UniRef90＿UPIo003653AF1 UniRef90－R5QU05 UniRef90－E6WJ86 UniRef90－Q11US5 UniRef90－I8SEZ3 UniRef90－UPIo0046FD64D UniRef90－UPIO002881E7D UniRef90－G5KCRO UniRef90－V4PDN1 1 UniRef90－D5X7S5 UniRef90－UP10003B34DDB UniRef90－TOLGN5 UniRef90－C1DTG6 UniRef90－UPI0003FD4AC5 UniRef90－UP100047EBDD5 UniRef90－K8WGD5 UniRef90－G1W8T1 UniRef90－D7BGV5 UniRef90－R9NUP8 UniRef90－F2NR11 UniRef90－UPI00037A5411 UniRef90 ${ }^{-W 6 L V J 9}$ UniRef90－UPIO00363EF1B UniRef90－F8VHQ1 UniRef90－Q31J85 UniRef90－A4XNB2 UniRef90－W0B6J7 UniRef90－UPIO0047C69AA UniRef90 ${ }^{-}$C9PZI1 UniRef90－B8CHB1 UniRef90－Q1QH77
UniRef90－U7ULU8
UniRef90－B7RJW8
UniRef90－A0Ао37Z9P8 UniRef90－R7DKR0 UniRef90－R9K6Q3 UniRef9O－UPIIOOO28A0115 UniRef90－A0A059E4Q1 UniRef90 ${ }^{-}$F8XRW6 UniRef90－UP1000464FD95 UniRef90－B8E3S3 UniReffo G5JJY5 UniRef90－X7FCK8 UniRef90－B21EV9 UniRef90－UPIO00225A8EC UniRef90＿UPI0003761E3D UniRef90－HOJB24
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UniRef90－B9R1P7 UniRef90＿E6TTP1 UniRef90－N4WQ69 UniRef90－AGFMR5 UniRef90－D9QFK5 UniRef90－U5MP71 1
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Uninefan E2PV30 UniRet90－UPlooo2F37955 UniRef90＿R6CJU4 UniRef90－A0A017HWA6 UniRef90 W7DV96 UniRef90－R5DY33
UniRef90 UPIO003E UniRef90－U2WTG3 UniRef90－U2D7V2 UniRef90－H8LAQO UniRef90－S2XJW2 UniRef90－U5QACO UniRef90－A1S1J8
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QPWPGAFTMFRGKKLIAH
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PFPGAWFETGGTRIKVL

D P WPSAYTY LDDGKTLKI W
NP FP D $\quad$ Y S Y Y E D K MM K V L


RPWPAAHTDWEGKRFKI Y
PFPGAWTASPAGRIGLL
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D P WP L C H T A L A G E P L $\quad$ K V $V$ W

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| $P$ | $V$ | $K$ |


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        P F P GA WF D L A G T RVVKVL
    
D P WP GAFCRYNGANMKLW
P F A G GF T I WN DEVVFK V W

P DAVGNTTFRRGKRMN L


DPFPGMTAPLGTETLKLW


NPWPSAFTHFNGKLLLK
D P WP GACTT WA GRVL K I W

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UniRef90_UPI000468A535 UniRef90-E9SEQ5 UniRef90-UPIIOOO46EE9BB UniRef90_UPIO0034854A0 UniRef90-H3VNN2 UniRef90-G2FUS7
UniRef90 $\mathrm{U} 2 \mathrm{Q4M5}$ UniRef90-U2Q4M5
UniRef90 R9PFH4 UniRef90 UPIOOO3653AF1 UniRef90-R5QU05 UniRef90-E6WJ86 UniRet90-Q11US5 UniRef90-18SEZ3 UniRef90-UPIO0046FD64D UniRef90-UPI0002881E7D UniRef90-G5KCRO UniRef90 -V4PDN1 1 UniRef90-D5X7S5 UniRef90-UP10003B34DDB UniRef90-TOLGN5
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| UniRef90－19W9K5 | GKRLPAQAFLQ |
| UniRef90－R7E | K GKMSAGEFIR |
| UniRef90－M7N8B4 | KRRMSTEEFLR |
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| UniRef90－UPI0003B5 | GKALAFSDLL N |
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| UniRef90－H1PM49 | KKSMKSGDYLRGNKL |
| UniRef90＿W2UHW2 | K SRMAVTEVLK |
| UniRef90－R6T68 | KKQMSAADFLNGR |
| UniRef90－D0BMY1 | KAKMSSDAFMN |
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| UniRef90－UPI00046900CE | KKQMKAADLL |
| UniRef90－L7WWQ0 | K K R M QVANYL S |
| UniRef90－UPI0003790547 | RKA $\square$ P V A A F LPGFS |
| UniRef90－H0QZG1 | KKQMAAADWARGAR |
| UniRef90－UPI00047E59A0 | K K R A D WARGA |
| UniRef90－D4K3Z4 | KKPMDGTSFAAGL |
| UniRef90＿UPI00034D08D3 | GKRIISAADYLN |
| UniRef90－E1QDU1 | KRRLPAAEFLRGAR |
| UniRef90－N6X998 | SKRLPAGEFLRGFP |
| UniRef90－UPI00039B423B | R |
| UniRef90＿Q47R04 | K |
| UniRef90＿UPIO003F564DC | GKRMS |
| UniRef90－H7CUA9 | GKPLEVKEFLK G NK】EKG\IL |
| UniRef90－Q49WZ7 | K K RMLTANYLS GVQTSVGKVL |
| UniRef90－Q0A5C0 | GRPLGVREFLNGRAL |
| UniRef90－K2E | KKVI DASCWYNGAR |
| UniRef90＿UPI00035F0E20 | GKVLDADDFRRG |
| UniRef90－N1ZMD8 | KKRMGADAY $\quad$ R ${ }^{\text {R }}$ |
| UniRef90－UPI000375EB3D | K |
| UniRef90＿K2LN45 | K S VMD T D A VLRGYKL |
| UniRef90－UPI00047887BB | RKSMAAADWMRGMDH |
| UniRef90＿UPI00036EC2A6 | SKPLLAVAEFTKARSLL GERF |
| UniRef90＿UPI00 | K K R M PVADFLR G NQ |
| UniRef90－N9ESV5 | GKALNSKQMLQTQ |
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| UniRef90－G4L3S3 | RSKQKDANFLNGAGIALGEQ |
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| UniRef90－DOKVS2 | GKRISAAD |
| UniRef90＿F6EMG0 | A A A WSRGAR |
| UniRef90－14BVW9 | KPP $\square$ D GRSFLNGLHLREGDV |
| UniRef90－W2BVC1 |  |
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| UniRef90－B1C5S2 | KKKMDAASFYNGNR |
| UniRef90－UPI0003F71 | RGVMTSAELLRGFTIPVGTRL |
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| UniRef90－V5XUE2 | K A K Q L I Q E F L G Q |
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| UniRef90－K1XRT2 |  |
| UniRef90＿E7RT11 | K K R M A K D F L N GMH |
| UniRef90－J2JT99 | K K P MKAAD WARGVR |
| UniRef90＿UPI0002EE40CE | RRRMTTEELLRGF |
| UniRef90－A3JYF6 | $L \mathrm{R}$ G L P L P K G |
| UniRef90－G9PE65 | KKWMDAAA WARGARLAEHTV |
| UniRef90＿F4KMX6 |  |
| UniRef90－A8YVW2 | KKKMD ${ }^{\text {K K N F L NGQG }}$ |
| UniRef90＿UPI0003ACFFCD | KRRMAATD WI |
| UniRef90－R5BZT4 | K K R M D VK |
| UniRef90－W5Y0Y1 | KKRMRASDWARG |
| UniRef90－UPI00047A138B | KKAMNVEDY\R |
| UniRef90－UPI0002196EDA | KPQKSITEYLN |
| UniRef90－U2QRA6 | S GTDUING |
| UniRef90－UPI0002FA9467 | K K PMNAADWAR |
| UniRef90－A6LCS5 | K K R M ${ }^{\text {DT }}$ T F |
| UniRef90－UPI00036F4A55 | GRR\S GREFLS GHPVAPGMV |
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UniRef90＿R6EH99
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UniRef90－W4UME3 UniRef90－UPIO003B39F7D UniRef90＿UPI0003A3B920 UniRef90－FOSLUO
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P W P V A Y T T
P FPGLLASTLLRGTVVKFW
PYPAAWCFFT DNNQK

PEPGAM T ${ }^{30}$ FFRGKTLIKV｜F
 PYPGAWVVLNGKEMMVF



 NPFPGTVFDKDGVPVKI W
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$P F P G S A T L Y N G Q K L T L D T M$


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                                    YPNCTT GFRNQPL L K I T
                                    YPVAWTHFTNGKATI T
                                    P Y P GA WC WVVDEKKRMK L
    
P FP GA N S P L D GEEI K L W


PDPGAWSTFRDERLKLG

P Y P A A WCFFSDKNEDI Y



E H A RV R WS A P A E DV A RAI R A
E GQI DWHGDAQSI ERLI RAF
EMSPVDWTRSAHEI ACQVRGG
EA A HI R WD L P A L A I GRRI R AVT


E DARVRWSDPAFAVDRRIRACT PAP GPWTTFRGERVVKLG

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$P$ WP IAA E A S L A GERRVR
PYPAA WT E L L A R R QV L L

P Y P GA YF V YNNEVVKV
P Y P A A WT H LLK N GEEEEEIV F

PYP GA WT T L K E TVL K I I F
D P
N $P$



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| :---: | :---: |
| UniRef90－E3H6U2 | KKKLLTGPDLVNGNYFS I GEKF |
| UniRef90－T0F7Q0 | K NRMSAADFLNGFRDTEEDRF |
| UniRef90－UPI00047B38BA | KKPMPAAD WARGTRI |
| UniRef90－R5PRQ9 | KKRMSAKDF ${ }^{\text {K }}$ NGQRL |
| UniRef90－A9B2Z9 | KRPMAANDWRR |
| UniRef90＿O87726 | KKAMSVQDIL N S R AFEVGTLLL |
| UniRef90＿UPI00046E7B80 | K K R LP IS A FL NGSPDSEGAYF |
| UniRef90－W4HN88 | RGAQDAET ILRGMA |
| UniRef90－UPI00035D144E | K K R M Y $\square \mathrm{EDFL}$ L R GY |
| UniRef90－D2B6L9 | KRLMGAGEWARGVRPADEDRL |
| UniRef90－H0HJP1 | GKPVTAEQFLRGAKARKGMKL |
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| UniRef90－C7Q4N9 | KRRMPAAD WARGLLRLTGDEAF |
| UniRef90－UPI00035D07F6 | KRMMNAADWARGAN PAGEVF |
| UniRef90－K1Z305 | K GPMKAKDF ${ }^{\text {P }}$ |
| UniRef90＿U1ESX6 | K K R ML ${ }^{\text {a A A Y }}$ L S |
| UniRef90－S9ZIL6 | SKRLLPA GEFLH GFAVCAGERF |
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| UniRef90－F3J |  |
| UniRef90－W9GET7 | K R P T PAADWARGTRDEPGERF |
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| UniRef90＿K1JVQ7 | KPKMAF GPFLQSLPFTVGEV |
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| UniRef90＿UPI000372FF93 | GRRQTAEQFI Q GWR |
| UniRef90－UPI000469F25E | K K R M D S S FL N GFK |
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| UniRef90－Q3Z614 | K A A CSAADFLRGQRHFDGVNL |
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| UniRef90＿A4AWJ5 | K R R M D $\square$ R D V L N G L K L S K |
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| UniRef90－J9GIR1 | K K R L K I |
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| UniRef90－UPI0003B39F7D | K K ILQTNNFLTGYKIKKGE\｜L |
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| UniRef90－G2KTI7 |  |
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| UniRef90－A3XIH9 | KKRMPVKDLLNGFTFQ |
| UniRef90＿D6YS11 | KKAMAPVELFRG |
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| UniRef90－UPI000361667B | GKRLDPVADFLHGFDLKPGQAF |
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| UniRef90－H5XAQ1 | KKRLPATDWARGARIEQKERL |
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| UniRef90＿V9XE85 | K K A M A T D WARGAR |
| UniRef90－I1YU40 | K K R M D S R F L N GFK QVEEYRL |
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| UniRef90－UPI0003B4AFC6 | KKMMNAADWARGF |
| UniRef90－UPI00047A9F3C |  |
| UniRef90＿UPI00037466D1 | K K R MPAT D WAR GVVIIEQGTVL |
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| UniRef90－H5WKT5 | GKRLLPVAAFVAAQPPAAGQVL |
| UniRef90－B4SKH6 |  |
| UniRef90－J9F6Q6 | KKRMQVTDFLRGYR TAGT |
| UniRef90＿14B602 | K K P M AVADFMNGYRLLD G D R |
| UniRef90－UPI0002DCC41F | KRRMSARDLLPGMR |
| UniRef90－F7XWZ8 | R K M $\square$ H T E AFLR GFP ${ }^{\text {P }}$ P |
| UniRef90－G0L2E8 | KRKMKTKDVLNGLKI EKNAQM |
| UniRef90－UPI00047AD8E9 | KRRMATEAVLNGLNLPENA】F |
| UniRef90－D5EW70 | KKRMNGKDFLNGI |
| UniRef90－W0RKY9 | KARMTPGDWARGRGПEDGDV |
| UniRef90－M1FAX3 | A R A Q SVNDLI NGGKL |
| UniRef90－R9M6K5 | A A Y L $\quad$ g |
| UniRef90－K0F246 | KRMMAA LD WARGARLQPGAEF |
| UniRef90－LODMJ0 | K K P APVAAFLDNGNCVVPGEQL |
| UniRef90－F4F3L7 | KRAMPATD WARGVRVSAGEE |
| UniRef90－R6Z914 | AKRMNDKDFLRGNQI K V G S M |
| UniRef90－UPI00047BD105 | KKRMDAPDWARGA I A Q GE |
|  | K GEMPARDWY N |




| UniRef90＿B2HP60 | $\text { K K L M N A A D WA R G A R LD P S } \mathrm{V}_{\mathrm{R}}^{100}$ |
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| UniRef90－C9LI30 | K K RLLPVADFLRG |
| UniRef90－A0A031LG09 | GKALNAAQULQSQKLQPGQ |
| UniRef90＇UPI000463B71B | KKRMAATDWARGTRIEQGERL |
| UniRef90－N8ZKA4 | GKALLNAVQVMQAQKLEDGQVL |
| UniRef90－Q824Q3 | K GAMDSKTFLNGH |
| UniRef90－G7CG19 | KKPMNAPD WARGARL |
| UniRef90＿G8UN50 | K K R M A A S F L $\mathrm{NG口AL}$ |
| UniRef90－A0A022LJ57 | KRMMNAVD WARGARLDDGAEF |
| UniRef90－M3IKA6 | KKPVDASAYLNGKRLG $\square$ G D $\square$ |
| UniRef90－I3BUL6 | GKRLSAEQFL NGRS |
| UniRef90－R5CFY2 | K K RLK T DELLRGFH |
| UniRef90－I2JEN6 | GK\LAAKDVLNSRQFAPGTL |
| UniRef90－V6STA4 | K K RMLTHELLNG】T F TENAI |
| UniRef90－R5CVB5 | KKRMKAADYL |
| UniRef90＿R7MJK6 | SKRMKTADFLRGKKLI K G TVL |
| UniRef90＿UPI0002FD00B7 | KKPMAALD WARG |
| UniRef90－E4KNY1 | K K R M P VKQ ${ }^{\text {L }} \mathrm{L}$ NGM |
| UniRef90＿UPI00036B82C4 | K K TMRAADWARGLTLLAEKEAL |
| UniRef90－UPI0004781DF9 | KKLMKALDWARGARL |
| UniRef90－UPI00046FF9F7 | T R PLEVKELL |
| UniRef90－R6XA90 |  |
| UniRef90－X5KQ77 | K K R M T L K F L NG |
| UniRef90－UPI000478053C | KKMMDAMAWI RGLLGTAEGMKF |
| UniRef90－UPI000373A2E3 | KKAMDATAFVCG |
| UniRef90－B5JST1 | GKPMDASAFANAVDLS GQVL |
| UniRef90－T1AAW4 | A RPLLTAREWLRGMHTISGDRL |
| UniRef90－13TP49 | RKPMTLDDLARGFPVAPGARL |
| UniRef90－N9MB30 |  |
| UniRef90＿UPI00035C1A00 | K R R M S TEEFLRGNKL |
| UniRef90－A0Z2Z7 | AKALLPVVDLNGHQLAKNQQF |
| UniRef90＿C3PG27 | KKMMNAADWGRGL |
| UniRef90－W4LLE3 | RRRMTAQAFAQGYRLRQGDCF |
| UniRef90－G0GEZ1 | R NPLLGWEEFLNGMPDLVGLRL |
| UniRef90＿UPI000375EB81 |  |
| UniRef90－E8MXM7 | K R A M D GKDFLRGAR |
| UniRef90＿UPI00037C2969 | K K R L L A V R ELL L G |
| UniRef90－K6Y7R3 | KKPMTVADILNARQFVVGQKL |
| UniRef90－X8AM97 | KKFMNAVD WARGARLDPAVR |
| UniRef90－C2M568 | KKRMTAQEFLNGFHFTEGDFF |
| UniRef90－K1ZRE7 | KKSTD $\mathrm{K}_{\text {K }}$ AFLNGHKNF |
| UniRef90－B0S8N4 | KKPMKGFEFFNGAR |
| UniRef90－Q3ATB5 | RKPMEAADFARGLHVEEGEAL |
| UniRef90＿10W8L0 |  |
| UniRef90＿UPI0003477E14 | KRAMAAVD WARGVRPTEDDRL |
| UniRef90－E4UE30 |  |
| UniRef90－U7KLJ2 | KKMMNAAD WARGDG |
| UniRef90－S5R883 | KKK $\square$ S A TEF $\square \mathrm{NG}$ |
| UniRef90＿UPI00037909F2 | KRAMAAAD WARGARLEPGLRLL |
| UniRef90－C8W071 | CKRMMTADFLR GKQIPEGRCL |
| UniRef90－R6B5N7 | KKRMEARDFLNGMR |
| UniRef90－G7V9R3 | RKRQDGAS WFLGA GL |
| UniRef90－K9T3K1 | KPPRSGWDFVNGTRLAVGEVL |
| UniRef90＿X5DTW8 | KKMMAAADWARGR |
| UniRef90－M1ZC35 | KKK LiNVSEYLR GNQLDSNDRL |
| UniRef90－A8LLC0 | RKAADAAEILRGMTLPA |
| UniRef90＿UPI00040587E6 | KKKMDAKSLLNGFRFDENAKM |
| UniRef90－F5YUR1 | KKFMDAADWARGARLT GAR |
| UniRef90－UPI00026C9BAE | RGVMTTDELLRGFPIPAGTQL |
| UniRef90－UPI0002F0C9FB | K R A M K I D D F R G NK |
| UniRef90＿R7K6F3 | GRKMD ${ }^{\text {K K S F }}$ |
| UniRef90－E3B703 | K K VMRAA D WARGDR $\square$ N E GES F |
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| UniRef90－UPI00047DEA09 |  |
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| UniRef90－C0W3L3 | K K WMAADA WARGAHPAAGAVL |
| UniRef90－R6J294 |  |
| UniRef90－H9Ul35 | K K NLD WRSFCNGAGDLTG R I F |
| UniRef90－C2GHU1 | KKMMDAPSWGRGVQQQDG®V |
| UniRef90＿R5A5G6 | K K EMLVS C Y ${ }^{\text {L }}$ |
| UniRef90－UPI0003FD5AF8 | KR\QSAWDFVNGTRDAVGE\｜L |
| UniRef90－A0A024PYP7 | GKPLAVRDLLNGERFAPGQQL |
| UniRef90－UPI000368B489 | KKAMA GAD WARGARLTNGQA |
| UniRef90－F6CYV7 | GKRLKVQDALN GKHLEVGKQF |
| UniRef90－B4SBG5 | RKPMEAAEFLRGFRPDAG |
| UniRef90－G6B071 | KKRMAARDYL L GF |
| UniRef90－19WUQ0 | GKK\AAAEFAASGG】ALGQVL |
| UniRef90－UPI000410A1FD | GKRLAVGEFLRGHAMAVGDPL |
| UniRef90－R5ACW6 | GKKMAADAYLRGHEMQTGI |
| UniRef90－K9XR03 | KRPQS GWDFVNGMRLSVGDR |
| UniRef90－G9PY46 | KKPQRAADWARGARIEKGE |
| UniRef90－L8DIY1 | KK L M K A LD WARGA |
| UniRef90＿D1BH16 | KKPMKAADWARGARLDDGLRL |
| UniRef90－R7K827 | GKRMLSEEYLKGHSIKEGACF |
| UniRef90＿V5WFE0 |  |

## UniRef90 K4RFN0

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UniRef90 R7FTV7 UniRef90－TOSK40 UniRef90 E EJJA46 UniRef90－W5W251 UniRef90－UPIOOO348142B UniRef90＿E6YFX7 UniRef90－UPIOOO4796736 UniRef90－K9Q102 UniRef90－N8X0G5 UniRef90－UPIO0034BE72C UniRef90－UPIOOO47800C0
UniRef90－UPIooo2629926 UniRef90－U6BBF9 UniRef90－E4U110 UniRefofo－X1M143 UniRef90 F4XPX1 UniRef90－XopPX4
UniRef90 E1X191 UniRef90－R5YQL4 UniRef90＿UPIooo36B2B82 UniRef90 F5YGU9 UniRef90－E3BR288 UniRef90－K9S8K7 UniRef90－D6ZHB5
UniRef90 B2T3P6 UniRef90－S8FGS5 UniRef90 V5UK59 UniRef90－Q0KOP8 UniRef90－C0W1K4 UniRef90－D2MQF4 UniRef90－UP10002EC4962 UniRef90－U5DJB9 UniRef9O－UPIIO003A68513 UniRef90－UPIo0034A4901 UniRef90－KONRW3 UniRef90－W0DF67 UniRef90－M9R6U9
UniRef90
D1AX31 UniRef90－S6GMG7 UniRef90 UP100036A7FDC UniRef90－F9DI54
UniRef90
A6Q4C9 UniRef90－B8ZUM6 UniRef90＿L7LEM3
UniRet90－B9NWG0 UniRef90－X1MF73 UniRef90－F3XP17 UniRef90－S2Z1A8
 UniRef90－S3ZQG5


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 EDGEI NWSAS T RS I D CLI R ALLVA P F P GA Y T H L L GRKL LI W


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$E$ <br> E T}

ARVRWDLPAAVVERRI RAVT
E D Q E L L $P N P G A W T L I G D L R V K L G$
 PAPGAWTTHAGTRFVKVA P WP LCA TKHA GQVLYI L

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K
ロマ NP DPGA Y L M M I N G Q R M M K V V D P WP $\square$ S HTFI NGERYK I K

 PAPGPWTTFRGARVKL G
 $P$ VP GC WC $\square$ MN H E R V K P WPGCVSTERGQK LKVL
$L_{\text {S }}^{S}$
$A{ }_{P}^{N}$
$C D$
$V$
$S$ ${ }_{P}$ NPWP S CYT WWQGKR L K $\begin{array}{lllllllllll}P & A & \text { G } & \text { A } & \text { WT T } & \text { F R G A R } & L & K & L & G \\ M & P & A & \text { W } & \text { T } & M & D & G & K & T & L \\ K & V & Y\end{array}$ NPWP VAF $\square Q L E T E N L R V W$


 NPFPSTYTMMLGDDRLVKV K $P W P G \square F T E S G L K$ I $\quad$ K
 $P D P G A Y T Y F E G Q R L K V W$ $\begin{array}{lllllllllllll}P & W P & G & T & W C & K & L & N & G & K & R & L & K \\ P & V & F \\ P & E & P & C & Y & F & N & L & N & N & E & R & V \\ K & I & Y\end{array}$ NPWP V T WA L L D GQ P E AELD DFTRAAKELAARIRAF
 P Q
P W Y F L WSQPA DA LNQVRGF YPACVTIFREAPLKVM





E EEMMV H F Q R D V V Q L Y N H I R A L Y D $\square$ T PA
$P$ M
DYA
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## UniRef90 K4RFN0

 UniRef90_UPI000465BCA2 UniRef90-UPI0003B47A99 UniRef90-UPI0003462FDF UniRef90_W6FR92 UniRef90_R6YAV9 UniRef90_P64135 UniRef90_E0NPX7 UniRef90_A0A023X2R9 UniRef90_C4KN90 UniRef90_M0QK02 UniRef90_F8F3S5UniRef90 B1XSN1 UniRef90_E4RVS7 UniRef90_J9YXZ3 UniRef90_U2HW82 UniRef90_Q0RF89 UniRef90_UPI00047DAFC9 UniRef90_U2S1D0 UniRef90_A4FD48 UniRef90_UPI00036A8766 UniRef90_X1GJL0 UniRef90_UPI00034861A7 UniRef90-B3EE18 UniRef90_V2TF41 UniRef90_C7M6H0 UniRef90_L8M1U6 UniRef90_A0A022L3A7 UniRef90_K9PRH0 UniRef90_X1MYX0 UniRef90_Q6A8H1 UniRef90_UPI00035D5143 UniRef90_G4D494 UniRef90-Q2J845 UniRef90_UPI00047B011E UniRef90_R7GBT6 UniRef90_R7FTV7 UniRef90_T0SK40 UniRef90_E3JA46
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UniRef90 UPI0002629926 UniRef90_U6BBF9 UniRef90_E4U1IO UniRef90- X1M143 UniRef90_F4XPX1 UniRef90-X0PPX4
UniRef90-E1X191 UniRef90_R5YQL4 UniRef90_UPI00036B2B82 UniRef90_F5YGU9 UniRef90-E3BR28 UniRef90_K9S8K7 UniRef90_D6ZHB5 UniRef90_B2T3P6 UniRef90_S8FGS5 UniRef90_V5UK59
UniRef90_Q0K0P8 UniRef90_R5E4I5 UniRef90_C0W1K4 UniRef90_D2MQF4 UniRef90_UPI0002EC4962 UniRef90_U5DJB9 UniRef90_UPI0003A68513 UniRef90_UPI00034A4901 UniRef90_KONRW3 UniRef90_W0DF67 UniRef90-M9R6U9 UniRef90_D1AX31
UniRef90_S6GMG7 UniRef90_UPI00036A7FDC UniRef90_F9DI54 UniRef90_B8ZUM6 UniRef90_L7LEM3
UniRef90_B9NWG0 UniRef90_X1MF73 UniRef90_F3XP17 UniRef90_S2Z1A8
UniRef90 UPI0003 UniRef90_B3Z1U6 UniRef90_S3ZQG5
UniRef90_H6QZT9

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K A A|V|SQGRYGGTPGR|I FEGDG|VVIVAGAGA|LLVQR|V|RTED






 T T R V


 KAKVSFFE GESGKILLQSPLII GCKQNSLELILEI QAEG

 AASPVPAGSDETPGTVVRNPGVCVRTRDGWIRRLETVQPS G

 $K A A L L S K P A K G R M G Q V I A D R G I G V V T G E G D L G L C E V Q L E G$ $P \vee T P V T D T V G G P D A L A D V E K Y Q V L V G T A T H P V R L G D V Q A Q G$
 QA GETK TVH QEKVGTIV QDD GVTVLDCGDHTITTL TQQLQWPG

 A T A P F D F DYVVHEPGEVVVS VVK GVVQTGGGLLLAREVQQAG KAKASNPEPPAVAGLVFQDKKTAALAGSGSLVVEKLLQLEG $R T R V P S T V A T A Q P G Q L V A T R K L F L G T G S Q P L E L L Q V Q A F G$ QASVVAGQS GAAGTLVDKKQLIVNCGQNSLSLAVI QLPG $K$ V E K A E N V Y GK DA GEEL L D D
 S T R L I T E D E H HLLP G E I V A M D Gll I V K T T D G F I

 $P V R P A A V Q T P L P P G Q L V V A G K V A V G T G T T A V L L G E V V R P E G$
 Q S I P L S A R L L R D D N D K K P G E DTVVPI T P P E C K G N V G Q V V A lic K L I V Q T G N G L I L L K Q V M P A G
 QAK QL L H D E ELAE P G L V L S
F ATKV
K GTGRPGEI IEADGPVIATGETALKLDDLQPS G E M R L E D E S S S G E A GVI I D K E GVVVV Q CK K G S L K I T R V Q A P S K A NVLLK F DESEEKNGLVVEAD KI LVVKCKNEMLKI ELLLQPQD




 ATAPISAATAGQPGEVVALLDPVIQTGDGLLLLQQVQMAG


 MAFAEPGKKTGEPGTVISAKGILVACGDSVLVRITRLQRPG $R T Q V A D C P V A L Q P G Q V H A T K K V V V G T A D G V L E L L A V A P A B$

 $K$ V E H V N K I H S L N DG S SFE HK S I GV A VN D G F V Y L K E L Q L P G
 A A EVVAE DN T S L L A G C L V S Q GRF A I S F A D S V L K A GA A




 VKDNKLIIKKLQPE G
 $P$ F GMTDENTLAPGHVV F GKREVRVGTATTDVLLGGTVRPH G EA QLA EGEGLD GQVIVKTKLVI ATGQGALISLIVVQPAG


90
GTEHAATDYFRTMG
KKEVKA VDY $\square \mathrm{NGKRDK} \mathrm{\square GD}$
KKPMPAADWWRGAG
KPVTSANDFANGLG
EEKTAAANDIKSVKSTLG
KKAMRAAD WARGAHLSP
SKKMN ILDFDRGNNIQAGNMF
KK L M NAAD WARGARL
KKRMSGRDFLNGFR
ARRMEAAEFLRGREL
EAVVSPAQFAQ
KKQMPAAD WARGAR LTDGAEL KKALDWVNFLNGAKQFDGSKL GKKMAAKACIQ P DGAGEKL KKRMGTEEFLRGYRF
KKPQS $\square$ DQFLLGN
KKRMDAAA WARGNQPE
RGPMKAADWARGARLTDDDLL
KRRMSAEDWMRGM
KKRMPVVNFLSNMKDYVGLIL
GTELAAADYFTSMG
KKKMDAADWARG
KRAMPVA
KRMMSAVDWARGVRPGPDERL
KK $\square$ MEAQEF L RGFRYE
GKPLNTQQUI QTNKLS $\quad$ GQ L
 $K K A Q S G W D F V N G M R$
$K R P M R G A D W A R G A S L$
KRPQSGWDFVNGTRLTVGEVF KKALSSGEFLNGYPQUI GDDL KRAMSGADWARG
GKALDDIDALLMN
KKRMDSKSFMLGNS LEKGDVL RGPMAAAAWARGVRI AKGETL KKKMAGRDYMNGKGLKLGEVF KPMSDAGDYKNLQDLKIGMVF


KAPMPAAAWARGURPTDGEAF
GTEDPATEYFRTMG
KKLQSAWNF $\operatorname{LGNGSHLK} \square G E K L$ GKLLDRATFLRGANISA
K S M N A GLYFRLTMLRDGDVF

$K K M M S A Y D F A Q S R P V$
KREMAAADWARGAGLAPGTAF
KKRMDGATFMRGDGLEDGQQ
KQETSVVDYLNGKRI GCG

KRAQSAWDFANGMRLEVGEVEL
KKRCSDTSLINGMK
KKMMEFKDYLNGDK
GKPLAARDLLNSRRFSPG $\square R \square$
KKALAWRDFLNGAR
KKP AA AKDFINGQGFKVGEK
RKVMDYKSFYNGNRDLIGKKIF
$K R P Q S G W D F A N G A R L D G E T L$
$K K P M P A D A W A R G A H L E S G A K F$
$K K P M P A D A W A R$
$S E V V T P A E F A Q$
KRRME $\square G D F \square R G F R P E$
GKPVTPEQF
GSALTPQAFA
GKQLLDVRD $\square$ A GHAFSKGEVL
KNQMEAAAWARGARLEENMLL
KKAMDAKSVMNGLG
HPQMA $\square$ TD F L N GAQFEVG
KKPQSGWDFVNGTRVRVGERL
KKRMQALALVNGMG
KRSQSGWDFVNGMRDQEGTK
KKAMKVKDFLNGQGFNAGDQ
GKRVS GEEFLK GYR
KKTASARDVLQG
 KNVVSIKDFNNAYQL
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RKPMAAADWGRGLSDPP
KPKMS I I DF L N G RK DEVGD
GSEYA ATDYFRTMG
GTEHDGAEFFR

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UniRef90_UPI0003 UniRef90_D9VH04 UniRef90_UPI00040F47B9 UniRef90_Q725Q9 UniRef90_UPI0004265327 UniRef90_G8M8V9 UniRef90_D3PDC5
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UniRef90-G0AH47
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UniRef90 T1BHX6 UniRef90-T1BHX6 UniRef90_UPIO003650CDC UniRef90_B8HUR2 UniRef90-T1BWG8 UniRef90_X1SME5 UniRef90_G7SQM8
UniRef90_UPI0003346540 UniRef90_UPI00037297C4 UniRef90_LOB6T5 UniRef90_UPI000479990A UniRef90_D8IT27 UniRef90_V8C6Y5 UniRef90_M4VEY7
UniRef90_Q9REQ1 UniRef90-U3Q948 UniRef90-F4GUD6 UniRef90-H0FCX6 UniRef90_IOROF3 UniRef90_D4H4C7 UniRef90_I7KFY0
36BDBE
 E D GEIDD WRMSSSS S V Y NL V R A L T H P Y P GA H C TVVNGREVVKI W

## E

 P Y P A S WT I L Y

 | $V$ | $H$ | $L$ | $V$ | $R$ | $A$ | $V$ | $T$ | $E$ | $P$ | $Y$ | $P$ | $G$ | $A$ | $F$ | $T$ | $F$ | $L$ | $G$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $R$ | $K$ | $M$ | $I$ | $W$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $I$ | $Y$ | $N$ | $F$ | $V$ | $R$ | $G$ | $L$ | $N$ | $P$ | $Y$ | $P$ | $G$ | $V$ | $W$ | $V$ | $M$ | $H$ | $N$ |
| $K$ | $I$ | $D$ | $M$ | $Y$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $M C Q \prod N R R K G N R S I Y N F V R G L$ E E E H L L L S M T A Q E I D W W V R A L $\quad$ R P A P GAFFFDFA GK RT K L W




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EEQITLDDMSAAAI DYKVRAL R


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$A F$
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$A$
$A$

| $T$ | $S$ | $K$ | $N$ | $I$ | $V$ | $N$ | $K$ | $V$ |
| :---: | :---: | :---: | :---: | :---: | :--- | :--- | :--- | :--- |
|  | $R$ | $G$ | $L$ | $S$ |  |  |  |  |
| $S$ | $M$ | $K$ | $I$ | $Y$ | $N$ | $H$ | $I$ | $R$ |
| $R$ | $L$ | $S$ |  |  |  |  |  |  |





 ETCKI I NWETN GTA I E QLI R GMM P

E

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E D

## E

 PEPGAHTTFDGARLKVL

\section*{D} | $R$ | $A$ | $A$ |
| :--- | :--- | :--- |
| $R$ | G | P |

 NP $\square \mathrm{MGA}$ G S FYD GKK I K F W YPNCVT TFRQQPLKVL $N P$
$D P$

\section*{E

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## E E D D E <br> E D



E
ECEVDWFQDAQUVVQKVRAFTS
EDSRID WAWTAEELDRLIRAQS D
$\qquad$ WP QTTAAFF GGKR L K K
 EEAPDRWSDDASSSIVRRIRAF NPFPGATAVMQGETVKVW GLI DWS QPAESNIRRKIFA CQPWPGTWTYYQFKRLA A C

D S ALDFSQPAAALAARINGF FPWPACSVE $\square$ NGQPI RFG
 E

UniRef90_UPI00036D9C29


| UniRe | RNQMKLADM空RGFTDDVGTTL |
| :---: | :---: |
| UniRef90－A0AO22 2 H640 | GTAAPV |
| O－Q2S4Y5 |  |
| UniRef90 UPIO002893E0B |  |
| UniRet90 UPIO004677773 | KRKMK |
| UniRet90－R6／ | SKRMNA |
| UniRet90－UPIO0031FE31B |  |
| UniRet90－M2WTM4 | GTEMTGREFF |
| UniRef90－13YR76 | KKRLPVREL |
| UniRe990＿K1LN52 | KKKMPVSEFLKGQNLIKEGQQF |
| Ret90＿UPIOOO4195 |  |
| UniRef90－A0AO31 |  |
| U2 | KKRMAAKDFLGFH |
| UniRef90－UPL0003673932 | KOKLAVTDYL |
| UniRef90－A2W906 | STVVTPAEFAQ |
| UniRet90－UPIOOO3B4181B | KRAMAATD WARGVR |
| UniRet90－E60Q |  |
| UniRef90－C7R | KRAMPA |
| UniRet90＿B4SS | K |
| NiReto－${ }^{\text {a }}$ | K |
| UniRef9－UPIO0034DB8A7 | KKPQPAQVWAQGQGVTPGARF |
| UniRef90－M5R8J9 | KREMAAEEF |
| UniRet90＿－ 9 HNL8 | S |
| UniRef90＿UPl00040E5 | A MAA |
| UniRet90 A6GBE | KRRMAPRDYAAGQPFAEGERL |
| UniRef90－D7BNT5 | GWMDA ASWARGARDAGDA |
| UniRef90－L1P9Y0 | KKRMK ${ }^{\text {K }}$ A DMLNGLK |
| UniRef90＿F9SJ41 |  |
| UniRet90＿A6H148 | KMMA |
| UniRet90＿UPIO00347A915 | GAMPAGDWFRGL |
| UniRef90 EOMT | GDKQFANDWAVSVGLAVGDIL |
| UniReeso－${ }^{\text {a }}$ | RMKA |
| UniRef90－K9V4Z3 | KRSQSGWDFVNGV |
| UniRef90－UP1000348 | GKALSVR |
| UniRef90＿D9VH04 |  |
| UniRet90＿UP100040F47B9 | LP |
| UniRet90－Q72509 | RKMLTAELLNGMTFSENAQ |
| UniRef90－G8M8V9 | RPLDA |
| UniRet90－D3PDC5 |  |
| UniRet90＿U2AY23 |  |
| UniRee990 Q9RR | W |
| UniRef90－UP100040C85 | AMRAADWARGARLPESAVL |
| UniRet90－R6XCC2 | KKRMEARDFLNGKD |
| UniRer90－${ }^{\text {UP9YOD73 }}$ | KMMASDF |
| UniRef90－A6DUA3 | KREMDVKDFLLGAGLKNGDNL |
| UniRet90－GOAH47 | V |
| UniRet90＿K6PYW5 | RRPMTPLEMVNGYRLEVGERL |
| UniRef90＿W0J7R9 | MLPAPEFFRGFVLPPGTPL |
| UniRef90－UPIo0029D7： | GKMIPAARFF |
| UniRef90－R9WF |  |
| UniRei90 UPlooo3754D77 |  |
| UniRet90－UPIO003A49DE9 | GTEMSAGEYF |
| UniRef90－D6SQG2 | M ARSF |
| UniRef90＿UPIO004792905 | KMESALLITKGH |
|  | RRPLTPLEMLNGYRLAVGERL |
| UniRef90＿TOYD46 | GKKVDARPFAEEQGLQVGMRL |
| S6G | GKQLSARDLINSKRFSPGNRF |
| UniRet90－UP100036B | KKAQTGADFNGSRLQVGEL |
| UniRet90 U10XW1 | K S WM Da |
| UniRe | RGAMPAPDWWRGLRV |
| 696DC |  |
| UniRet90－T1BH | GS RQPAGVFASG |
| UniRef90 UPIIOOO3650CDC | GKRLAARDFAG |
| Ref90 ${ }^{\text {B8HH}}$ | K |
| UniRef90－C1D | R |
| UniRef90－18WG8 |  |
| UniRef90 X1SME5 |  |
| UniRef90－G7 | MNTKNL |
| UniRer90－UPIO00377297C4 | KPAMSAYAYS |
| UniRef90－LOB6T5 | CNKCSASDFIRGHRLLLGM |
| UniRef90－UPIO00479990A | KKA】CAVDFVRGQRLE\GN】L |
| Ref90＿D81 |  |
| UniRef90－V8C6Y5 | KNKMRASEFLKTRG口K $\square$ GTNL |
| O9 | MKDEDNRGFADPRGTRD |
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 DAR L A P A PVAA P GTVGS D H GLLAI S C A D A WI EVVVSL $G V A P V R A G D D G A P G Q I V A A K A A W L R T A G G A V R L S R V Q P A G$



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G S P
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$K A R S S G Q T L I Q Q L Q A V P G D$
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G $\square \mathrm{K} \mathrm{L}$ PATTVL
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$R N P C N \square E D F V R G \square K S S V A K R F$
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R K L M P A A
GERLEPDA $\square$ A
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 GWI SWHESAETIERMCRALNNRLGLPKFNLGTDFFLVT




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