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K A I I K N V D M A E E M Q Q Q VI D D




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10
10 M E T Q 20
20
30 KA $\operatorname{V}$ K NVDMDK QMERHALELCADAMKRFDLEKDI A S HII
 D R K T NV K L S D DS E E M Q N D A L L V A A R A V D WK V V I T N A D M S E G M Q Q D S V E R A A Q A L E K C S M E K G I A A P S


GRAQ $A$

## D

N Q K
K N A S L S E EMQQD FVECATQT N QKAMMKNAN


DQKAMIKNADMPEEMQSDLAECATQALEKYNTEKD A A M M


E GKA
$V \vee K H V D M D E P T K K F$

GKAVV K K N A DMPDFMQQQDATECT DK A
DLKPVIKNVD
MSEE
DAKAVIKSVDM


VI LKASDL
ESK P I LKASD DS DLT PIVVKSVDMSEEMQTVVLELARTAVTKYTLEKDMAGFL
 GNPVV

V I K N A D MSHQ
E
E
E EGK $\operatorname{Gi}$ KNADMS EMQEYVQQLAGDAFEKFTVEKDIAS Y I
 ATVK LVEMPKDME
MKPSIKSADMKE E GKAVI GSTDMPEKMQARAMEWASEA L L D
K K IQ I KIIADMPDFMQTAA $\square$ I TAKAF

QPVI KNSDMSVVEMQKEVVEVVAKKA DDYCNTDKEDAT F I

 $D R Q V V K F A D M S E L M Q Q H A V D C A N H A F K E K R I D D D I A C D L$
 $K V I V K N T D M N D E M M E D A V R V T A C A M D R E R V D M E V A N F I$
K K P TIM A S D $\quad$ S D E L K D E I L NI S Q D A I E N N E L E R R D I A S S I

$K H V V K L C D M P P D M E Q D A V S T S G D A M G R F D T E K E V A Q Y V$ K P I L K A S D D A A D E LlR D
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ENKAVI KKT DMNLGEMQQAAVDATYAAMEAYEKEK DVAANV
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N Q K VGIK N A D M
A Q I K A A D MND DLA ME
K A A DMP A L L Q E R A F R CA R Q S L D DVM D
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| UniRef90-S9W382 | VL L WK |
| UniRef90_V4M717 | FLI F K S |
| UniRef90-K4CH01 | F L L F K T |
| UniRef90-W1QDR1 | FQLFKT |
| UniRef90-L5MLD4 | V L |
| UniRef90_A8QE54 | 1 M I F K C G |
| UniRef90-M0TGY8 | 1 LLFRTA |
| UniRef90_UPI00032A8C40 | 1 L L F K T |
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| UniRef90-U6IGL6 | FLLFS T |
| UniRef90-U1M8Q0 | 1 LLF F C G |
| UniRef90-G0R029 | VLI FRC |
| UniRef90-D8SY93 | VLLFQTA |
| UniRef90-M0U4Q0 | 1 L L F R A |
| UniRef90-K4ASB3 | V L F R T A |
| UniRef90_B6U3L9 | $\checkmark$ MLFKT |
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| UniRef90-M5WPI6 | VL L F K |
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| UniRef90-W1PHL8 | $\square \mathrm{L}$ L F K |
| UniRef90_UPI000185A573 | FLL F K S G |
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UniRef90_E1ZWU9

| 1 |
| :---: |
| $E$ |
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|  |

EGKATLEDTDMPAKMQLQAMSAASRALDRFNDCWS\|TAHII GKAVVLHAEMDFDVQEDADTVASEALLQCKSVQEVPEYI

 PLI KHSDMNEEMRAEAMELCVTACEKFQSNNEAAAKM $M K A K V N Q S D M K E K M Q Q E A V N A A A Q A D L N E D S A V A V A T S D 1$ P LIR Y S DMNDEMRTEAMELCVTACEKFSNNNETAAKM PI CRHSDMTEEMKVETMELCVTACEKFSTNNETAAKM
 PLVKHSDMDDEMRTEAVDLSDTACEKFSSDYEQAAKV

 EGKVVRSSDMSDFQQTEAARITTEALT IHQKETLVAKTV GKAVIGETDMLQTMQQDATDLASKALDFFDVTE ADEI
 $K P$ LIK S S DMPPEEVVQEAVVEVVTMSVDKFKNYEAAA QLI
 $P$ LVRKCDMPEDMKNEA I ELIVVTACEKHQNSNEMAARV PLVK F CDMS DEVVRA E AV D MA V T A V E K H P G N H E A S S K T
 ECKAVIKNADMHEDMQQDAVDCAS QA





 GKGMV K E T D M GE KM QR KA M A C A S Q A L D L
E
 E Y E VAA DN S S M P T D DVE EYAAAQAAAS E A

PRINF

| $Q Q \square N$ | $V$ | $K$ | $L$ | $C$ | $D$ | $M$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $G K$ | $A T$ | $V$ | $E$ | $D$ | $T$ | $D$ |

 DTSSUVVKESAMRPEEKERAL GWAVEAVNRFDSEMDVARFL
 PLVK H S D M K E E M R H E V V E L S Q S D M P
K RVVIGKSADMF E M MKNECAEVCSAACEKYGNNEACARH I

PLCKYS DMREEMKQEAI EI CVTATEKYTDNHELAARS

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





A RVVKMCDDME D DVLDEDVI K TVVT K R L S Q Y D T E E Q V C E D I

HK P VVTVFCDMNQA QKEFAFETA E HAAFK EK RYG



 I VHKDSSKEMEEFIVNSATNALVAYNHFTEVAQQ\|


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UniRef90-S8E1K5 UniRef90_U6IFS9 UniRef90 ${ }^{-}$K7LUK3 UniRef90-A0A024UVC2 UniRef90-D8M0B0 UniRef90-D7FHG8 UniRef90-J6F3Y5 UniRef90-A2E1Z9 UniRef90-T1HXH5 UniRef90-F4NSI2 UniRef90-G7Y6Q2
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UniRef9O_A4UHB4 UniRef90_A9NMZ6 UniRef90_J9IB05
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 KKEFDKDFSPTWHCIVGKNFG
KKAFDEKRGPTWHCIVGRNFGSFVTH
KKEFDKNHGPTWHClVGRNFGSYVTHETNYFVYFYDDSKA KRHFEKKYHGMWHCCVGRNVACYVTHEQSKFLYFYGGQMA $K D E F E R R F G P T W H C V V G K S F G S R V S Y E M Q H F M L L R R R R V S S$
$K A A F E G L Y P S D W H C F V G R N F G C F V T H E H T K F V Y L Y Q G Q U G$ KETMDKKFGASWHAVVGEGYGFEVTHEVKNMMYMFFGGMA KKEFDAVYGPAWHCI AGKSFGSFVTHSPGGFVYFSADSDF

 KCQLDSLK G GVWWHCAI GEGFGFEGTYYQQRNMUY KKEFDRLYNTTWHCVVGKHFGSFVTH
K LHFDEELYGK DWHCVVGKSFGTFGTHETKNY DY DYYKQTA IKEDDKKYGPSWHTVVGEGYGFHDSYECKTMMYFFAGNLG IKEMDKRCGSSWHVVVGEGFGFEITHEMRNLLHMYFGNGG KKEFDRRYDRDWHCVVGKDFGCYVSHEEDHLVRFYDGGNA KQKFDEAYGPAWHCVVGVDFGSCITHGCGNFIFFRVETME KKEFDSRKGATWHCIVGRNFGSFVTHVC KKEFD $\mathrm{K}_{\mathrm{K}} \mathrm{KN}$ NTWHCIVGRNFGS
 RHRFDEKYGPWWQCIVGSSFGSFVTHRNNHFVYFYI DDFA
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 KKEFDKKHGPTWHCIVGRNFG
 I K EMDKKF GAPWNVVVGQYYS SEEITAEVVKHLLYFF GGQFA I K E E S D N R F G G P F H V V V I G G E S Y A C A V T Y Y Q A T S S L L Y M Y A G N
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 K S EMDS KY G L L WY CV C G H S F G S LV G H E G G D C I Y F S I D D I F

 VK E M D K K F A P N WH CI I G Q G F G F E V M C E R N S L L Y M F L G N L A K NEFDNKF Q GTWHVIV G L H F G S FVVSYE S QCMIHFY I N QL G K F D S R K GATWHCIVGRNFGSFVTHD
K AFFDGKYDPNWMCVVGKDFA SF GTYETKTY LFFY $\square G Q \square A$ KQFFDGKYGPNWHCVVGKGFATHATYEAKTHMFFYQPPLA KKEFDSFYGAGWQCVVGTNFGCFFTHAEGSFIYFFF R D D F D K VF G P S WNVIVVGKNFGS HVVVHQTK S Y L F A S Y G D I Y


UniRef90_E1ZWU9

| UniRef90_T1MVZ4 | $V$ |
| :---: | :---: |
| UniRef90_G7YFW9 | V L L Y K |
| UniRef90-UPI0003F11F77 | 1 L L F K S G |
| UniRef90-B3RPW6 | 1 TVVWKC |
| UniRef90-M1D6J0 | VLLFK |
| UniRef90-T2MHJ9 | V TV WK C |
| UniRef90-U6IGT2 | 1 L LFKSA |
| UniRef90-D7G1V9 | 1 MMYKA G |
| UniRef90-A7SCP2 | $1 \mathrm{Cl} \mathrm{I}^{\text {WK C }}$ |
| UniRef90-UPIOOO4574254 | 1 CVVK C |
| UniRef90-FOVDW0 | FLI WK T |
| UniRef90-E9BE84 | F SMWR |
| UniRef90-T1GXG2 | $\square \mathrm{V}$ A WK C |
| UniRef90-U61925 |  |
| UniRef90-W9CS92 |  |
| UniRef90-W5D498 | VLLFKS G |
| UniRef90-A0A024U2U3 | $\checkmark \vee \mathrm{L}$ F A T A |
| UniRef90-F1LHQ5 | 1 MIFKCG |
| UniRef90-D8LRM6 | V CLFS T A |
| UniRef90-I1FRJO | 1 CL WK C A |
| UniRef90-S8E1K5 | $\checkmark \mathrm{L}$ L F K T |
| UniRef90-U6IFS9 | V M L F K |
| UniRef90_K7LUK3 | LLFRG |
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| UniRef90-D7FHG8 | VLTF K C |
| UniRef90_J6F3Y5 |  |
| UniRef90-A2E1Z9 | V Q LWK C G |
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| UniRef90-G7Y6Q2 | V V L F |
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| UniRef90_Q24CE5 | LL L WK A |
| UniRef90-F1LHP2 | VLLYK S A |
| UniRef90_11M392 | $V$ L F K |
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| UniRef90_G0QMB7 | 1 LLYRKG |
| UniRef90-D7FQ38 | VLLFCS |
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| UniRef90-D2VAK7 | VLVFKG |
| UniRef90_U6HAJ4 | 1 LL F K S A |
| UniRef90-A9XNQ4 |  |
| UniRef90-H2KUD6 | 1 L V WK C |
| UniRef90-Q16UB1 | IVLWK C |
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| UniRef90-Q5BSU0 |  |
| UniRef90_G4V850 | F L L F R |
| UniRef90-J9IRQ2 | FLMFKHG |
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| UniRef90-W6KR36 | V L I W |
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| UniRef90-B4J4N3 | I V L WKC |
| UniRef90-G7YW12 | 1 L L F K A G |
| UniRef90-T11H09 | V CIIWK C A |
| UniRef90-W9RYS3 |  |
| UniRef90-IOYQB7 | VLTWK |
| UniRef90_C1FHN7 | 1 L L WK A |
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| UniRef90_U6HAU7 |  |
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| UniRef90-F1LH62 | V ILF Q C |
| UniRef90-W1P3H8 |  |
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| UniRef90-F2U6N7 | VLVWKC |
| UniRef90_S9U7P3 | FLL WR |
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| UniRef90-L1JKU9 | 1 L L F K |
| UniRef90-A0BN12 | F MIY K F G |
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| UniRef90-A8J5C4 | VL L WK |
| UniRef90-E1ZWU9 | V L V ${ }_{\text {WR T }}$ |

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UniRef90_U6HXU7 UniRef90_A0A016V1G7 UniRef90-X6N5Q2 UniRef90-EOVLC4 UniRef90_V5BTL8
 NRRALMKATDMNETMKMKALSMFFDAYQLNSTDQSIVAEFM EFKAVISQTAMSDSMQQMAAEVSADASDRYNTLVGISKFI
$P L L \underset{K}{K} H_{S}$

EFKKVVQLCDMDMSMLRDVIKDTFSTDEKYNDERDI $K A K V H Q T D M K E V M Q Q E V V D C A R D M C R P E V T P V K V$
$K A \square 1$ KSVDMPDDMQQDAVD $\quad$ CA $\square$ A $\square K K Y T M E K D I A A F M$ VTKGVDMSPER DSFAI EVAKKGYNDLKYWQEVAQML GNVQI DATGMNPEMQQYAVGLAQEADANSPNDMMPAQHL PHILRCDMKREMKQEALGCVRFACRKFKTSKAMAMY GEEVKMVI Q
 AVI HD S A M GWDMQQDCVDCAVYALAS LPDQNTIAK FM
 $H K \square Q L \sqrt{K} S A$ DCEEGLLDTADEAARK
D E QLK V I M A MSDEMKQEAMELCVTAAE K S A F I S S R A DAETVE GKA IINSSDMQGDLLQEAQDV DQSGIENNSAPVLNCK Y $K A K V N Q S D M K E S M Q Q E V V D D C A Q M C D A E D D T P V G Q V A T E E V$ K L Q I K A T D M D E DF D KAVI KNHYMTMENQRKITNNVALADLDMHMDEDRMACF I PLVQACDMSEEMKAETVEVI ITACEKFGTEYFAAAKT GNAQV $\square A S G M D A E K Q Q F A V Q C A N E A \square A Q H N Q N M A D A Q Y I$ EGKARVVEDTDMPARMQAAAATTAAASRAMDDLFDDDFRGDAGH 1 $K T V \vee \stackrel{R}{L}$ K T $V$ V $V$ F A E D MT D A MLLE K

 $P V L K Y$ TEMTGALLKESVSLCTAACKKFPSNERAAKYII


MTS DMQD MA $I$ S $\square$ A ME A L LK N NSE T DVA A D I $\square$ I VKESAMS WDLQQQDCVDCVAHAFYNDRDQNQIA K F V K K Y NIE K DI A A Y V
CDMGDDVLRDAlDEVREEDNNLPAGSE\|VER\| PLIQYSDMHEEMKIEAMELCVTACEKFSNNNEQAAKM
 PLVVNYS DMNE ELTA EI SEMCDTAACEKFDDN GAAA K MV
 ERK E VK L
 D M M D D M L A D S QV H L S T M S D E M QREA L Q CA L LAA V N M Y N N GK D $\square$ C N Y I LLWPVDMP DY V VDF TVVRRCK QLMDEFSPDK QUA ETL


D MP D D MLLEDA IT T A K K T
$P L V V E T D M G D D L Q T E T \not L D L V S S A I^{L}$
 AKVKMCDMED DVLDE A K HVTT A D D A A T E A I G S R T K S N Q E R R A T Y $V$ V EKMEHYA
$E \square T \square R S T D F N$
AK $\square$ K S T D M P ESMQC $\square$ A VD C CA A A CE R F K D D R D IA K QADIKK VDMPDEMRDFALKAAAQAVDRHKEDWEVGAYV D MP DYM LD Y T A K A K E L L D NGSNA QEVATAL D Q K A VI K N A D M S E E M Q Q D S V E C A A Q A L E K Y N I E A D A A A H

 K K AVV K $\square$ A D M S T E M Q V D A


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UniRef90 Q 5 BSV 7 UniRef90-FOVRN1 UniRef90-U1P4A7 UniRef90-V4A5C7 UniRef90-G7YM58 UniRef90-S1RTL2 UniRef90-G7Y67
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1 VY QD TS KE LEE ELLTSATNADKEKNQFTEVAQQD RHA MSDVMQQFAAE DTAEA GTRYNNY DDUSKY
 PLCKHTDMQEDLKQEAMEVTVTAVEKYADNYEFAARM P LVDDCDMQEEMSSEASDAAVTAVEKYSNNYS $\square$ AAKM AKVRVADMPAFMQVHAFRCARDSLEKFN PKHMAYNM MPTELGNEAVEVCTMALDKFQTNADYEAA！ KMCDMSEEMQTECKEIVVNALEKYENNYEQAAKH KPRFVRMD $\begin{aligned} & \text { D E K K }\end{aligned}$



E E E LVLQYTEMSGPLLRDSLSVCTAACKKYPDSHEKAKRT KPTNQVADDK EEGKAADITAKLLDEETDKQQSESDLVNTI KLEVRSSKMPKDMERDALETARRALDRNSEPRAVANMI RSVEMNQAKADFAQKLVQQQI EKNYNL
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 $\square K$ K R H D GT K A FL

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 Q D $\begin{array}{llll}A & R & D \\ A & E & S \\ A & S & A\end{array}$
IK DV A D A S A L


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 K LN LLDKDDVCGWHVIVGKSFASA TY Y TKAVLFFDLTNKT $K Q Y$ D $\quad \mathrm{D}$ H GPYFHCI CGRKFGAYVS
$R \square D L N N S L G G H W H V I V G G R H F A S Y F T F T P G L M A H L K L R D M Q$
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| UniRef90_K7ITM4 | AL I WR |
| UniRef90-A0A059D764 | 1 L L F K T A |
| UniRef90-W1P935 | ML L F K G A |
| UniRef90-E4XTG9 | \L L WK |
| UniRef90-W1P3R9 |  |
| UniRef90-B8LE82 | 1 L C Y K |
| UniRef90_W6L562 | $\mathrm{I} V \mathrm{VFK}$ |
| UniRef90-A3F4W3 | FLMFKFG |
| UniRef90-U6IB56 | FMVFKSA |
| UniRef90-U613X3 | 1 LVYK |
| UniRef90-C1MWA5 | $\checkmark \vee \vee F K$ |
| UniRef90-V6LQS0 | $\checkmark \mathrm{L}$ AFKG |
| UniRef90_S8CGC1 | $\checkmark$ L L F T |
| UniRef90-B5M763 | $\checkmark$ C L WR |
| UniRef90-V6M0G0 | VLI Y K A G |
| UniRef90-W6UD89 |  |
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| UniRef90-V5B757 | FLVWK T |
| UniRef90_UPI0003EAB37C | VCVWK C |
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| UniRef90-K3XRW7 | VMLF K T |
| UniRef90_U6HRP2 | F MVF K A A |
| UniRef90_S9YH94 |  |
| UniRef90-B8C2Z8 | \\| L L WK S |
| UniRef90-G4V849 | VLLFK Y G |
| UniRef90-K3WNE9 | 1 L L F K S A |
| UniRef90-GOUWP1 | VLI F R S G |
| UniRef90-W5I6P7 | FLL F K A A |
| UniRef90-C5KDN6 | VLVFKC |
| UniRef90-B7Q6H3 | VGIIF K |
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| UniRef90_J9EZ78 | VI L F R T |
| UniRef90-H2ZQ79 | HLI Y S T |
| UniRef90-F1LI03 |  |
| UniRef90-U6HZR3 | VL V ${ }^{\text {K }}$ |
| UniRef90_G4LZL4 | FL L Y K S |
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| UniRef90_U1P013 | F V L F R |
| UniRef90-U1P013 | F V L F R |
| UniRef90_U1P013 | F V L |
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| UniRef90_Q22R86 | FLMYQ |
| UniRef90_S7NLD0 | VCVWKC |
| UniRef90_U61162 | 1 LVY K |
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| UniRef90_G0U6W3 | VLVF R S G |
| UniRef90_A4HP85 | FLAMRS G |
| UniRef90-Q6MV46 |  |
| UniRef90-H2XPM7 | HLITY |
| UniRef90-Q4E4C6 | TLLFRS G |
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| UniRef90-Q6A1P5 | FLI Y |
| UniRef90-W6L6R7 | V M V WR Q G |
| UniRef90-C3ZNJ8 | 1 MLFK |
| UniRef90_U6IMQ4 | V Y L Y K S |
| UniRef90-U1LPA3 | VLLFKS G |
| UniRef90-U6IMQ0 | 1 L ${ }^{\text {L Y K }}$ |
| UniRef90-A2H7N0 | 1 EVWQC |
| UniRef90-V5HIT6 | 1 R L WMC |
| UniRef90-А5АНАЗ | FLVFKDG |
| UniRef90-R4V212 | VLCWK |
| UniRef90-F0YB41 | 1 L L Y K C |
| UniRef90-F0Y944 | LLIFKHG |
| UniRef90_U6HDE3 | FLMFK G G |
| UniRef90-S9UCM7 | F L V L Q S |
| UniRef90-G7YE78 |  |
| UniRef90_U1LSV6 | $\square \mathrm{Y} \\| \mathrm{F}$ |
| UniRef90_U1LSV6 | 1 Y 1 F |
| UniRef90-U1LSV6 | 1 Y I |
| UniRef90-U1LSV6 | 1 Y I |
| UniRef90-J9HWH4 | F L I F K T |
| UniRef90-H3F8X9 |  |
| UniRef90_U6IKA5 | F L V Y K |
| UniRef90 E5S9Q5 |  |

## UniRef90 S8G8k7

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UniRef90 TORSM2 UniRef90－W6U3H6 UniRef90－A0T1W3 UniRef90＿G7Y5W3 UniRef90＿D8LGT6 UniRef90－14EC26 UniRef90－U6IL98 UniRef90－H2KUY4 UniRef90＿U6IHM5 UniRef90＿G7YW14 UniRef90－G4V851 UniRef90－V9E2P3
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UniRef90 G4LZL0 UniRef90－W6U648 UniRef90＿G4VA31 UniRef90－A3F4Y1
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UniRef90 L115H0 UniRef90＿G7YV08 UniRef90－C1LKF9 UniRef90－W1P7D4 UniRef90－D7FJY1 UniRef90＿G7YIH4 D MSEEKVE F AL D D A Q Q A S F K G K VY S Y $\square A Q G$ I
 LIRKSDMPYYSQNNIVDIITGVLDKYTDANTNNKN QK VVIKSVEVCEK $\square$ QQDS VACA
DMK $\square V V N N K D \square S E N \square Q A D V A D M C \square S F K D F K N D H A K \ A K A D$
 EGKAIVQETDMPEVMQSQVMELAYQALDLHEVSDCQARY I KTVVFAEDMTDVMDEKVIATAKDAFQLQKTFSTVADMV KAVIKNVDMAEEMQERAVVDCAQDAMNRYSVEKDIAAAHI
 $R \vee V$ L $A$


$\square 1$ RFNDMAQHLLKKV $\quad$ RQNPQGLEK D $\square A \square N L V K F V$
MSSKTLQHI TDITALLAMDLSMPEDFLACFL RDVE I DECDMP CVMMVQVCKVINEGQKHCPDEPSFVQYG EKS $\square Q \square K K V D M D E Q M Q M N V I S T V V A A L H E Y N E N T R M K K F \|$

PLVVECDMNEEERAEATETIVTAVEKFPSDPEQAARF
EGKALVQDTDMP


IVKCADMSEAMQQEAAI AVSTTALQEYNI EKDIIAKY I
 DMDLEMKDKVMEDFRESGRKTNIDMELLDQS

 KPRFIRCELEDKDQSYFLKIVYEACQCYDDPVDLCTAJ

TDDDLEGCVRLVKDYPGQFKQESDLAGYL RPPVVTFADMNTEMKEFAFERAEYAY Q $\square R V V M A T M S R A M Q E Q \square E D V F F M T R D$

VLPESDMNEEMSTEDQELVVGLLEKHPVFGLAAKET
MPNNQQAELLKLADDLMEKTGNPGKVASNL
ADMPNDMKNFIVDQIESPLREYNNDEPIVTNL
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VVYSDFDLGVHRQMRECA DS LLKKEESKRVVIKADLS E $\square \mathrm{K} \square \mathrm{I}$ LKE


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| UniRef90＿S88 |  |
| :---: | :---: |
| UniRef90－S9VHB0 | KDVTAKLGGSWHVIYGRDFATYVTHKRMSFCHFQ\DGAD |
| UniRef90－U6FT27 |  |
| UniRef90－FOXW22 | AGFEKAYGKGWNVVVGRSFGAYVTHEDKTYMY |
| UniRef90 U6JFH5 | KETMEKKWGRHWQVIVSQSFGCAVGHEENYFVHFQYGPHL |
| UniR | KRKFDAKYGGHWQCIVGRNFGSHLSDP |
| UniRef90 UPIOOO359440D | A |
| UniRef90 E5SD81 | DEKYMPPWHCIVGRKFSSKVTFEDGHCVHFVAGNKG |
| UniRee90－13EDQ0 | KRKLDEKYGGVWHVIVGAHFGGNDTSDAETLINFQUDKRH |
| Un |  |
|  |  |
| UniRef90－TORSI | EKEYGRGWNCVVGLSFGAYVTHE【KTY |
| UniRef90－W6U3H6 | KQRMDKE |
| UniRet90－G7Y5W3 | KQELDDRKLGRLWHVIVVHGYNSYYSYETNNNFCFKLYERI |
| UniRef90－D8LGTE |  |
| iRef90－14EC | V |
| UniRef90－U6 | VEEKHGRHWQAIVATNLGCNVEHEVNTFVYLRKNNHI |
| UniRef90－H2KUY4 | RLDS |
| UniRet90－G7YW14 | 隹 |
| UniRef90－G4V851 | ， |
|  | ， |
| Ref90－U61Q | （ |
| UniRef90－C5K493 | D⿴PGKGPWHCVVGKSFGGSIAHERNHAVLFDNSGNT |
| UniRef90－UPIOOOO6CFA92 | EWQCI 1 GKNFGCSLTEDANVLAFFDLSRKS |
| UniRef90－L1J1N7 | ELIGPTWH1VGRSFGYSLAYELRYVCRFRMRHLA |
| UniRef90－G7Y5 |  |
|  |  |
| UniRef90＿C1L4J7 |  |
| U6I | AMDENFGPVWHVIAGTGYGSNUASLEGQLLHFKAFGWA |
| UniRef90＿UPI0002B4C17C | DVYV |
|  | VE ELETGAWHV |
| UniRer90 W6U6． |  |
| UniRef90－W6VC84 |  |
| M0 | dg ir ragwoymVat |
|  | FSYGHTWHT\VSTTRECCDPHDPKSLADFSTDKYR |
| UniRef90－C1LEZ4 | FDTRYGKSWHIV VNQHLGRFSYEPNTLFHFCLGRFA |
| UniRef90－H8ZCX4 | DSKFKPGWNVVGENYTGSCSVAKNHEEDS CNOH |
| UniRef90 U6IHD9 | CLDKKFGPMWHVVVGPEFGS |
| UniRef90－Q661M9 | EESWHVIVGDSYGS |
|  | KEHMEMKYRKHWQVVIAVS $\square$ GC |
| UniRef90－UP1C |  |
| UniRef90－T1HW |  |
| UniRef90－E4X052 | GVGWNIVIGKAFHSEFQAVKGTVLMMYYQGVY |
| UniRet90＿G7YD16 | － |
|  | KQRYDGVWQVVILTSYSAFSAYTPERLFHFKYGRFV |
| UniRef90－Q5BYF7 | KTFDPSWHVIVDGSYWISYSHLDPEQSLQFRLKKEKC |
| UniRef90－G4LZLO | GRNWQCVI GRDFES |
| UniRef90－W6U648 | LKQRYEGVWQVVI LTSYSAFSAYTPERDFHFKFGRFV |
| UniRef90－G4VA31 | DKTFGRAWH |
|  | KEQMETNYNKHWQVVVAS |
|  | EHYGRYWHVIVGTDYSAFMSYCPGSYIQASYGDLV |
| UniRef90 A0A016TJV0 | TKMEEDTKKAEWHCVFGQKFATCLECERGSLFYFQUGNTG |
| UniRef90－A0A059ETD0 | EAEFGKGWNVFVGEHFCGVCLFEDDTLIQVKIGSLI |
| UniRef90－C1M0 | WHVIVRGSYWTTYTHIPNCSFHFKINQHS |
|  |  |
| ef90＿G00 | KETLDKKYGASWQCII |
| iRef90＿H3EZ |  |
|  |  |
| UniRet90－A0C |  |
| G7YC | 俍 |
| UniRef90－A0DG69 |  |
| UniRef90－U61JJ4 | FGRVWHVIIVQSYWMHYSHEIDCSLQFQ |
| G4V | YGP $\mathrm{L}^{\text {WHVVVVRDYGASFTHSENRSFQFRLRDKC }}$ |
| niRet90＿MOZ | KKVNLRVFGRTWHVIVRGQYHAFYSYEGGNSFCFKKGPR品 |
| UniRef90 ${ }^{\text {a }}$ AOO22RUL3 |  |
| ef90－H3GQG | LKVADTKYGPTWQVVVSRELCCLPKADEGTHADFTVTKLR |
| ef90－P91804 | K WWLDITYGKAWHVIVKGSFWSSYSHSANKCFDFRVRDVS |
| UniRef90＿G4VJT8 | KNELDKYFGKLWNVIIGRYWSRYC HETGYNFCF】KDDR |
|  | KRWПDSRYGRAWHVLLIRGYWMHYSHEDDCADQFQDGSYV |
|  | EDUGRHWHVVVGTDYAAFMSYCPGGYIQARYGDLT |
| UniRef90－Q8IDD2 |  |
| Ref90－S7x | R |
| UniRef90＿L115H0 | GFGSHCFVGRSFGFCIITTTARHYVQLRMYHFE |
| UniRe |  |
|  |  |
| UniRef90－D7FJY1 | GPVWHVMATRDWGFSIVAHEEGQLLDFKLINGDR |
| ef90＿G7Y |  |


| UniRef90 S8G8K7 UniRef90 S9VHB0 | V WR H G |
| :---: | :---: |
| UniRef90-U6FT27 | Y F If |
| UniRef90-F0XW22 |  |
| UniRef90-U6JFH5 | F 1 L Y R T |
| UniRef90-C6S3A9 | IVVYKC |
| UniRef90-E3N3S3 | V I L F R |
| UniRef90-UPI000359440D | T F L K S G |
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| UniRef90_W6KEW9 | FLVFRS G |
| UniRef90-B9SV39 |  |
| UniRef90-B9SV39 |  |
| UniRef90-TORSM2 |  |
| UniRef90-W6U3H6 |  |
| UniRef90-A0T1W3 | F I I F K T |
| UniRef90-G7Y5W3 | $F L \vee Y \mathrm{~K} ~ S$ |
| UniRef90-D8LGT6 |  |
| UniRef90_14EC26 | F L L F K T |
| UniRef90-U6IL98 | Y I L F R T |
| UniRef90-H2KUY4 | Y L M R S |
| UniRef90_U6IHM5 | $Y$ ¢ I F |
| UniRef90-G7YW14 |  |
| UniRef90-G4V851 | $\bigcirc \mathrm{L}$ LF |
| UniRef90-V9E2P3 | V V V Y R H A |
| UniRef90_U6IQP0 | Y L L Y |
| UniRef90-C5K493 | LLLFKS |
| UniRef90-S9V213 | FL V L Q G |
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| UniRef90-L1J1N7 | ILVWK S |
| UniRef90_G7Y5W2 | F L V Y |
| UniRef90_Q1WA82 |  |
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| UniRef90-G7YAJ6 | Y LI WK T |
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| UniRef90-E4X052 | 1 HI WK S |
| UniRef90-G7YD16 |  |
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| UniRef90-Q5BYF7 | $\bar{Y} \mathrm{~L}$ V |
| UniRef90_G7YAJ7 | Y L V WK T |
| UniRef90_G4LZL0 |  |
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| UniRef90-F4PYB4 |  |
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| UniRef90-U6NUC0 | FVL F R C |
| UniRef90-G7YC26 | VLI WK T |
| UniRef90-A0DG69 | VLLFKS G |
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| UniRef90_U6HY29 | L L M R L G |
| UniRef90_Q8IDD2 | LLIYK S |
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| UniRef90-G7YV08 | IVVWQT |
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UniRef90_H3FAA5 UniRef90-P32070 UniRef90-A0CFA8


lupas_21
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solo
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lupas_14
lupas_28
jnet cont
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sol5
sol0
jhmm
jpssm
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$\begin{array}{lllllll}9 & 9 & 9 & 6 & 0 & 8 & 9\end{array}$
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B B B B
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