

QUERY UniRef90 C4UNU9 UniRef90-A0AO26UTD1
UniRef90-A0A022HSA9 UniRef90 D2T791 UniRef90-V1VMW6 UniRef90 G9Y3A5 UniRef90 A0A022PD65 UniRef90-H8YUQO相 1 UniRef90-UPIO00469C231 UniRef9-_88M055
Ref90 H8P115
UniRef90_SOAMD8
UniRef90-W1A104
UniRef90 UPIO002E0938B
UniRef90- J3H213
UniRef90-COAY95
UniRef90_U4VGG0
UniRef90-B1VJ71
UniRef90- y2N7R4
UniRef90 A4WB09
UniRe990-X715D9
UniReeg-4LC8
UniRef90 - C3K4R4
UniRef90-P02978
UniRef90-A4WC18
UniRef90-D4BV00
Uneiso fuviys
UniRef90 ${ }^{-}$Z5G088
UniRef90-SOVBR2
UniRef90 UPI000378119E
UniRef90-A0A014PWS1
UniReto-LZMY
UniRef90 M9GBI4
UniRef90-Y1CRK4
UniRergo-Evi3
UniRef90-V6A6H
UniRef90- 88 LY Y I
 A QEENDAVKDAVKFTADFYQTVTEKYGVQSAKIAQELA EA R DQ S DVLNKA A E LISSDMGNKIGD Y L G ES Y K S L A R E I A A D D E SDK EV L D K T S GVI I S VG D KA GALL G E K Y K A L S R E V A S N K DNDETVSADVK TADFYKE LTTEKWGGKSAEVAQELA WD

 AEKEKSILLDTSAIITDASAKISKHLGDKYNDIANELKND

 E I K D A V K F T A D F Y K E V T S K Y GE Q S A Ki A K E L A E A
 EER DLLLDQTSDAIIDAVGQETSKTIGEKYKSVANEIAA D K DER QFLMESSGII ADAGEKDSNHIGGGQYKRYADEVANN E DE F S Q QVKTAAVK FTA D F Y K E V F S VVYG DKA E QLLA G A L A E Q REDI A NAVKKTTDFYQELTQKFSQNASQLAQEFAEQ
 AENEANAVNDAISKVNDFYKELASKYGDKLEKEAKA LADE EKEA LMGAA D II TNTGEK I SKHGGEKYK T IA NE A A E
 EVLQKTSEIIAGTGEKISDHASAQFKTFANKIAA P DEKAAVVGD S V K K L V AS D F Y G DVVT E K L G A K N A S L A K E L A E S

 D AVDATVVSFYQTLTEKYGEKYSKMA QELAADK ERQKDVITTTSAEII SDSGEKISGKLGEKYKGLAQGVAND DEGSILQKTGEI IA GVGEEISKHAAVQFKNHANKIAND NEAI KSASE I MT DVGGKASKFFGDKYKSTSNKIDNE K S DVD KI K D A V A YT A T FY E K VT E K Y G E K A K L L LA K S L A D K K GAIK ESQASVIDTTSG $\qquad$ T D S GK T L S QDELKATKDADNFTTEFLKSVSEKYGAKAEQLARDMAAGQ

 K M H R E F L G K A GEEAD MS GMGDKLGEYLGVKYKNLAKEVAND MK D A ITTTAAAFFESSI SK K F GERAAR LA QELAA Q D A V D T MVVGFY Q Y I T E Q Y G E K Y A K I A Q D L A E K

A $\square K T$ TADFYKE LTEKF GEQSAKVAKELAD A


[^0]


[^1]


90
100
110
120
A WK HVDAQDMANKLGNDSKAFKVADVVMKVEKVREKSTEG A WKAFNAEDMGNKFAALGKTFKAADYADKANNI REKSI EG A WKAFDAEDMGNKFAALGKTFKAADYMMKANNVREKSIEG ALES DDRDLMAKNLAKFSKAFGLVGKADDGVDVVKE NNG
 A WKAFNVEDMGNKFTALGRAFKVADYVTKGNNVREKSUTG A LE S LT QAEDAKNFVRFSKGLGLVSSGIDVYETAMEFKKA

 A 1 RYIDAKTLSDNL QRDGKSFALLDKVI KVEKDRDKIVEG ALESVDRELMAKNLAKFSKAFNYVGKT: DRYDTLKEIQKA
 AL E SLKRDEIAKNLKKKSKAFGLTSSF WL E SVDVKVAAENFKRFSKGMGYTSKF DVANWSTSGYNA ALLESLNVDEDAKNLKKFSKGMGFVSYSIDANDLRDELVKA A WNHLNATDMAYKLGFDGK DFTAADVVI K IDDKVREKSI EG
 A LES I K S A EIA K NFTKFSKGMGVLSHAINAFDWVGELI K S

 ALESLNKDQMAKQLK IFGKAFGVVGEADQWGGFISGLVKG

 ALKHANAQTMAANLGNDSKVFKGADKAMMAGKVLDKTRVG
 ALNALDKASFADNDTRLGKAFGVVGKVVQAEAVREKTVSG T K K F D GKK LSENLYKLGGSFKLTDKFLKFEKIKTKVEEG

 ALKHANVQALASNLDNLSLAFKGVDKTLLAGKIDDKIRVG A K KAVDGKKLSENLYKLGTTFKIADKFLKFDKIKNKVEEG GUQALDATNTANSLAKYSKAFGYLGNADDDADLVELKNA A K SLDRA ELAKNLNDFGKAFGYVGKGIDAMDLLVE KK G
 ALEAADNQVHMAENFKLFSKAFGFTGKVIDRYDVAVELQKA Y D S I D YEA I GKAATKFSKGDGYVGPVIDAKDSIDEFDNS ALNSVEYSSMARNLKRFSVAMGYYGTI ADUVDVVGEIRTA WLKMI DAEQYARNARVLGKVFTGVDWAIKGADLVNAAIEG A WKQVNAKDMANKIGNLGKAFKVADLAIKVEK REKSV
 ALESVNYDELSKNLTKDSKSLKKITSRVSFLYDVGSDFKN
 ALESVRREHIA QNLAKFSKAFNYTGKAI DAYDVVVELDKA

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
sol0
jhmm
jpssm


| QUERY |  |
| :---: | :---: |
| UniRef90_P05819 | YQTGNWGPLMLEVES |
| UniRef90-T2D1N2 |  |
| UniRef90_C4UNU9 | METGNWRPLLVKLETLAAGRG |
| UniRef90-A0A026UTD1 | Y ETGNWGPL MLEVE |
| UniRef90-A0A022HSA9 | YET G N WGPLMREVESWTVS G LT S S VA LIV VF S A T LGAMLVA |
| UniRef90-D2T791 | $\square$ D S H NWRPFYVKLET LLAGK |
| UniRef90-V1VMW6 | Y N T G W P P M REVESWVLS G $\square$ A S A VA LIA VF S A T LGAMLIA |
| UniRef90-V7YEJ4 | VKTDNWRPFFVKLESLAAGRAAS |
| UniRef90_G9Y3A5 | VET D N WR S F Y V K TE |
| UniRef90-A0A022PD65 | FETGNWKPLMLEDEAMVLS GFASG\\|LLG\|LTS |
| UniRef90_H8YUQ0 | LET N N WRPVFVQLES |
| UniRef90-UPIO00466B40A |  |
| UniRef90_B4F067 | VKTGNWRPFFVK |
| UniRef90-D2U130 | I ETNNWQPFFIKTESLVAGK |
| UniRef90_UPI000469C231 | I Q T G D WR P F FVK TE |
| UniRef90-X8M055 | VETDNWRPFCVKVE |
| UniRef90-H8P115 |  |
| UniRef90-S0AMD8 | YSTGNWAPLAYEVE |
| UniRef90_W1Al04 | VKTDNWRPFFVKTE |
| UniRef90-UPI0002E0938B |  |
| UniRef90-J3H213 | AESGDWKPFFIKAE |
| UniRef90-C0AY95 | IQQT D D WRPFFVKTE |
| UniRef90-U4VVG0 |  |
| UniRef90-T6UGJ2 | FRTGDWNEAFISGEKIAVGK |
| UniRef90-B1VJ71 | F ETGNWKPLMLEVE |
| UniRef90-W0YN80 | TETGDWKPFFVKI |
| UniRef90-U2N7R4 | Y E S G N WK P L M L EVE |
| UniRef90_A4WB09 | FETGNWGPLILEI ES WA |
| UniRef90-X715D9 | $\square \mathrm{DT}$ GE WK DAMLKI ESMAVGKAA |
| UniRef90-14L7C8 | FQTGDWKPLMLELE |
| UniRef90_B6XI00 | F ET G N WR PLVLE |
| UniRef90-C3K4R4 | YAS GDWNNTVLKME |
| UniRef90-P02978 | KDTGDWKPLFLTLEKKAA |
| UniRef90-A0A038CKY0 | VT T G NWQPLALEVE |
| UniRef90-A4WC18 | YETGNWGPLILEIESSA |
| UniRef90-D4BV00 | FETGDWKPLLLEVE |
| UniRef90_F4U3Y9 | LT T D N WR PVFVKLEl I T A N R |
| UniRef90-UPI000466C7C3 | YETGDWNSTVLKVE |
| UniRef90-Z5G088 | VT T G D WQ K LiAFEVE |
| UniRef90_S0VBR2 | VKT D NWRPFFVKLESLAAGRAAS |
| UniRef90-T6XZ30 | VRTENWRPLFVKTE |
| UniRef90-UPI000378119B | MES GD WKPFFLKLE |
| UniRef90-A0A014PWS1 | LQ T N Q WR S VFVKLET】A A G K |
| UniRef90_L7ZNY6 | FSTGNWKAFRNQLE |
| UniRef90-D4HYL9 | $\square$ |
| UniRef90_M9GBI4 | $\square E T G N W N D A N K \square E S \square A$ |
| UniRef90-E9VI37 | HETGNWNDAHNKLESGAL |
| UniRef90-U2LQL7 | YVRND WS PFMLQLE |
| UniRef90-V6A6H1 | IRTQNFKPLFVKI ET |
| UniRef90-C7BU82 | F ETGNWS PLFLELES |

lupas_21
lupas_14
lupas_28
jnet
conf
sol25
sol5
SOIO
jhmm


QUERY
UniRef90_P05819
UniRef90 T2D1N2
UniRef90 C4UNU9 UniRef90-A0A026UTD1 UniRef90-A0A022HSA9 UniRef90 D2T791 UniRef90 ${ }^{-}$V1VMW6 UniRef90-V7YEJ4 UniRef90 G9Y3A5 UniRef90 A0A022PD65 UniRef90-H8YUQ0 UniRef90-UPI000466B40A UniRef90-B4F067 UniRef90 ${ }^{\text {D2U130 }}$ UniRef90-UPI000469C231 UniRef90 X8M055 UniRef90 H8P115 UniRef90-S0AMD8 UniRef90-W1Al04 UniRef90 UPI0002E0938E UniRef90- J3H213 UniRef90_COAY95 UniRef90_U4VVG0 UniRef90 T6UGJ2 UniRef90 ${ }^{-}$B1VJ71 UniRef90-WOYN80 UniRef90 U2N7R4 UniRef90-A4WB09 UniRef90-X715D9 UniRef90_14L7C8 UniRef90 B6XI00 UniRef90 C3K4R4 UniRef90-P02978 UniRef90-A0A038CKYC UniRef90 A4WC18 UniRef90-D4BV00 UniRef90-F4U3Yg UniRef90 UPI000466C7C3 UniRef90-Z5G088 UniRef90_SOVBR2
UniRef90 T6XZ30 UniRef90 UPIO003781198 UniRef90-A0A014PWS UniRef90-L7ZNY6 UniRef90 D4HYLS UniRef90 ${ }^{-}$M9GBI4 UniRef90_Y1CRK4 UniRef90-E9VI37 UniRef90 U2LQL UniRef90-V6A6H1 UniRef90-C7BU82 UniRef90- X8LYLC


 A A VP A VVVG $\|$ I G I I VAA $L I G A L I D D K F \| D R L N N E!I R$
 $\nabla G \square P \square T A \square T \square A G \square I G \square S Y \square A S F \square D D K \| V D K \square N N E \square I R$

lupas 21
lupas_14
lupas_28
jnet
jnet
conf
sol25
sol5
solo
jhmm

sm


[^0]:    lupas 21
    lupas_14
    lupas_28
    jnet
    conf
    sol25
    sol5
    sol5
    jhmm
    jpssm

[^1]:    lupas_21
    lupas_14
    lupas_28
    jnet
    conf
    sol25
    sol5
    sol0
    jhmm

