```
MNELNTVST NŠSDST KNGGTŠNSPDDMDSĀ A A A S H A [ K K R
QUERY
                                                                                                                                                                  K K R
K K R
D R R R
S K R R
L K R R
UniRef90_Q6FLP2
UniRef90_C5DGQ7
                                           S A S R R E S E P K E A E T S P E A
T M A E V S R N S R N S S I E E H A V R R G S V E
N P T S T Q S H N T S P S T D S N G N E E G S D A D N K E S
                                                                                                                                                 G G A A S
S N S S E
T S Q H T
UniRef90_G8JW69
UniRef90_G8BHK8
UniRef90_A0A024UAL5
                                           S P M A S P A S P G F M A A S P A H S P A S P L N P T S P A Y S P M S P P A G V P P S S G A K R E G H D A A P
UniRef90_D0P371
                                                                                                                                                               DAAPK
HPRKR
UniRef90_M3DCK5
UniRef90_A5DIV7
                                                  MHS MPS A Y S N H D M S T H A A D V S A D T I N N D D D A E
A A S S Q V P H G S V A Y A Q A N G T A D A G P P P P D
                                                                                                                                                               GAGKR
UniRef90_E6ZJK0
UniRef90_F9X9I7
UniRef90_D8TT23
UniRef90_T0Q521
UniRef90_N1QMN7
                                                                           A G A P Q G S V A Y A Q A S G S V D A A P L P P D K H K K R
UniRef90_K0R3M3
UniRef90_B6AG69
UniRef90_M3BTF8
                                                 D A A N G G F S S S R H D T P T S D Q MVS H A M S V P V G P P M G P Q Y P I D N S I P P R
UniRef90_N4U9F6
UniRef90_G0V8L7
                                                         MESTLALPPKDEASDVARVADALAARSSGGGKQTPSQPAFMPTGGRSSLDASAETPQEPQTGDK
UniRef90_J0CX19
UniRef90_W9W7D0
                                                                K K R

S S S D D T G K D A E N N K V H V K R

T E K R A N E S T G D N N N N N S A V A T A P D T K K

D T S S K E T R A N G N T K T S P A K G D G A A A P T H T P K K R
UniRef90_A5DJ86
UniRef90_UPI0004416B54
UniRef90_Q6CB01
UniRef90_V5G134
UniRef90_A8Q5I6
UniRef90_M2WJ37
UniRef90_UPI0004624727
UniRef90_UPI0004624727
UniRef90_K9I8S2
UniRef90_A0A017SJ27
UniRef90_B0YA51
UniRef90_B0YA51
UniRef90_G4T8R1
UniRef90_A7F197
UniRef90_UPI0004416B54
                                                      H M G S F H T P Q Q A S P P G P Q G Q Q H P S S A A D A T D R A R A Y K
                                        M D P V G G S S S A S M N I K K Q E D M D G M G P K S D Q K A E Q K P V V R T L T G P S H Q S S V K K Q E D D D K A L K A E V K P A V K T L D G V S R K R P S M E S A S A P V R
                                        MTDLAVSSTPASANTME SESQSKRKASAAGLSANSRPVK
UniRef90_A7F197
                                                   MSAPTTNFTQQEKQSKPNNDATPSTGQQSKGQTGGNH
UniRef90_D8LRY3
UniRef90_A8IRZ2
UniRef90_UPI0003500021
                                            D S H S S T P G S S D S H S S T P G S S D S H S S T P G S S D S Q S S T
UniRef90_Q5CH45
UniRef90_UPI0002B8D44C
UniRef90_G6CM85
UniRef90_W9YHX8
UniRef90_R7SV30
                                                                                                                                    DHFPPSNFLKSKS
UniRef90_Q7RJS0
                                                                   S P F Y D P S S P A G S P T S P S Y S P T S P G M S P T S P G F T R A T G A A G P I R T H S G S K S S S Q Q H D P L V D A R S A I R K N S T A T A V R H H A H L Q P S P S S L D Q I G G H Y G N I D G S L A P R K R
UniRef90_Q9BMP3
UniRef90_UPI0001BF7D46
                                        MSPGVVSASPFYDPSSPAGSPTSPSYSPTSPGMSPTS
UniRef90_Q5U918
UniRef90_N1J4Y4
UniRef90_UPI0003F4A05C
UniRef90_Q0UHM4
                                                                                                                                       SSRSSATSGPVR
UniRef90_UPI0003F497A5
UniRef90_W9CF82
                                                  HRNATSKHRQHPYTLGMSGS
                                                                                                                             NATSARGTGNSGPIR
UniRef90 G6D6D2
                                       PTPLVKK
SPPAVQR
MAHMAPAMGAHPHFQGQARPTHSPQQMAQPYDPNDPTRKR
DSQQSNGKSSRSFRKH
TTIPLESAGTSTERDAPPSRAQPSSSRSAANTRRAS
AHTHSHVHTHMAVDSPQPDDVPDEDLSEHA RPR
UniRef90_W0T9I8
UniRef90 L8FMT5
UniRef90_R0KG34
UniRef90_W9XIC8
UniRef90_D8QAV3
UniRef90_G5EH28
UniRef90_A0A023AZW7
                                      DSTSSGSPTASPTGALRTR
DNPENSKSPSPARRDSQTV
HNTAASNLSPTTSNNPSTATATANAAAAAGQASTPQH
SAAGSEGNATKSEGEAKAQDQRAAAADEVHRTPKKQVR
SQSDSAGSKMPLMRSPLSEARSSHSAETTAAAVR
SRTNHTHGDQEAAKLREQVSPLLSKHGRRHR
MDPPAKPKRTRNKH
SPPAVAAPALRGGAKKLKQ
SPPAVAPALSKHGRRHR
MPPAPAATNRSKRRLIDPEDDARQHPATEDSSANPKR
MTPFQPVQTSPTEASDDRNSSVSGSDPDNAPDAGNGGKKRR
MSAQAQAHDQATHSETPPNKR
MMSAGTSHQETGLYAQSDRD
PKSSSSPQPQH
ADSSNDSLASCGSPPAQNGEQNYQPQH
ADSSNDSLASCGSPPAQNGEQNYQPQH
SSESTNFSLSTSSMPSFSHESNQSPNP
MSARPKTAKKDGSGSVSAGNGNSAADGLKKVV
MSAPTTNQQEKQSEPDTNGTPSTGQQQSKLQHVGGNH
DYFNDLSRQSVSQDANQSQSGNTGGNTSPAEDDGNPLPR
MAQEESPQTPSSDPVSSNQSGNTGGNTSPAEDDGNPLPR
MAQEESPQTPSSDPVSSNQSAGQPTSQPVPPNESIPRPKR
UniRef90_O77165
UniRef90_S7Z7G0
UniRef90_B8MFL6
UniRef90_A0A010RT36
UniRef90_G2RHB8
UniRef90_S8FYN0
UniRef90_B8MRF1
UniRef90_R9P1I1
UniRef90_F9G6M9
UniRef90_M3CMV2
UniRef90_Q0D130
UniRef90_W9YE09
UniRef90_G3AI44
UniRef90_W9YMY4
UniRef90_Q0CJF1
UniRef90_N1JBQ4
UniRef90_UPI000455FE86
UniRef90_H7C834
UniRef90_C4QZ96
UniRef90_R9ANB3
UniRef90_UPI0001584D9A
UniRef90_B8LZE7
UniRef90_B6QQR4
UniRef90_W2S973
UniRef90_M1VGW3
                                           H P S H Q V P P H P Q S S H Q Q P P H S Q S P H P Q G S H S Q S P H S Q G P H P S H Q V P P H P Q S S H Q Q P P H S Q S P H P Q G S H S Q S P H S Q G P H
UniRef90 UPI00046CFE6D
UniRef90_UPI00046CFE6D
                                        P G S A G P A P Q T G L A R R Q S T S D S T G E V F S R K P
M E L E A S D S N S F S M S T N E T G K A N P N V Q I V Q D G K V V K K V Q K R
S V K R N
UniRef90_A8N128
UniRef90 U5H3G9
UniRef90_Q5A453
UniRef90_Q6CKI5
```

QUERY UniRef90_Q6FLP2 UniRef90_C5DGQ7	TKASRACDQCRKKKIKCDYKDEKGVCSNCQRNGDRCSFDFTNVSRACDQCRRKKLKCDRNQERNICTSCQRNGERCKFEFSKTSRACDQCREKKTRCDFSDERPICSACQRMGKTCTFEF	२ २
UniRef90_G8JW69 UniRef90_G8BHK8 UniRef90_A0A024UAL5	TKVSRACDQCRRKKIKCEYŘEDSQSCTGCNKNNEKCAFERNRIPASCSMCRKRKSKCDRVRPVCGTCIRKGIACQYEV	/
UniRef90_D0P371 UniRef90_M3DCK5 UniRef90_A5DIV7 UniRef90_E6ZJK0 UniRef90_F9X9I7 UniRef90_D8TT23	A Y S P T S P A	Α ?
UniRef90_T0Q521 UniRef90_N1QMN7 UniRef90_K0R3M3	T K V S R A C D E C R R K K [R C D A [D E T G P C T N C A R T G A R C A F S F	3
UniRef90_B6AG69 UniRef90_M3BTF8 UniRef90_N4U9F6 UniRef90_G0V8L7 UniRef90_J0CX19 UniRef90_W9W7D0 UniRef90_A5DJ86 UniRef90_UPl0004416B54 UniRef90_Q6CB01 UniRef90_V5G134	T A A D R A C D Q C K S R K V R C A V Q E P Q K P C L T C A A K G V T C T Y D K S K V S R A C D E C R R K K I K C D A Q S D T G P C S S C A R S S I R C L F S F K K A S R A C D Q C H H R R I K C D F N P E T R N C S G C E K T E E K C L F N F K R Q S Q S C D A C R A R K V K C A R E D P Q Q A C K H C V S L G I P C T Y D Y S K A S R A C D E C R R K K V K C D A P T E P K T C T N C Q K A G V N C E F E F N R V P A S C S V C R R R K N K C D R I R P V C G T C K K K S I S H L C F F F K R Q S Q S C D A C R A R K V R C A R E N P K Q S C K H C L A L G L P C T Y D Y R R V I R A C D E C R K K K V K C D G Q Q P C I H C T V Y S F K C T Y D C R K V N H A C V Y C R R S E R P C T C I K R N I G H L C H D	२ २ १ २ ()
UniRef90_A8Q5I6 UniRef90_M2WJ37 UniRef90_U9SVU6	SRNKRPCDFCRYKKAACHL EANPPCELCIRYNKECTFVE	
UniRef90_UPI0004624727 UniRef90_K9I8S2 UniRef90_A0A017SJ27 UniRef90_W9WLS6 UniRef90_B0YAS1	NRVPRACNACRKQKMRCEGAE NPPCRRCRHAGLECLFEKNRVPRACNACRKQKMRCEGAD NPPCKRCRNTGLECLFEKKRLSRACDQCNQLRTKCDGKNP CAHCVEFGFACEYAFKRSRNGCWPCKSRKVKC GEEKPTCANCQRQGETCDYSCRRASKACCCCRARKVRCDVVENGSPCTNCRLDQVECVVTE	?
UniRef90_G4T8R1 UniRef90_A7F197 UniRef90_D8LRY3	KRIYQACIPCRRRKVRCDLNPSDPPCVRCRRESKECYFSA	4
UniRef90_A8IRZ2 UniRef90_UPI0003500021 UniRef90_Q5CH45	P G S S D S H S S T P G S S D S H S S T Y N T	
UniRef90_UPI0002B8D44C UniRef90_G6CM85 UniRef90_W9YHX8 UniRef90_R7SV30	RRVEQACIRCRSRKAKCNGSRP SCSGCRGANAACIYAS	3
UniRef90_Q7RJS0 UniRef90_Q9BMP3 UniRef90_UPI0001BF7D46 UniRef90_Q5U918 UniRef90_N1J4Y4 UniRef90_UPI0003F4A05C UniRef90_Q0UHM4	S P A S P A R R I S R A C D Q C N Q L R T K C D G Q H P R R I S R A C D Q C N Q L R T K C D G Q Q P C A H C I E F G L G C E Y I F R R I S R A C D E C R R K K I R C D G N Q T E E Y C T N C K R V G A R C Q F S R A C L Y C R K R R I R C S G N K P D P R R I S R A C D Q C N Q L R T K C D G R Q S C A H C I E F G L T C E Y I F	۲ ۲ ۲
UniRef90_UPI0003F497A5 UniRef90_W9CF82 UniRef90_G6D6D2	RRISRACDQCNQLRTKCDGQSP CAHCVEFALGCEYLF	
UniRef90_W0T9I8 UniRef90_L8FMT5 UniRef90_R0KG34 UniRef90_W9XIC8 UniRef90_D8QAV3 UniRef90_G5EH28 UniRef90_A0A023AZW7	KRFSQACDRCRSKKVKCDGLKP SCTNCRKIGYHCSTSCKRVAQACDRCRSRKDKCDGAKP ACSACAVRGHPCSYDFSKVSRACDECRRKKIRCDATSENGPCSSCKRTGARCQFSFRRAPRACDECRLRKIKCDGSLPCGP CSVSDDVCSYDFTNVVIACKQCRARKLKCDSTRP SCHNCKKRENPCEYDFKRTRACDKCSNSRTRCNGECP	2
UniRef90_O77165 UniRef90_S7Z7G0 UniRef90_B8MFL6 UniRef90_A0A010RT36 UniRef90_G2RHB8 UniRef90_B8MF1 UniRef90_B8MF1 UniRef90_B9P111 UniRef90_F9G6M9 UniRef90_M3CMV2 UniRef90_Q0D130 UniRef90_W9YE09 UniRef90_G3Al44 UniRef90_W9YMY4 UniRef90_W9YMY4 UniRef90_UD150 UniRef90_UD150 UniRef90_UD150 UniRef90_UD150 UniRef90_UD150 UniRef90_UD150 UniRef90_UD150 UniRef90_UD1500455FE86 UniRef90_UD1600455FE86 UniRef90_UD1600455FE86	NKTSRACDQCKFRKIKCSLSQP EKVSRACDNCSKSKSKCLLRPGTKTCENCRFLEIJACTFNC KRVYQACIPCRRRKVRCDLNPHDPPCVRCRRESKECYFSA RKVNHACLYCRRSHMTCDLARP CTRCIKRNIGHLCH RRSSKACDQCRKSKCKCERGSPQDPCRNCVMLGTPCTFLC RRISRACDQCNQLRTKCDGQSPCAHCTESGLSCEYAR KRSRMACDLCWKKKERCDVGDPMQQCSNCARQDTECRYSE KRVSRACDLCWKKKERCDVGDPMQQCSNCARQDTECRYSE KRVSRACDLCWKKKERCDVGDPMQCCSNCARQDTECRYSE KRVSRACDLCWKKKERCDVGDPMQCCSNCARQDTECRYSE KRVSRACDLCWKKKERCDVGDPMQCCSNCARQDTECRYSE KRVSRACDLCWKKKCDGQPPCSNCVDAGTTCVIRE QRVSRACDSCRSKKDKCDGVQPVCSTCASLSRPCTYKA KRSKISCELCKSRKVKCDRVEPACGWCARNNRVCCVYKE KKTTRACNHCHKAHMTCDSSRPCKRCIQRGGLELTCE RRGYQACDPCRKRKVKCDLNPRPPPCVRCRRESKECFFSA KRVYQACIPCRRRKKVKCDLNPRPPPCVRCRRESKECFFSA KRVYQACIPCRRRKKVKCDLNPRPPPCVRCRRESKECFFSA KRVYQACIPCRRRKKVKCDLNPRPPPCVRCRRESKECFFSA KRVYQACIPCRRRKKVKCDLNPSDPPCVRCRRESKECFFSA KRVYQACIPCRRRKKVKCDLNPSDPPCVRCRRESKECFFSA KRVYQACIPCRRRKKVKCDLNPSDPPCVRCRRESKECFFSA KRVYQACIPCRRRKKVKCDLNPSDPPCVRCRRESKECFFSA KRVYQACIPCRRRKKVKCDLNPSDPPCVRCRRESKECFFSA KRVYQACIPCRRRKKVKCDLNPSDPCVRCRRESKECFFSA KRVYQACIPCRRRKKVKCDLNPSDPCVRCRRESKECFFSA KRVYQACIPCRRRKKVKCDLNPSDPCVRCRRESKECFFSA KRVYQACIPCRRRKKVKCDLNPSDPCVRCRRESKECFFSA KRVYQACIPCRRRKKVKCDLNPSDPCVRCRRESKECFFSA KRVYQACIPCRRRKKVKCDLNPSDPCVRCRRESKECFFSA KRVYQACIPCRRRKKVKCDLNPSDPCVRCRRESKECFFSA KRVYQACIPCRRRKKVKCDLNPSDPCVRCRRESKECFFSA KRVYQACIPCRRRKKVKCDLNPSDPCVRCRRESKECFFSA	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
UniRef90_C4QZ96 UniRef90_R9ANB3 UniRef90_UPl0001584D9A UniRef90_B8LZE7 UniRef90_B6QQR4 UniRef90_W2S973 UniRef90_M1VGW3	K R V Y Q A CI P C R R R K V K C D L N P S D P P C V R C R R E S K E C F F S A R K V Q H A C V M C R R R K V Q C D G K N T E K K C S T C V A N N F D C T WA E R R I S R A C D Q C N S L R T K C D G Q H P C A H C I E F G L T C E Y A F M L I E Q A C D S C R K R K L R C S K E Y P K C S K C V T H K W S C V Y S F T R V S R A C D Q C R K Q K M R C Q N A D D P P C V R C K S A N L P C T F E K K R L Y Q A C L P C R R R K V R C D L N P S D P P C V R C R R E S K E C F F S A K R P M V S C E L C K Q R K V K C D R A Q P S C G W C A R N G Q T C E Y K E P K R M A C I V C R K R K L R C D G Q K P S C G T C A R V G H N C T Y D E I A C I L C R K R K L K C D G S K P S C S T C S R L G H N C E Y N E P Q S P H Q Q G P H S Q S P H L Q S P H S Q S P H S Q S P H S Q S P H S Q S P H S Q S P H S Q S P H S	\ \ ==================================
UniRef90_UPI00046CFE6D UniRef90_UPI00046CFE6D UniRef90_A8N128	P Q S P H Q Q G P H S Q S P H L Q S P H S Q P Q S P H Q Q G P H S Q S P H L Q S P H S Q))
UniRef90_U5H3G9 UniRef90_Q5A453 UniRef90_Q6CKI5 UniRef90_J4U7H4	KRTYRACLPCRSRKLKCDLGDPDGPCRRCRRESRDCIF QRRILSCVYCHSKKIKCDRQKPCSQCTKLGMECKYIN KKVSVACVHCAKSHVTCDDNRPCTRCIRKGLEESCII)

```
100 110 12
R T N E | Q D H N N S R S Y N T F D N S N N
R P K S V G E D S N M D P L S R H G S N T P
E G F D T S R R G S R
L Q E R H N S R K R R A S D E Y L T L Q S
Y Q G Q G Y M Q G Q S D S Y N N L N G P Q P
                                                                                                   V P L K R G P S
V P L K R G P S
V P M K R G P T
V P L K R G P S
N S S H R
                                                                                                                                                                     QUERY
UniRef90_Q6FLP2
UniRef90_C5DGQ7
UniRef90_G8JW69
UniRef90_G8BHK8
UniRef90_A0A024UAL5
UniRef90_D0P371
                                                                                                                                                                                                                        S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S V L H A L R R I D H D A S S Q A P S S A G S L S P N D F D D N E S H A R T H S L G G I E A R I V K M E H L I A S L A P G V D F T D R L A E R L N S L E Q Q V Q P P H L E Q Q H R Y E I Q P M S P G Y S
                                                                                                  S P A Y S
V P K K K
V P L K R
A A R K R
Q P M K R
                                                                                                                                                                      PAYSPGLRSAKGHSKGHSYVEKGYIK
                                                                                                                                                     T S P K P S P P S
                                                                                                                                                                                                                T S P A Y S P T S P A R V L H A L R R I D H
                                                                                                                                              PGGAG
UniRef90_M3DCK5
UniRef90_A5DIV7
UniRef90_E6ZJK0
UniRef90_F9X9I7
                                                                                                                                                                                                                A I
E L
UniRef90_D8TT23
UniRef90_T0Q521
UniRef90_N1QMN7
UniRef90_K0R3M3
                                                                                                     Q P M K R G P S K G Y [ K E [ A E R [ N N [ H P P H [ E Q Q H R Y E [ Q Q V Q Q
                                                                                                                                   HETEERTKKRYKANIATSA
RGPVGKRIEEI
RLHQKGLATAGERQ
RGPSKGYIKELAD RIHSIENKLESDGGLSQDDID
RGPAKGYIRSRKGSVTMSPRINVSLTSALPMTNNQ
RGPPNLYLRRLQQQQEAAAAAQAQANGGGLAPLAN
RGPSKGYISQLAERVQGLEQKQRQSLDAGQGGFAE
SKPTEPYYEDEVTSTPNQSGYSPQASPYQSHQNQI
RGPPNLYLRRL
Q
KKVPDNAEKSKVSETILAHLFPDVDFYSADF SLD
REPSKRARSEHELSAADEEGSSKNEFASSQGMPRN
UniRef90_B6AG69
UniRef90_M3BTF8
                                                                                                   AVLQK QPE
                                                                                                                   K C K K K K K K K R R
UniRef90_N3U19F6
UniRef90_G0V8L7
UniRef90_J0CX19
UniRef90_W9W7D0
UniRef90_A5DJ86
UniRef90_A5DJ86
UniRef90_UPI0004416B54
UniRef90_UPI0004416B54
UniRef90_Q6CB01
UniRef90_A8Q516
UniRef90_M2WJ37
UniRef90_UPI0004624727
UniRef90_UPI0004624727
UniRef90_K918S2
UniRef90_A0A017SJ27
UniRef90_B0YA51
UniRef90_B0YA51
UniRef90_G4T8R1
UniRef90_A7F197
UniRef90_D8LRY3
UniRef90_D8LRY3
UniRef90_D8LRY3
UniRef90_D8LRY3
UniRef90_UPI0003500021
UniRef90_UPI0003500021
UniRef90_UPI0003500021
                                                                                                 PPRRKKVPDNAEKSKVSETILAHLFPDVDFYSADF SLDEP REPSKRARSEHELSAADEEGSSKNEFASSQGMPRNQSPMR
SPAKRRRPNEQTTDQHKAVEGVFKHSTNGSIDGSAQFSNRRSGNMTPALGGMTPFTSARTP
PTRE ASLTGEAGLERIRSLESHVADIRASQTAIQNPSRETGEAGLERIKSLESHVADIRASQTAIQNPSRETGEAGLERIKSLEAHVAELKTTQIRILESTLADIAAARKKRGKSKKDLAVAAAVATAGATNPSSDRDTDTDRVNNGRNKKKPSNGYANGSLDPMVNDQILAPPVTIQAPEYPIDSKRRKKSR IEVENGTROPSQSPADGLDHQAAFSPLHMNGTDDAPTRRKRKKSR ENSVDNEFADDYVTRNGRKMVSGS
                                                                                                    T P G S S D S H S S T P G S S D S E V S E R A R K K Y K V N N T L S S
                                                                                                                                                                                                                                                          HSSTPGSSDSHSSTPGSSDSHS
YSPSSPLNSDNKISNISPDLSP
UniRef90_UPI0003500021
UniRef90_Q5CH45
UniRef90_UPI0002B8D44C
UniRef90_G6CM85
UniRef90_W9YHX8
UniRef90_R7SV30
UniRef90_Q7RJS0
UniRef90_Q7RJS0
UniRef90_UPI0001BF7D46
                                                                                                   PPRKRGLTGGYVRVLETLSILERIDGSEHAAIKLLEELVV
                                                                                                UniRef90_Q5U918
UniRef90_N1J4Y4
UniRef90_UPI0003F4A05C
UniRef90_Q0UHM4
UniRef90_UPI0003F497A5
UniRef90_W9CF82
UniRef90_G6D6D2
UniRef90_W0T9I8
UniRef90_G6b6b2
UniRef90_W0T9l8
UniRef90_L8FMT5
UniRef90_R0KG34
UniRef90_W9XIC8
UniRef90_D8QAV3
UniRef90_G5EH28
UniRef90_A0A023AZW7
UniRef90_O77165
UniRef90_S7Z7G0
UniRef90_S7Z7G0
UniRef90_G2RHB8
UniRef90_G2RHB8
UniRef90_S8FYN0
UniRef90_B8MRF1
UniRef90_B9BMRF1
UniRef90_R9P111
UniRef90_R9P111
UniRef90_M3CMV2
UniRef90_M3CMV2
UniRef90_W9YE09
UniRef90_W9YE09
UniRef90_W9YE09
UniRef90_W9YE09
UniRef90_W9YMY4
UniRef90_W9YMY4
UniRef90_W1JBQ4
UniRef90_N1JBQ4
UniRef90_N1JBQ4
UniRef90_H7C834
UniRef90_H7C834
UniRef90_H7C834
                                                                                                PMILTSPMSPAGFMSPGSPGRYS

PQKKRGPTGHRVSQIRQQQTHVISRNSQEPAIPKPEPFQ
TVKKRGPPKGYVNTLEQR
TRRKRKAEDG EDPEPEDVDDYTIRNGRKRVHVSGSPP
EPRENETRKSKSGPSNAQETQSQPDVGPSSARQDAGAMR
PSRKRGPPKGYIDAII EARLHQTEALIGILLSSKDSRAR
ERKKRGKSKKDLAEAAAKAASGGSRDSGTPGYETIPDQS
QSNKIKIPHGGNKPMDDLVEHARNDSMQSQESNVLPQST
DSKKRGLTTGYVRALELLWALVFTVVPNSKAQELLPDIQ
RKNQRRDSTPQEAQAAVLEQQSHSWVPTPP
NPKKRGLPTGYIRTIELLWGLVFCKIQGSEEVVRALLKQ
RQKPGLRVGYGRELEEK LRLEALLQVMGRRLEDHIS
APRKRK
PTDSAANVLVRKEYLSDLENRVAANEGVQSLDHIS
TRRKRKPSE VEEPTEDGVLRRDKRMMVGEVVSNGSPN
TRRKRKPSE VEEPTEDGVLRRDKRMMVGEVVSNGSPN
TRRKRKKPSE VEEPTEDGVLRRDKRMMVGEVVSNGSPN
TRRKRKYEDGAEESTNRLESSDEYAIRNGRRPTLISHSP
RAKRGKRRKAYVESLESTNRLESSDEYAIRNGRRPTLISHSP
RAKRGKRRKAYVESLESTNRLESSDEYAIRNGRRPTLISHSP
RAKRGKRRKAYVESLESTNRLESSDEYAIRNGRRPTLISHSP
RAKRGKRRKAYVESLESTNRLESSDEYAIRNGRRPTLISHSP
RAKRKKG KAAYVESLESTNRLESSDEYAIRNGRRPTLISHSP
RAKRKRGKRRKAYVESLESTNRLESSDEYAIRNGRRPTLISHSP
RAKRGKRRKAYVESLESTNRLESSDEYAIRNGRRPTLISHSP
RAKRGKRRKAYVESLESTNRLESSDEYAIRNGRRPTLISHSP
RAKRGKRRKAYVESLESTNRLESSDEYAIRNGRRPTLISHSP
RAKRGKRRKAYVESLESTNRLESSDEYAIRNGRRPTLISHSP
RAKRGKRRKAYVESLESTNRLESSDEYAIRNGRRPTLISHSP
RAKRGKRRKAYVESLESTNRLESSDEYAIRNGRRPTLISHSP
RAKRGKRRKAYVESLEGQREFIRSLEMQVSSMSSNLFFELVG
RTKRKRADGSRENSVEDEYADDYVTRNGRKMVSGSPPAAA
RRKPGLRAGYVKQLEARLEQREFIRSLEMQVSSMSSNLFFELVG
RRKKSGPKRGYVKQLEARLAQVEILLKNQEP
ERKKSGPKRGYVKQLEARLAQVEILLKNQEP
UniRef90_H7C834
UniRef90_C4QZ96
UniRef90_R9ANB3
UniRef90_UPI0001584D9A
UniRef90_B8LZE7
UniRef90_B6QQR4
UniRef90_W2S973
UniRef90_M1VGW3
UniRef90_W1VGW3
UniRef90_UPI00046CFE6D
UniRef90_UPI00046CFE6D
UniRef90_A8N128
UniRef90_U5H3G9
UniRef90_Q5A453
UniRef90_Q6CKI5
```

```
130 140

G D N G I N S N T V P S

I D D R L G G S T D P G

G D A G R P

I P R Q P L L A R E D V A

B P L P P H F A H H T P Q
                                                                                                                                                                                                                                                                        150
N S V L L
G S I L L
D P V S L
T P V A L
S P N S S
                                                                                  TLN
LD
KRS
GNG
VQV
                                                                                                        N N T
N N S
S S D
H E Q
Q P Q
                                                                                                                                                                                                                 VPSTPSRS
DPGTPSRS
RA
DVAHPTSS
TPQHYVPP
                                                                                                                                                                                                                                                                                                                                T Q Y | P Q Q Y P Q A Q Y L P H Y Y L P A N Y V P
                                                                                                                             GNS
NSF
QQ
LP
 QUERY
                                                                                                                                            SGKHG
                                                                                                                                                                                                                                                                                                                    PPPP
                                                                                                                                                                                                                                                                                                                          LLLL
UniRef90_Q6FLP2
UniRef90_C5DGQ7
UniRef90_G8JW69
UniRef90_G8BHK8
                                                                                                                                                                                                                                                                                                             D
UniRef90_A0A024UAL5
UniRef90_D0P371
                                                                                                              A Y S P T S P A Y
F G S N W G W G T
P P S L P Y P N H
I R R P D E K G D
A M A E G L Q A Y
G Y S P T S P A Y
                                                                                                                                                                                                  S P A Y S
V P P G A
A H K V S
S N D A T
P R I M P
S P A Y S
                                                                                                                                                                                                                                                                                      PTSPA
GQEIA
IVLPP
VSPIK
RLHPG
PTSPA
                                                                                          T S
T Q
T Y
G K
V Q
T S
                                                                                                                                                                                     PTGSSPS
                                                                                                                                                                                                                                      P T
S P
P P
K P
D P
P T
                                                                                                                                                                                                                                                           P A Q S P S Q F A
                                                                                                                                                                                                                                                                                                                                  S P
G Q
V H
T R
Q P
                                                                                  P T
Q T
S T
                                                                                                         PPDPQP
                                                                                                                                                                               SNSETS
                                                                                                                                                                                                                                                     SSNSRS
                                                                                                                                                                                                                                                                        YPSEDY
                                                                                                                                                                                                                                                                                 SQSDKS
                                                                                                                                                                                                                                                                                                                                              T P S P L T
                                                                                                                                                                                                                                                                                                                                                     S P A G D S P P P
                                                                                                                                                                                                                                                                                                                          YYLEQY
UniRef90_M3DCK5
UniRef90_A5DIV7
UniRef90_E6ZJK0
UniRef90_F9X9I7
                                                                                                          UniRef90_D8TT23
UniRef90_T0Q521
                                                                                    A M A E GLQSYPYDPR MLRDPRSGEKRSHDLADGLQGAQ
UniRef90_N1QMN7
UniRef90_K0R3M3
                                                                                 SPTSPVYSGDKDGDSS
PLHSPTASSG
LFSTDRPRQSQGEDAA
FVSSS
SPPSALSPTSPASLGP
SPPDDQTGAGFQNRTPS
QNQNPNQLNQNQLNQH
AAAAAAAAQQDGGGGG
FVSRAQYLSQSGVNLV
DVQDATAQPLLPDL
PLGAQSPGYGFAPTSP
GINGMDMQRDMLPWDN
HFAMTPMYGACTPLSS
LEELVSHLRGGGSVSV
LRAFPFSARSPSTYPP
I MAKEHNSQDEFSSRE
PILAESGLPPFNHFANNA
GSFLRRLSESHGLNA
FDWQGYAPSPMRPASG
PASFRQTSMGAPSSARS
 UniRef90_B6AG69
 UniRef90_M3BTF8
UniRef90_N4U9F6
UniRef90_G0V8L7
UniRef90_J0CX19
UniRef90_W9W7D0
UniRef90_A5DJ86
UniRef90_A5DJ86
UniRef90_UPI0004416B54
UniRef90_Q6CB01
UniRef90_A8Q516
UniRef90_M2WJ37
UniRef90_UPI0004624727
UniRef90_UPI0004624727
UniRef90_W9WLS2
UniRef90_W9WLS6
UniRef90_B0YA51
UniRef90_G4T8R1
UniRef90_A7F197
UniRef90_D8LRY3
UniRef90_D8LRY3
UniRef90_A8IRZ2
UniRef90_A8IRZ2
UniRef90_UPI0003500021
                                                                                   STPGSSDSH
TSPHYSPTS
SNDVTKP
TSHNYSPTS
DRGEEWRME
PVQTMLAAQ
UniRef90_Q5CH45
UniRef90_UPI0002B8D44C
UniRef90_G6CM85
UniRef90_W9YHX8
UniRef90_R7SV30
UniRef90_Q7RJS0
UniRef90_Q9BMP3
UniRef90_UPI0001BF7D46
                                                                                  TKSRAEPSSRRFNEPS
UniRef90_Q5U918
UniRef90_N1J4Y4
UniRef90_UPI0003F4A05C
UniRef90_Q0UHM4_
UniRef90_UPI0003F497A5
UniRef90_W9CF82
UniRef90_G6D6D2
UniRef90_W0T9I8
UniRef90_L8FMT5
UniRef90_R0KG34
UniRef90_W9XIC8
UniRef90_D8QAV3
Unikef90_D8QAV3
Unikef90_D8QAV3
Unikef90_G5EH28
Unikef90_A0A023AZW7
Unikef90_O77165
Unikef90_S7Z7G0
Unikef90_B8MFL6
Unikef90_G2RHB8
Unikef90_G2RHB8
Unikef90_S8FYN0
Unikef90_B8MRF1
Unikef90_R9P111
Unikef90_R9P111
Unikef90_M3CMV2
Unikef90_M3CMV2
Unikef90_W9YE09
Unikef90_W9YE09
Unikef90_W9YE09
Unikef90_W9YE09
Unikef90_W9YE09
Unikef90_W9YMY4
Unikef90_W9YMY4
Unikef90_W0ZJF1
Unikef90_N1JBQ4
Unikef90_UP1000455FE8
                                                                                  HGPTSGQAES
HGPTSGQAES
HGPTSGQAES
ELLRDGLYS
ELLRDGLYS
VLMSVVMMTS
QMSVVMMTS
QMSVVMMTS
QMSVVMMTS
ALDSSRNL
NMPSHLAAT
HGDYPSRMK
APSHLAAT
HGDYPSRMK
APSHLASD
TPDHLVGGN
VGEHSLNKGAP
LLSTNKGAP
IRRSTNKGQHL
VGEHSLNKGAP
IRRSTNKGQHL
LET
                                                                                                                                                                                                                                                                                                                                                                   N V P D V R Q P
                                                                                                                                                                                                                                                                                                                                                                    N
Q
L
 UniRef90_UPI000455FE86
UniRef90_H7C834
UniRef90_C4QZ96
UniRef90_R9ANB3
UniRef90_UPI0001584D9A
UniRef90_B8LZE7
UniRef90_B6QQR4
 UniRef90_W2S973
 UniRef90_M1VGW3
UniRef90_W1VGW3
UniRef90_UPI00046CFE6D
UniRef90_UPI00046CFE6D
UniRef90_A8N128
UniRef90_U5H3G9
UniRef90_Q5A453
UniRef90_Q6CKI5
                                                                                                                                                                                                                HSQSPH
HSQSPH
MSFPQS
QQQPPS
NPLAPS
TIRQSA
                                                                                                                                                                                                                                                          QQGP
QQGP
PHGA
SSIA
PANN
                                                                                                                                                                                                                                                                 Q G P H S Q H P Q S
Q G P H S Q H P Q S
H G A G G M S P G P
H L S H V Q N
S I A T S I E E V E
A N N G K N N P E T
                                                                                  QSP
QSP
AFS
SVT
TQS
LKM
                                                                                                                                                 G Q S P H P Q G Q S P H P Q G A E D T A N F S N L P I P Q T N S S T T S N I P L D Y D
                                                                                                                            GPH
GPH
SNG
PTA
SSP
                                                                                                               P Q P Q A D S G P G
                                                                                                                                                                                                   G P
G P
Q Y
H A
T A
G G
                                                                                                                                                                                                                                                                                                                                         PPGHQQ
                                                                                                                                                                                                                                                                                                                                               HHYHQQ
                                                                                                         HHPPSE
                                                                                                                                                                                                                                                                                                                                                       PPSHQTS
```

Q Q Q M

RST

NELRQ

M

```
170
Q N P
S N N
S Q P
L Q S
G G P
                                                                                                                                                                                                                                                                                                                                180
G N I
S T I
G A Q
F P P
H L Y
                                                                                                                                                                                                                                                                                                                                                                                                                                        190
V P
V P
V P
V P
                                                                                                                            A G G L P P S F
Q N Y T S T S A
S G
N N T Q Q H S L
N N P Q Q F P G
                                                                                                                                                                                                                                                                                                                                                              G Q Q Q F
L Q Q Q F
P Q Q Q F
M Q Q Q F
H S P P F
                                                                                                                                                                                                                                             A | Q S T M P A M L N S T S L N R L Q P L L A P S A Q S S P Q R P P P P P P P
                                                                                                                                                                                                                                                                                                                                                                                                                    WK
WK
WK
WK
N G
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Y H
Y H
Y Y
Y Y
L S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QHQNQHQFSP
 QUERY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HHHHQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             F F Y H P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QQQQDMP QUDDP AUPP
                                                                                                                    UniRef90_Q6FLP2
UniRef90_C5DGQ7
UniRef90_C5DGQ7
UniRef90_G8JW69
UniRef90_G8BHK8
UniRef90_A0A024UAL5
UniRef90_D0P371
UniRef90_M3DCK5
UniRef90_A5DIV7
UniRef90_E6ZJK0
UniRef90_F9X9I7
IJRIREF90_D8TT23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YPRDRTSRFYDSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  THRDHSPRSS
UniRef90_D8TT23
UniRef90_T0Q521
 UniRef90_N1QMN7
UniRef90_K0R3M3
UniRef90_B6AG69
UniRef90_M3BTF8
UniRef90_M3BTF8
UniRef90_N4U9F6
UniRef90_G0V8L7
UniRef90_J0CX19
UniRef90_J0CX19
UniRef90_M9W7D0
UniRef90_W9W7D0
UniRef90_UPI0004416B54
UniRef90_Q6CB01
UniRef90_V5G134
UniRef90_M2WJ37
UniRef90_M2WJ37
UniRef90_UPI0004624727
UniRef90_UPI0004624727
UniRef90_UPI0004624727
UniRef90_W9WLS6
UniRef90_B0YA51
UniRef90_B0YA51
UniRef90_B0YA51
UniRef90_G4T8R1
UniRef90_A7F197
UniRef90_D8LRY3
UniRef90_D8LRY3
UniRef90_D8LRY3
UniRef90_D8U005500004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRY HIRYAZHAG GRRYSHSYGYT YYQPTAHGS YADYRTYAQRAHTRLAHA RLSYKERSYTTPTHHAANYW PRPQPLYSDQAAG SATLYMGHTSGMXXHREDMGV VSGGQSHSAAMDLHLQDST QVYLGXSHLAPLAHHQMSLA KPG XSLPLHFGH EXRLRPPPHTVAQPTXRSPGHSQSFTFGPAGTHHRDPXFSLLRHLLXHHLXLAPPPRGSFP XSG PVHVHAHQQSSDDPSTSXSTGLSGSFQQYPQDSSGTSSPLMPHTADELXSDHPESSSRLAPS PVHVHAHQQSSDDPSTSXSTGLSGSFQQYPQDSSGTSSPLMPHTADELXSDHPESSSSRLAPS PVHVHAHQQSSDDPSTSXSTGLSGSFQQYPQDSSGTSSPLMPHTADELXSDHPESSSSRLAPS
UniRef90_A8IRZ2
UniRef90_UPI0003500021
UniRef90_UPI0003500021
UniRef90_Q5CH45
UniRef90_UPI0002B8D44C
UniRef90_G6CM85
UniRef90_W9YHX8
UniRef90_R7SV30
UniRef90_Q7RJS0
UniRef90_Q7RJS0
UniRef90_UPI0001BF7D46
 UniRef90_Q5U918
UniRef90_N1J4Y4
UniRef90_UPI0003F4A05C
UniRef90_Q0UHM4
UniRef90_UPI0003F497A5
UniRef90_UPCF82
 UniRef90_G6D6D2
UniRef90_W0T9I8
UniRef90_W0T9I8
UniRef90_W0T9I8
UniRef90_L8FMT5
UniRef90_R0KG34
UniRef90_D8QAV3
UniRef90_D8QAV3
UniRef90_G5EH28
UniRef90_A0A023AZW7
UniRef90_S7Z7G0
UniRef90_S7Z7G0
UniRef90_B8MFL6
UniRef90_B8MFL6
UniRef90_G2RHB8
UniRef90_G2RHB8
UniRef90_B8MRF1
UniRef90_B8MRF1
UniRef90_F9G6M9
UniRef90_R9P111
UniRef90_R9P111
UniRef90_W9YE09
UniRef90_W9YE09
UniRef90_W9YE09
UniRef90_W9YE09
UniRef90_W9YMY4
UniRef90_W9YMY4
UniRef90_W9YMY4
UniRef90_Q0CJF1
UniRef90_U1D0004F6EEE
UniRef90_N1JBQ4
UniRef90_UPI000455FE86
UniRef90_H7C834
UniRef90_C4QZ96
 UniRef90_R9ANB3
UniRef90_UPI0001584D9A
UniRef90_B8LZE7
UniRef90_B6QQR4
 UniRef90_W2S973
UniRef90_M1VGW3
UniRef90_W1VGW3
UniRef90_UPI00046CFE6D
UniRef90_UPI00046CFE6D
UniRef90_A8N128
UniRef90_U5H3G9
UniRef90_Q5A453
UniRef90_Q6CKI5
```

FSAKPPSSYSSSSSTSNVSGR

```
210
DISVRTLNPNEQLSYNTVQQSPITNKHTNDS
DLSVRTFNPQDQLVYNTFQQSPIAMKHSSDP
DVSNRN GSEQLAY
QUERY
UniRef90_Q6FLP2
UniRef90_C5DGQ7
UniRef90_G8JW69
UniRef90_G8BHK8
UniRef90_A0A024UAL5
UniRef90_M3DCK5
UniRef90_A5DIV7
UniRef90_A5DIV7
UniRef90_F9X9I7
UniRef90_F9X9I7
UniRef90_D8TT23
UniRef90_D8TT23
UniRef90_N1QMN7
UniRef90_N1QMN7
UniRef90_N1QMN7
UniRef90_K0R3M3
UniRef90_B6AG69
                                                                                                                                                                                                S L Q S S L Q S S L G S S V H S S A A N Y T T P A Y S
                                                                                                                                                              SI DE DD DD PD S K T S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              E P P
S P R
S P H
Y S P
V F T
G V S
R V I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AKPQLPNPTSPMSDVGD
                                                                                                                                                S S L D S V H S

S P S A A N R Y S P S N G P P G S S L S Y G A F Q H P
F S K D Y T T P D V S F G T P G A T S P L M S P S G S F S
S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S

R P I P P N T Q Q S E S I A A G S
E S A D S V S S T N S N L S N G S R S R M S S L V P S V S
D D I A F I Q S R I S Q V N L H S Q P A L A S T S A T F D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PSPFPTEAVSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NNG
VSFA
SPA
QSES
SSE
                                                                                                                                                                                                                                                                                       PAYSPTS
PAYSPTS
VSSFDWD
GSGTSGS
PTSPHYS
YEDLMAN
ETVDIDE
RPGSLSS
                                                                                                                                                                                                                                                  PTSPTSNSTPAGSDAGS
                                                                                                                                                                                                                                                                                                                                                                             PAYSPTSPAYSPTSPGFSPAYSPTSPAYSE

FAYSPTSPAYSPTSPAYSPSPNYSPTSPNYSPTSPHYSPTSPNTSTF

QVASLPNASPAPSMLQSYLSTVGPVYPLLPSSIVSGSSSSESPHSSP
                                                                                                                                                 SPGSPGAP
                                                                                                                                                                                                  PAAPPSS
PPQVS
                                                                                                                                                                                                                           Y PYSPRPT
UniRef90_N'QMIN'
UniRef90_KOR3M3
UniRef90_B6AG69
UniRef90_M3BTF8
UniRef90_N4U9F6
UniRef90_G0V8L7
UniRef90_J0CX19
UniRef90_J0CX19
UniRef90_A5DJ86
UniRef90_UPI0004416B54
UniRef90_UPI0004416B54
UniRef90_W37
UniRef90_W37
UniRef90_M2WJ37
UniRef90_UPI0004624727
UniRef90_UPI0004624727
UniRef90_UPI0004624727
UniRef90_W37
UniRef90_W37
UniRef90_UPI0004624727
UniRef90_W37
UniRef90_UPI0004624727
UniRef90_UPI0004624727
UniRef90_W38S2
UniRef90_W38S3
UniRef90_W38S3
UniRef90_W38S3
UniRef90_W38S3
UniRef90_W38S3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SYTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       P
S
G
T
                                                                                                                                            PPTASTPPRAPTLYTSYY
UniRef90_UPI0003500021
UniRef90_Q5CH45
UniRef90_UPI0002B8D44C
UniRef90_G6CM85
UniRef90_W9YHX8
UniRef90_Q7RJS0
UniRef90_Q7RJS0
UniRef90_UPI0001BF7D46
UniRef90_UPI0001BF7D46
UniRef90_UPI0003F4A05C
UniRef90_UPI0003F4A05C
UniRef90_UPI0003F497A5
UniRef90_UPI0003F497A5
UniRef90_UPICF82
UniRef90_UPG6D6D2
UniRef90_UP10003F497A5
UniRef90_W9CF82
UniRef90_G6D6D2
UniRef90_W0T918
UniRef90_R0KG34
UniRef90_BVXC8
UniRef90_D8QAV3
UniRef90_D8QAV3
UniRef90_O5EH28
UniRef90_O77165
UniRef90_O77165
UniRef90_S7Z7G0
UniRef90_S7Z7G0
UniRef90_S8MFL6
UniRef90_B8MFL6
UniRef90_B8MFL6
UniRef90_G2RHB8
UniRef90_G2RHB8
UniRef90_S8FYN0
UniRef90_B8MRF1
UniRef90_B9MRF1
UniRef90_W9P111
UniRef90_R9P111
UniRef90_R9P111
UniRef90_W9C0U7
UniRef90_W3CMV2
UniRef90_W3CMV2
UniRef90_W3CMV2
UniRef90_W3CMV2
UniRef90_W9YE09
                                                                                                                                           UniRef90_W2S973
UniRef90_M1VGW3
UniRef90_W1VGW3
UniRef90_UPI00046CFE6D
UniRef90_UPI00046CFE6D
UniRef90_A8N128
UniRef90_U5H3G9
UniRef90_Q5A453
UniRef90_Q6CKI5
```

```
250

NANGSVTGSGSASGSGGYWSFIRTSGLLAPTDDHNGEQTR
NSIPPNTKSQHLSGNPNYWGSVR AGSFIPNGDENDDQIR
PSNASSGSQFY

GQNEQYTPSTASSSSRGLQPIQDYFLQHDQAPELPDERER
IPAPSSHHRTSQDNGKPYLPSPTAISNSMFRGGPHHLQSP
SPYSQSPGYAQSPGLNPTSPLYSPTSPAYSPTS
PAYSPTSPAYSPTSPGYSPTSPAYSPTSPAYSPTS
PAYSPTSPAYSPTSPGYSPTSPSYSPASPEYNPTEGYNP
SELYSRRAITPEAFMPFVQLFFQHMFPIMPVFDRSVFLDP
DDFHSVRSKMSRQSSQSISPRNSVSSLSSLNGRINSMTFQ
NVKVEDPPHVPNT
QUERY
UniRef90_Q6FLP2
UniRef90_C5DGQ7
UniRef90_G8JW69
UniRef90_G8BHK8
UniRef90_G8BHK8
UniRef90_A0A024UAL5
UniRef90_D0P371
UniRef90_M3DCK5
UniRef90_A5DIV7
UniRef90_E6ZJK0
UniRef90_F9X9I7
UniRef90_D8TT23
UniRef90_T0Q521
LIDIREF90_N1OMN7
                                                                                          P A Y S P T S P T Y
A Y S P T S P A S P T
                                                                                                                                                                           S P T S P T Y S P T S P T Y S
S P A Y S P T S P A Y S P T S
                                                                                                                                                                                                                                                                                           PTGPAYS
PAYSPTS
                                                                                                                                                                                                                                                                                                                                                               S
Y
                                                                                                                                                                                                                                                                                                                                                                               SER
UniRef90_N1QMN7
UniRef90_K0R3M3
                                                                                          PAYSPTSPAYS PTSPAYSPTSPSYFWALRELDLPPLTAAADLWPVKVNE
                                                                                                                                                                                                                                                                                    S P A Y S
N P A S P
T T L L P
                                                                                                                                                                                                                                                                                                                          PTS
NYS
WID
                                                                                                                                                                                                                                                                                                                                                        A
S
                                                                                                                                                                                                                                                                                                                                                               YS
SP
VY
                                                                                                                                                                                                                                                                                                                                                                      SPTS
PHYN
YFTR
                                                                                                                                                                                                                                                                                                                                                P
P
UniRef90_B6AG69
UniRef90_M3BTF8
UniRef90_N3U19F6
UniRef90_G0V8L7
UniRef90_J0CX19
UniRef90_W9W7D0
UniRef90_A5DJ86
                                                                                                                                                                    LYSESQSSYPYSQFSQNLQKSTHKNGSHRK
                                                                                        LS N
NP GSVS GS MS GS MS GS MS GS IS GPITS SIPGSVS GAPLS
LH N WS Y K QH T A LP LP S P
UniRef90_A5DJ86
UniRef90_UPI0004416B54
UniRef90_UPI0004416B54
UniRef90_Q6CB01
UniRef90_A8Q516
UniRef90_M2WJ37
UniRef90_U9SVU6
UniRef90_UPI0004624727
UniRef90_K9I8S2
UniRef90_A0A017SJ27
UniRef90_B0YA51
UniRef90_B0YA51
UniRef90_G4T8R1
UniRef90_A7F197
UniRef90_D8LRY3
UniRef90_D8LRY3
UniRef90_D8LRY3
UniRef90_UPI0003500021
UniRef90_UPI0003500021
UniRef90_UPI0003500021
                                                                                        LLNSMTLAGNNA
GFLQPPQLGAAQS
PAGPGASGPKYSPTSPQYSPTSPQY
QIVGISGESDPYLLSKRYDEYNEATFQSVRMR
NASQSAYNRQTSPTYSPTEYGDDYVPNGQSST
GDMHTQGPPGMMYSNGGAGQHPAHGPSLPPFS
YQNADQRSPNKQTTVSGVKRPAPPPSNVTSAD
SDPESTYPLMNPQEPNPSTLNHFRLTGPTENQ
NPAKRMKLSPRTDSFGRTASNYQRAGSYGPND
                                                                                                                                                                                                                                                                                                                                         QNASPTKMNSPSSAPTD
                                                                                                                                                                                                                                                                                                                                                               GNGI
SPQY
GGPG
YTPT
SMGP
LDDD
FMGL
VAPR
                                                                                      NPAKRMKLSPRIDSFGRIASNYQRAGSYGPNDIDEWAPRH

SPKYSPTSPKYSPTSPRYSP

TSPKYSPTSPRYSPTS

NTSFPLSHWRHTTAHP

PAYSPTSPSPTSPAYSPTSPAYSPTSPAYSPTS

SPTSPAYSPTSPAYSPTSPAYSPTSPAYSPTS

SPTSPAYSPTSPAYSPTSPAYSPTS

DSHSSTPGSSDSHSSTPGSYFTSLPWP

PQYSPTSPNYNPASPNYSPTSHYSP

TSPNYNPTSPNY

KYPAQYPGYHPSTQQSDYPAWQGRPTHYPRPMDPSTKTPD

TPPAPPYSPTSHSYSLPYSPASPSISPSSPKYSPSPNY

PEGVLTLPDNTWELLNRYFTYTHTWFPLLEKSD

SPFYDRSHGATSPTYSPTSPALNLTSPGYSPTSPRYSPTS

SVIHSPFSPFDNRNKQPLDPFSPKNNASTNPGLNNYNVFS

NGTSGPTSPGYSPTSPGYSPTSPGYSPTSPGYSPS

NGASHHAPYGSNQAAMSNYPDL

PYAALQTQSPAGYSA

LMNSHDTNANSGSAENPSASFLGGFSPPAQSPSWLPLPSP

AQLLSCPVPLGEAIHEALSGAVNSFSKNNSTSSDLANIRR

SAFPSAFAMGLTPGTQAFLNDLIPPSSVTQGESHPPNLE

GSPYSMMSPQSAHAQAPPNPFRLSDEA

ANLGYLSQSPMHPQ

NSPMHPQQSPLHPQQSPMHPQ
UniRef90_UPI0003500021
UniRef90_Q5CH45
UniRef90_UPI0002B8D44C
UniRef90_G6CM85
UniRef90_W9YHX8
UniRef90_R7SV30
UniRef90_Q7RJS0
UniRef90_Q7RJS0
UniRef90_UPI0001BF7D46
UniRef90_UPI0001BF7D46
UniRef90_Q5U918
UniRef90_N1J4Y4
UniRef90_UPI0003F4A05C
UniRef90_Q0UHM4
UniRef90_UPI0003F497A5
UniRef90_W9CF82
UniRef90_W9CF82
UniRef90_G6D6D2
UniRef90_W0T918
UniRef90_L8FMT5
UniRef90_R0KG34
UniRef90_W9XIC8
UniRef90_D8QAV3
                                                                                          HCWLPIVEKHNSLRASYLYPTTISPSMTGSGDH
UniRef90_W9XIC8
UniRef90_D8QAV3
UniRef90_G5EH28
UniRef90_A0A023AZW7
UniRef90_O77165
UniRef90_S7Z7G0
UniRef90_B8MFL6
UniRef90_B8MFL6
UniRef90_G2RHB8
UniRef90_B8MRF1
UniRef90_B8MRF1
UniRef90_B9P111
UniRef90_F9G6M9
UniRef90_W9YE09
UniRef90_Q0D130
UniRef90_W9YE09
UniRef90_W9YE09
UniRef90_W9YE09
UniRef90_W9YMY4
UniRef90_W9YMY4
UniRef90_W9YMY4
UniRef90_W1JBQ4
UniRef90_UP1000455FE86
UniRef90_H7C834
UniRef90_C4QZ96
UniRef90_C4QZ96
UniRef90_UP10014584D0A
                                                                                        S R R R Q R A G
G P R E A L P S
R V V A S P V Y
A Y S P A S P A
L P Y S P A M G
                                                                                                                                                    S M A Q A G N S E WWA R F L S A E S S P S T G S T H Q S L P G I S H V P L S A S P S S P A F G M G A L N P Q S P G A Y S P A S P A Y S P A S P A S P A S P A S P A S P A S P A S I Q S S S S Q E P E G F W P N S I N E
                                                                                                                                                                                                                                                                                                          FRADTPHWLSFL
NSSGHRSAYQTS
SPTAQSPIGLVT
YSPASPAYSPAS
ANMIPWLDVYFD
                                                                                        VVSIPAMPQQP
MLPPSATPGGSMPVANAEQGSISRPASTLPADKTRAY
TLSITQPSSSGSLAGPASASALLSAGSEQAGEAPFRR
DASANHFTGLTPPVQSPGWLPLPAPSVGFPPINVSNG
SWRRPDLDQYPLRHRHTGVSASNVPSLALPDVEDVLQ
DIYFAHTNCWLPMVQKHMMELLYSPSRDDRAEEGNMA
SAPSLLPSPNGLALSGPHVPPRRSSTVQIPGLNPRDQ
VDAIPPLLPPSAQTTETHFKLPANTWPL
                                                                                                                                                                                                                                                                                                                                                                              Y L Q
Q R R
F T
Q P Q
T L W
E Y L
                                                                                                                                     STLSSILQDSFGHPTTSNEGTPNSSGSPHNQLQN
SALTALPS
ARQSVSSFNSPMSPLTQAGTPRSAGGSFSRPQRA
                                                                                         A A D L E Y
V P N V P E
L E N R Y A
                                                                                        F L N R Y L E D I P N Q P D D P P F T F P E P D L A R Q L I D L Y A A A L N H F R I G N S A E N P T A P F L G L S P P A Q S P G W L P L P S P D G M A A L S V N A L K L G Q F D S A S I S P M S S V R N S V S K T N T E
UniRef90_R9ANB3
UniRef90_UPI0001584D9A
UniRef90_B8LZE7
UniRef90_B6QQR4
                                                                                         HTSFPISHMRHTTT
SHNDSSLTVPVSLFNNQEQSLSNSELELPPYD
                                                                                       VCLRYAMWAHSASVTAKYYSFAEHFYARARKYAE
TGTLGAFSPSSPAYSPTSPRLVSPTSPAYSPTSP
GPHGPHPGAHQGPHPGAHQGPHQGPHQGPHQGPH
GPHGPHPGAHQGPHPGAHQGPHQGPHQGPHQGPH
PNFGSPASPNYSPASPSY
VPQFFMPSPLSLPTRQLHPTPTNLPAMTAPTYIR
MTSSYFNHNFTTQATNHNNSINGANNQINFNSS
AIYSNLLGPVSHEILQSEFNLYTNHFFPLQPQESL
PSYSPTSPAYSPAYPGGGRTSPGYSPTSPAY
UniRef90_W2S973
UniRef90_M1VGW3
                                                                                                                                                                                                                                                                                                                                                               DYGGTAFGP
                                                                                                                                                                                                                                                                                                                                                        Q A Q Q P P S D S
UniRef90_W1VGW3
UniRef90_UPI00046CFE6D
UniRef90_UPI00046CFE6D
UniRef90_A8N128
UniRef90_U5H3G9
UniRef90_Q5A453
UniRef90_Q6CKI5
                                                                                                                                                                                                                                                                                                                                                                              HHPSLLS
```

```
290 300 310 320

R S S S I P S L L R N T S N S L L L G G Q P Q L P P P Q Q Q S Q P Q A H Q Q K L

R S S S I P S L L R N T S T S L L S Q P Q L P H P T N G A G S S A S P Q A Q

Y A S Q L P S D V E G A N P E D C R G S L S L P A II Q K F Q Q P P S G Y

S S S I P S L I V R S N P II S H S Y H Q A P P P Q Y P Y S Q F A M A S N G S N T

P P P S A P I P G S A A A S S L G S E G Q P Q L P P P S A S S V T P K N A S T S

P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P

S A S G Y S P

Y Q Y S N H S S M S S E M Y A L C A L Q P P S I H P S K K T D A F F A E E C L

Q P A S F S P P V P Y P A Q P G V V Q F Q F S P H Q Q F P Q M P

T L
 QUERY
UniRef90_Q6FLP2
UniRef90_C5DGQ7
UniRef90_G8JW69
UniRef90_G8BHK8
UniRef90_A0A024UAL5
UniRef90_D0P371
UniRef90_M3DCK5
UniRef90_A5DIV7
UniRef90_E6ZJK0
UniRef90_E6ZJK0
UniRef90_F9X9I7
UniRef90_D8TT23
UniRef90_T0Q521
                                                                                                          P T G S P A S P N Y S P T S P N Y S P T S P Q Y S P T S P Q Y S P T S P Q Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P 
UniRef90_N1QMN7
UniRef90_K0R3M3
                                                                                                        PAYSPTSPAYSPTSPAYSPTSPAYSP
PASPNYSPSSPQYNPALPNYSPSSPPNYSPSSP
LHPTLPLLNRTSLYSNML
 UniRef90_B6AG69
 UniRef90_M3BTF8
UniRef90_N4U9F6
UniRef90_G0V8L7
UniRef90_J0CX19
UniRef90_W9W7D0
UniRef90_A5DJ86
                                                                                                          RFSSI
UniRef90_A5DJ86
UniRef90_UPI0004416B54
UniRef90_UPI0004416B54
UniRef90_Q6CB01
UniRef90_A8Q516
UniRef90_M2WJ37
UniRef90_UPI0004624727
UniRef90_UPI0004624727
UniRef90_K918S2
UniRef90_A0A017SJ27
UniRef90_B0YA51
UniRef90_B0YA51
UniRef90_G4T8R1
UniRef90_A7F197
UniRef90_D8LRY3
UniRef90_D8LRY3
UniRef90_D8LRY3
UniRef90_D8LRY3
UniRef90_UPI0003500021
UniRef90_UPI0003500021
UniRef90_UPI0003500021
                                                                                                          S H S S P A Q N L P A V T A E N D A K I L P P L G Y G S P G S G P Q M A S S N R
                                                                                                        PTSSPTSPQYSPTSPQYSPTSPQYSPTSPQYSPTSPQYSPSGSTIPTFFMIQHNALASKAQPQ
PNYTPTSPKYSPTSPNYSPTSPSYSPTSPNYTPTSPRYSPRSTTNVSSMRYNAADNGRQGRPQ
NGELPASGLVAP
TAPSPGWLPLPPPSPANFPSFSMHPFPNSLRYPVLQPVLPTPTFFPSYLSNPLTPATSSTSQTQPEPEDRRDSKQDDQNG
                                                                                                          PTYSPTSPKYSPTSPKYSPTSPKYSPTSPKYSPTSPRYSP
                                                                                                         P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P 
UniRef90_G6CM85
UniRef90_W9YHX8
UniRef90_R7SV30
UniRef90_Q7RJS0
UniRef90_Q9BMP3
UniRef90_UPI0001BF7D46
                                                                                                         PSFSPTSPRYSPQSPSFSPTSPRYSPTSPSFSPASPRYSPKANMNN QSPLIYSPNPM DIFSPKPQMQNNIYSPSYSP
                                                                                                       NTSSGFRIGNSSLNAYPMAGEPTSPGWMNIASPPPQFAQHSPANFPSFSMAPSTLRYPVLQPVLPHIAS
SATLLSSLEDAPSRPLWL
DTTFPSYSSSQSNVTPVSGDSRSPSPYTAPLHQQNEQVT
VPGSPGWMLPSPSTTMYSGAPQHNPSQQ
SPTSPVYSPTSPVYSPASPAFSPTSPAYSPPAYSPNS
LAESPLPGFPMGSDAPSPGGWMSLPSPSNQYQHVTHQNFHQSSMHPSPMHSQQSPMHTQQSPMQSSMSPQHFL
UniRef90_Q5U918
UniRef90_N1J4Y4
UniRef90_UPI0003F4A05C
UniRef90_Q0UHM4
UniRef90_UPI0003F497A5
UniRef90_W9CF82
 UniRef90_G6D6D2
UniRef90_W0T9I8
UniRef90_L8FMT5
UniRef90_R0KG34
UniRef90_W9XIC8
UniRef90_D8QAV3
                                                                                                       HLESF
LPSSSTAYGAGVNVQMQLASVLDSTAAMDHSGMMATSPST
SLAAEPTAPLSPSALQSPRYDPMMSP
PAYSPASPAYSPASPAYSPASPAYSPASPAYSP
RLHPTVPVLSRSSLYTRMMLQ
UniRef90_D8QAV3
UniRef90_G5EH28
UniRef90_A0A023AZW7
UniRef90_O77165
UniRef90_S7Z7G0
UniRef90_B8MFL6
UniRef90_A0A010RT36
UniRef90_G2RHB8
UniRef90_S8FYN0
UniRef90_B8MRF1
UniRef90_B8MRF1
                                                                                                         R D G E D L S H A R S P S A T S V S G R S R S P A L A S A K S S S T L K Y P V L E P L L P H L V S L I P H S L A C D L L
UniRef90_BOMRF1
UniRef90_R9P111
UniRef90_F9G6M9
UniRef90_M3CMV2
UniRef90_Q0D130
UniRef90_W9YE09
UniRef90_W9YE09
                                                                                                          QSASL
AVVAYASLQDTRNHTGASDGQSALPPP
RVEGCFELLPPHVLKPMMRMYFRMVHPNLPLVPEDQF
                                                                                                         NYSQSGSIINSPS
                                                                                                                                                                                                                                                      EIQTLPKIPATHSTSSPLTQPHEP
UniRef90_W9YMY4
UniRef90_Q0CJF1
UniRef90_N1JBQ4
UniRef90_UPl000455FE86
                                                                                                          G A M S M P S A G P G S A D A P M S N G R D Q S A P A D N T Q D P
                                                                                                         Y T N S V S P L L H Q P T P A N F P S S L P S Y S S T L R Y P V L Q P V L P H I A S E P Q S I R S L L G D P N D F L E P E K K A E F P G Y D S H L N D P N N Q S Q Y
UniRef90_H7C834
UniRef90_C4QZ96
UniRef90_R9ANB3
UniRef90_UPI0001584D9A
UniRef90_B8LZE7
UniRef90_B6QQR4
                                                                                                         HGESIITLAH
PAYSPTSPAYSPTSPAYSPTSPAYSPSSPNVAY
PHQGPHQGPHQGPHQGPHQGPHGPHPQLPHQSQMPV
PHQGPHQGPHQGPHQGPHQGPHGPHPQLPHQSQMPV
SPASPGA SPMSPKYPPASPSFSPASPAYSPASPNYSP
UniRef90_W2S973
UniRef90_M1VGW3
UniRef90_UPI00046CFE6D
UniRef90_UPI00046CFE6D
UniRef90_A8N128
                                                                                                         AS GS
S D V S I T F S S H A N S P S E R L Q Q Q Q Q Q Q Q Q P P R P E S A S I V K
K R M T I G T L S P H L T N Q Y Y L N F A N T F P E I Y D S R K I P N L S Y A L
G A T S P R Y S P T S P Q Y S P A S P A F S P T S P A Y S P T S P Q A F
UniRef90_U5H3G9
UniRef90_Q5A453
UniRef90_Q6CKI5
```

```
330 340 350 36
QQGQNLYSYSQFSQQQPYNPSISSFGQFAANGFHSRQGSV
RQSQQLYSYSQFNQSKPYNNNFSSFGQFSTNGFQSRHGSL
YLQYPYSQFSQYVPAPPGAEHFKEFD EGFHSRKGSD
QUERY
UniRef90_Q6FLP2
UniRef90_C5DGQ7
UniRef90_G8JW69
                                         PLANSQHPSPNEQNGVNQTVTPSATSPAYSPTS
UniRef90_G8BHK8
                                                                                                                                        R I R S M
P A Y S P T S P A Y S P
UniRef90_A0A024UAL5
UniRef90_D0P371
                                         RERM LFDYPEQATSFNLMTSFLLFCYYGNHENHNRQESI
YGPMQLHPNTASHTPTPQPPT
UniRef90_M3DCK5
UniRef90_A5DIV7
UniRef90_E6ZJK0
UniRef90_F9X9I7
UniRef90_D8TT23
UniRef90_T0Q521
                                         T S P Q Y S P T S P Q Y S P S P A Y S P T A D V S P V Y S P T A D V S P S Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P 
UniRef90_N1QMN7
                                         T S P A Y S P T S P A Y S P T S P A Y S P T S P S R Q V R A Y S P T S P A Y S P N D S P Q Y S P S S P H Y Y H P T S P S Y T S T N M A A E E A E Y S P T S
UniRef90_K0R3M3
UniRef90_B6AG69
UniRef90_M3BTF8
UniRef90_N4U9F6
UniRef90_G0V8L7
UniRef90 J0CX19
UniRef90_W9W7D0
UniRef90_A5DJ86
                                                                SKSGASPYDPH VGLTTNVAVGTTPGTSPESSR
                                         NESQS
UniRef90_UPI0004416B54
UniRef90_Q6CB01
UniRef90_V5G134
UniRef90_A8Q5I6
UniRef90_M2WJ37
UniRef90_U9SVU6
                                         TSPQYSPTSPQYSPTSPQYSPTS
                                                                                                                              PQYSPSG
                                         NQAQSQHYSPTSPIJYSPTSPSYS
                                                                                                                                                      PTSPHYSP
UniRef90_U9SVU6
UniRef90_UPI0004624727
UniRef90_K9I8S2
UniRef90_A0A017SJ27
UniRef90_W9WLS6
UniRef90_B0YA51
UniRef90_G4T8R1
LIDIREf90_A7E197
                                        HIASIIPQS
AGDEQLPRRGSLHQRMISYSETETYGQDRGNDIPRNNDTM
                                         T S P Q Y S P T S P A P A G M S P A S P R Y S P T S P A Y A
                                                                                                                                                      PKSPOYSP
UniRef90_A7F197
                                         UniRef90_D8LRY3
                                                                                                                                        PAYSPTSPAYSP
S PTSPNYSP
UniRef90_A8IRZ2
UniRef90_UPI0003500021
UniRef90_Q5CH45
UniRef90_UPI0002B8D44C
UniRef90_G6CM85
UniRef90_G6CM85
UniRef90_G6CM85
UniRef90_G6CM85
UniRef90_G6CM85
UniRef90_G6CM85
UniRef90_W9YHX8
UniRef90_R7SV30
                                                   UniRef90_Q7RJS0
UniRef90_Q9BMP3
UniRef90_UPI0001BF7D46 V
                                                                P Q P T Y S H A Q L R Y P V L E P L L P H L G N L M P
UniRef90_Q5U918
UniRef90_N1J4Y4
UniRef90_Q0UHM4
UniRef90_UPI0003F497A5 PAYSPTSPAAQGSNGQPQTNGQPARKGWGTSGGYGTSPS
UniRef90_W9CF82
UniRef90 G6D6D2
                                         QQLQAQRTSPQLPTPSRSPQADYTSGRF
UniRef90_W0T9I8
UniRef90 L8FMT5
UniRef90 R0KG34
UniRef90_W9XIC8
UniRef90_D8QAV3
UniRef90_D8QAV3
UniRef90_G5EH28
UniRef90_A0A023AZW7
UniRef90_O77165
UniRef90_S7Z7G0
UniRef90_B8MFL6
UniRef90_A0A010RT36
                                        N A H Q H Q Q S S P T L S R L A H Q Q A G T S P G G A F P P M G G G H H A G S V
                                         ASPAYSPASPAYSPASPAYSPAS
                                                                                                                                        PAYGPASPAYSP
UniRef90_S8FYN0
UniRef90_B8MRF1
                                        ELYFASTSSSHVFPQSPY
UniRef90_R9P1I1
UniRef90_F9G6M9
UniRef90_M3CMV2
UniRef90_Q0D130
UniRef90_W9YE09
UniRef90_G3AI44
                                                                                             RYPK<mark>C</mark>DES[NQYF[]GRTEADH[]S[]
                                         E S R T S I Y D D S
UniRef90_W9YMY4
UniRef90_Q0CJF1
UniRef90_N1JBQ4
UniRef90_UPI000455FE86
UniRef90_H7C834
UniRef90_C4QZ96
                                                                              YHTSYPF LHKGSF LKHYAG
                                        LQAYFKY
UniRef90_R9ANB3
UniRef90_UPI0001584D9A
UniRef90_B8LZE7
UniRef90_B6QQR4
UniRef90_W2S973
UniRef90_M1VGW3
                                         P Q Y Y Q P H P P
P Q Y Y Q P H P P
UniRef90 UPI00046CFE6D
UniRef90_UPI00046CFE6D
UniRef90_A8N128
                                         SSPTWSPTSPAHDQNGPTNNRSSAYQQ
UniRef90 U5H3G9
                                                                       N S L N G Y T I N T A T S V N Y L Y G T N T Y G E N S T I E I P H D T E I P H T L R F T T P S E I Y S L P T S P A F S P T S P S Y S P T S P V Y S P T S P S Y S F
UniRef90_Q5A453
UniRef90_Q6CKI5
                                            PSEITYSL
SP
                                         EVEPPEYR
QATSPKYS
```

```
370
A S E A M S P S A P A M F T S T S T N P V N V A Q Q T Q R P Q G Q Q V P Q F S S T S E A M S P S T A L G Y N Q N N S N V S V A V S P S S P V Q V T R T
UniRef90_Q6FLP2
UniRef90_C5DGQ7
UniRef90_G8JW69
                            PSENVSPLTSMHKPSTATTPGSYTSEQKPLSMQNSPTSPAYSPTSPAYSPTSPAYSPTSPAYSPTSPAYSP
UniRef90_G8BHK8
UniRef90_A0A024UAL5
UniRef90_D0P371
UniRef90_M3DCK5
                            TSENMS
UniRef90_A5DIV7
UniRef90_E6ZJK0
UniRef90_F9X9I7
UniRef90_D8TT23
UniRef90_T0Q521
                            T A DVS P P Q G G A G P S P L T G G E Y S P T S A H Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P
                                                                             Y S P T S P A Y S P A S
UniRef90_N1QMN7
UniRef90_K0R3M3
                            TSPAYSPTSPAYSPTSPA
                                                                             YSPTSPAYSP
UniRef90_B6AG69
UniRef90_M3BTF8
UniRef90_N4U9F6
UniRef90_G0V8L7
UniRef90_J0CX19
UniRef90_W9W7D0
UniRef90_A5DJ86
                            S S N H G S N R G S H V S G S H K S V Q L A P L Q D T R L V A V
UniRef90_A5DJ86
UniRef90_UPl0004416B54
UniRef90_Q6CB01
UniRef90_V5G134
UniRef90_M2WJ37
UniRef90_U9SVU6
UniRef90_U9SVU6
UniRef90_K9I8S2
UniRef90_A0A017SJ27
UniRef90_WWLS6
                            TSPSYSPTSPVY
                                                                T P S S P S N Y A P S G Y S P S G I N A A T Y S
UniRef90_W9WLS6
UniRef90_B0YA51
UniRef90_G475187
                            AISGMSPSEHSDFES
                            ASPQYSPTSPSGNTSQGSTQGNSGSTQYKSS
UniRef90_A7F197
                            T S P A Y S P T S P A Y S P T S P A
T S P N Y S P
UniRef90_D8LRY3
                                                                            YSPTSPAYSP
UniRef90_A8IRZ2
UniRef90_UPI0003500021
UniRef90_G6CM85
UniRef90_W9YHX8
UniRef90_R7SV30
                            TSPAYSPASPA YSPTSPQWSPSSPAQ
TSPKYSPTSP QYSPSSPVPNNPSSPQYSPYSLTSPKFS
UniRef90_Q7RJS0
UniRef90_Q9BMP3
UniRef90_UPI0001BF7D46
                                      VSLACDLIDLYFASSSSAQMHPMSPYVLGDAPFLTS
UniRef90_Q5U918
UniRef90_N1J4Y4
UniRef90_UPI0003F4A05C A L E
UniRef90_Q0UHM4
UniRef90_UPI0003F497A5
UniRef90_W9CF82
UniRef90 G6D6D2
UniRef90_W0T9I8
UniRef90_L8FMT5
UniRef90_R0KG34
UniRef90_W9XIC8
UniRef90_D8QAV3
UniRef90_D8QAV3
UniRef90_G5EH28
UniRef90_A0A023AZW7
UniRef90_O77165
UniRef90_S7Z7G0
UniRef90_B8MFL6
UniRef90_A0A010RT36
                            TREGIASDESMGYPSPANG
                            ASPAYSPASPASPA
UniRef90_G2RHB8
UniRef90_S8FYN0
UniRef90_B8MRF1
UniRef90_R9P1I1
UniRef90_F9G6M9
UniRef90_M3CMV2
UniRef90_Q0D130
UniRef90_W9YE09
                            ALENMKANDPAVYYERNS
UniRef90_G3AI44
UniRef90_W9YMY4
UniRef90_Q0CJF1
UniRef90_N1JBQ4
UniRef90_UPI000455FE86
UniRef90_H7C834
UniRef90_C4QZ96
UniRef90_R9ANB3
UniRef90_UPI0001584D9A
UniRef90_B8LZE7
UniRef90_B6QQR4
UniRef90_W2S973
UniRef90_M1VGW3
                             P N V A Y S P S S P N V A Y S P S S P N V A Y S P
                                                                                             SSPNVAYSPS
UniRef90 UPI00046CFE6D
UniRef90_UPI00046CFE6D
UniRef90_A8N128
UniRef90_U5H3G9
                            L N D
V Q T A F P S T
A S P A Y S P T S P V Y S P T S
UniRef90_Q5A453
UniRef90_Q6CKI5
```

QUERY

QUERY UniRef90_Q6FLP2 UniRef90_C5DGQ7 UniRef90_G8JW69 UniRef90_G8BHK8 UniRef90_A0A024UAL5 UniRef90_D0P371 UniRef90_M3DCK5 UniRef90_A5DIV7 UniRef90_E6ZJK0 UniRef90_F9X9I7 UniRef90_D8TT23 UniRef90_T0Q521 UniRef90_N1QMN7 UniRef90_K0R3M3 UniRef90_B6AG69 UniRef90_M3BTF8 UniRef90_N4U9F6 UniRef90_G0V8L7 UniRef90_J0CX19 UniRef90_W9W7D0 UniRef90_A5DJ86 UniRef90_A5DJ86
UniRef90_UPl0004416B54
UniRef90_UPl0004416B54
UniRef90_Q6CB01
UniRef90_A8Q516
UniRef90_M2WJ37
UniRef90_UPSVU6
UniRef90_UPl0004624727
UniRef90_UPl0004624727
UniRef90_A0A017SJ27
UniRef90_B0YA51
UniRef90_BYA51
UniRef90_G4T8R1
UniRef90_A7F197 UniRef90_A7F197 UniRef90_D8LRY3 UniRef90_A8IRZ2 UniRef90_UPI0003500021 UniRef90_Q5CH45 UniRef90_UPI0002B8D44C UniRef90_G6CM85 UniRef90_W9YHX8 UniRef90_R7SV30 UniRef90_Q7RJS0 UniRef90_Q9BMP3 UniRef90_UPI0001BF7D46 UniRef90_Q5U918 UniRef90_N1J4Y4 UniRef90_UPl0003F4A05C UniRef90_Q0UHM4 UniRef90_UPI0003F497A5 UniRef90_W9CF82 UniRef90_G6D6D2 UniRef90_W0T9I8 UniRef90_L8FMT5 UniRef90_L8FMT5 UniRef90_R0KG34 UniRef90_W9XIC8 UniRef90_D8QAV3 UniRef90_G5EH28 UniRef90_A0A023AZW7 UniRef90_O77165 UniRef90_S7Z7G0 UniRef90_B8MFL6 UniRef90_A0A010RT36 UniRef90_G2RHB8 UniRef90_S8FYN0 UniRef90_S8FYN0 UniRef90_B8MRF1 UniRef90_R9P111 UniRef90_R9P1I1 UniRef90_F9G6M9 UniRef90_M3CMV2 UniRef90_Q0D130 UniRef90_W9YE09 UniRef90_G3AI44 UniRef90_W9YMY4 UniRef90_Q0CJF1 UniRef90_N1JBQ4 UniRef90_UPI000455FE86 UniRef90_H7C834 UniRef90_C4QZ96 UniRef90_R9ANB3 UniRef90_UPI0001584D9A UniRef90_B8LZE7 UniRef90_B6QQR4 UniRef90_W2S973 UniRef90_M1VGW3 UniRef90_W1VGW3 UniRef90_UPI00046CFE6D UniRef90_UPI00046CFE6D UniRef90_A8N128 UniRef90_U5H3G9 UniRef90_Q5A453 UniRef90_Q6CKI5 UniRef90_J4U7H4

```
1
                                                                  10
UniRef90_M2LL36
UniRef90_S7ZNN1
UniRef90_W3WJZ9
UniRef90_X8JJ04
UniRef90_Q0CS89
UniRef90_M1W8A4
UniRef90_E6R0T0
                                                                                                                                                S H A S S T P A P Q Q H P E K
A A R A T G A A G P II
R R
UniRef90_W9ZNS7
                                                                                                                                                                                                            K
R
R
R
UniRef90_K2QL46
UniRef90_J3NQV7
UniRef90_A2QL55
UniRef90_B6QBN2
UniRef90_E4V0Y9
                                                                   A E S A A P T R T R A E S P G A Q E G N P G Y | P R
T S D S L S E H S A H P D S R S D L D A D S K N T P A K E E L K K T | I
I S T T A P F F N S P S G S P A P E Q E Q Q P Q V E Q R P | S K R R G K
D V S R D D D D G K G K P
UniRef90_M9LWS6
UniRef90_S3CWR0
UniRef90_R9PB53
UniRef90_M5FQ84
                                                                                PEAPAEPRSARGRVTKTSATSARTQPETDGSPSPKSASLAPIMDVRER
UniRef90_K2RVN0
UniRef90_M2UJQ5
UniRef90 D3ZAI8
                                               HMKNISNASEALQPSRQTFTTR
MDDTSTARNAASRTSSAEVKAESPDASPPPPPQQSAPPKR
SNNSLPGFKNPAQRDPLAEARSARKNSSSAPVR
UniRef90_F4NVU6
UniRef90_E3QH51
UniRef90_A1C7P9
UniRef90_A2RA85
UniRef90_H6C2B7
UniRef90_H6C2B7
UniRef90_E3Q9H1
UniRef90_J8Q3Z1
UniRef90_A1YIA7
UniRef90_A5K7P4
UniRef90_Q6BQT8
UniRef90_C5MGL5
UniRef90_C7ZQY4
UniRef90_B0CUU2
UniRef90_B77798
                                                   DEVSLSRPAAPTSASHRESPVSPGTGPTLAGSHMPPSRK
MPEQTQQGEQSVKR
                                                                                                                                                                                                     KTR
                                              T Q K R

S G Q P P P S A P T M D K P V N R P R L N K R

S S S A L H S S K K K R L D D D T M A P D V G Q K P L Q L Q R

P S G A D S N A S P P P R T S A Q P H

S T V D S S P A S L G D H E H D Q E Q E Q D H D E R T D A S P E T K S R

N T L D V R S H A R S V S D V V A S P A R S A S V V A A T P A P P Q D R R P

D D E A A G Q E S G L A G D S T T

S K S A A N P P P R

S G Q P E S Q G S E Q P D N S S G K Q P T A T

T E T P P V T V T S R

S S T T K T S S L N G N T N G H S S S T R P P R R E A

MA T T H Q V S Q Q S S G N V N S T S G G A N G K N G S P Q P T T Q H

M D D T D S A R N A A S R A G S A E V K A E S P G A T T T A A T P K S A P P K R

MD P P A K P K R T R N K H

G S G S D D G E S D Q D R E P G S R K A D Q K K

S S N A N G S Q S R H K Q E D V E P D S K S S K G D L R P V V R T L

D S A S T V M E D A P D S T T K G A S Q Q S S T P A S S S E P N G T T K I T K I T K

D N N S A Y T K S E S D V H H
UniRef90_R7Z798
UniRef90_G2Q0W3
UniRef90_J5JFL1
UniRef90_S8G2D1
UniRef90_A0A024J624
UniRef90_G8ZXL4
UniRef90_F9XLP6
UniRef90_Q5B7U5
UniRef90_B8PGT1
UniRef90_L8FXK2
UniRef90_A0A010SFW5
UniRef90_N4U8M5
UniRef90_G7E7R9
UniRef90_S7QLT2
UniRef90_M7SJE6
UniRef90_B6HLH0
UniRef90_H9J1U7
                                                                        T T S K S N P G E VK A Q K
M N S N S S D G D T LE T G A K S K A E Q A A A G A H S S
UniRef90_B6DST3
UniRef90 A0A017SL90
UniRef90_G8XZD6
                                               T S S F S T A M P K H D A K A Q R D H T V T A D D D T K G K
E D Q G R Q S P A Y K S R T S
S P E Q P L A P K K
S A A P P S P A S T S A K T V T D K T N K K R A S P S G D S E Q P T K
MT T F H A G Q T S P A E A S E D S G S D A E N E D P D T A S H S G N A S K K
UniRef90_Q4PBR6
UniRef90_G3JPD6
UniRef90_A0A010RB75
UniRef90_P52959
                                                                                                                                                                                                    T S R
K K R
T K K
UniRef90_F52959
UniRef90_W9Y0B6
UniRef90_E3M1N1
UniRef90_W6QFD8
UniRef90_E3Q2J4
UniRef90_B3QQL0
UniRef90_J9HHP4
                                                   SARPDKPY
SNLSPTTSNAPSTAAGASAQAQAPAQAQAGTAGAPPQH
QTSDSQESGKSAGSNTSKR
UniRef90_J9HHP4
UniRef90_F0VM35
UniRef90_W2RZB2
                                                                                                                                                                     SGAAGLGRAYK
UniRef90_K0TFQ8
UniRef90_G0RWA6
                                                                                                A G T M R S P R C E S T R Q T S S A S D H K E G P R K R P A P T G K
UniRef90_W6Q4H0
UniRef90_C4XYJ6
                                                           MESTHDGSMSQDAVSLNNGSYDESNRELRSETPPTQH
KY
UniRef90_B6Q6D1
UniRef90_J9VSF1
                                                                                                                                                                         SDGDGQPQKK
UniRef90_M7WLE7
UniRef90_J9DLL8
UniRef90_U4L9S1
                                                                                                                                            P R A P V V G R E V R P D V T A G A Q R H F T L P R K R T D D D A N D R G Q A S A S N K R
                                                                        E S S H S H E H G H D W S G D E R S
UniRef90_W9NN24
UniRef90_M2SNX4
UniRef90_R4XCQ8
                                                       MSSNNPITQVSSTVQRSWTAESKHKTR
SSSSGLVRGNPSGSNPTSSRPPRREA
QTVVSKR
GPTSVIAHQPTEPDSDSHSDDEQYNDGSTQNGKRKR
SAPVK
MDSASSHPHQIKQQDDQSLSDLKGDDKRSSKTPAKTL
PRAPVAGREIR
PASSNSVSNDSRKRARQDDDADPQSPITERGDEPKAKP
SVASAGPSSPAKDASSSKSQARRSDASEPAPEPKKR
UniRef90_B8M415
UniRef90_UPI0004415B94
UniRef90_Q870S0
UniRef90_E9DTE0
UniRef90_M2RZQ8
UniRef90_UPI000455D067
UniRef90 G1X7D2
UniRef90_UPI0004624321
UniRef90_Q4P507
UniRef90 K7GY36
                                                                        MATREQDHHPMASRSASKR LKSSGAGAPAPRKKR
PEQQSRQRR
```

UniRef90_N1PFL5 UniRef90 W7MJN4 UniRef90_UPI0003C0237F

UniRef90_M2LL36 UniRef90_S7ZNN1 UniRef90_W3WJZ9 UniRef90_X8JJ04 UniRef90_QCS89 UniRef90_M1W8A4 UniRef90_E6ROT0 UniRef90_W9ZNS7 UniRef90_J3NQV7 UniRef90_J3NQV7 UniRef90_B6QBN2 UniRef90_B6QBN2 UniRef90_E4V0Y9 UniRef90_E4V0Y9 UniRef90_F3CWR0 UniRef90_R9PB53 UniRef90_R9PB53 UniRef90_M5FQ84 UniRef90_M2VN0 UniRef90_M2UJQ5 UniRef90_M2UJQ5 UniRef90_M2UJQ5 UniRef90_M2UJQ5 UniRef90_M2UJQ5 UniRef90_M2UJQ5 UniRef90_M2UJQ5	0
UniRef90_F4NVU6 UniRef90_E3QH51 UniRef90_A1C7P9 UniRef90_A2RA85 UniRef90_H6C2B7 UniRef90_E3Q9H1 UniRef90_BQ3Z1 UniRef90_A1YIA7 UniRef90_A5K7P4	KRQTQSCDRCKSKKRRCNGEYPT CGNCVKANTDCTMLIT VCDHCRRRRIRCDGKFPRRISRACDQCNQLRTRCDGQNPKTFRACYKCAIARVRCSGGSPCDACRRKKVKCSKTEPQCDACRRRKVKCSKTEPQRVALACKRCKRRKQRCDGAHPRRVTRACDECRKKKVKCDGQQPCCISTGLRCTREIT CDRCLSTGLRCTREIT
UniRef90_Q6BQT8 UniRef90_Q6BQT8 UniRef90_C5MGL5 UniRef90_C7ZQY4 UniRef90_B0CUU2 UniRef90_B7Z798 UniRef90_G2Q0W3 UniRef90_J5JFL1 UniRef90_S8G2D1 UniRef90_A0A024J624 UniRef90_G8ZXL4 UniRef90_G8ZXL4 UniRef90_G8ZYL4 UniRef90_B8PGT1 UniRef90_U5B7U5 UniRef90_B8PGT1 UniRef90_B8PGT1 UniRef90_B8PGT1 UniRef90_B7U5 UniRef90_N4U8M5 UniRef90_M7SJE6 UniRef90_M7SJE6 UniRef90_M7SJE6 UniRef90_M7SJE6 UniRef90_B6HLH0	QRKLLSCLYCHSKKLKCSRVQP VCNNCDKLGLECKYLN QRASKVCDFCKKRKVKCDLGNPCSACVRYKKF PCVYSA KRVSRACDYCRARKHRCDGRRP ACSSCSATRQQCSYGS RRVWRACESCRRKKLKCDGCEP TCSQCSMSGSQCTWLQ TRTYQACLPCRRRKVRCDLNPHEPPCVRCRRESKECFFSA RGVKRACNECRQQKLRCDVQEPFQSCSRCNRLKLECKLES KKSSSTCATCRRKKVRCDLNPHEPPCVRCRRESKECFFSA RGVKRACNECRQQKLRCDVQEPFQSCSRCNRLKLECKLES KKSSSTCATCRRKSKSRCVPAAGGER KRTTRACDRCRKSKSRCVPAAGGER KRTTRACDRCRKSKSRCVPAAGGER KRTTRACDCCNHLRTKCDGKNP NKSKNGCDNCKRRRVKCD EGKPACQKCLNMKLDCVYYTP KQLRRACDCCRKRKKVRCDGQDPCGP CKKASIRCAYLT QRPGSACEECRRRKVRCDGQDPCGP CKKASIRCAYLT QRPGSACEECRRRKVRCDGQDPCGP CKKASIRCAYLT QRPGSACEECRRRKVRCDGQDPCGP CKKASIRCAYLT SSVVIACRQCRARKIRCDSTRP VCDHCRRRRRLRCDGKFP TCSRCSALHYPCSYGP RRSSKACDGCRARKKVKCDLNPNAPPCVRCRRESKCCYPAA KRVSRACDYCRARKHRCDGSHP TCSRCSALHYPCSYGP RRSSKACDGCRARKKVKCDLNPNAPPCCKRCRHAGLECLFEK RRAARACVSCRARKKVKCDLNPRPPCCKRCRHAGLECLFEK RRAARACVSCRARKKVKCDLNPRPPPCCKRCRHAGLECLFEK RRAARACVSCRARKKVKCDLNPRPPPCCKRCRHAGLECLFEK RRAARACVSCRARKKVKCDLNPRPPPCCKRCRHAGLECLVVQE RRGYQACDPCRKKRKVKCDLNPRPPPCCKRCRHAGLECLVVQE RRGYQACDPCRKKRKVKCDLNPRPPPCCKRCRHAGLECLVVQE RRGYQACDPCRKKRKVKCDLNPRPPPCCKRCRRRESKCEFSA
UniRef90_H9J1U7 UniRef90_B6DST3 UniRef90_A0A017SL90 UniRef90_G8XZD6 UniRef90_Q4PBR6 UniRef90_G3JPD6 UniRef90_A0A010RB75 UniRef90_P52959 UniRef90_W9Y0B6 UniRef90_E3M1N1	T K V G K A C D S C R R R K I K C N G L K P C P S C T I Y G C E C T Y T D R K V N H A C V Y C R R S H M T C D S E R P C T R C I K R N I G H L C H D N R I P T S C S V C R K R K S R C D K V R P V C G T C R K K S I V H L C Y Y E K K V L R A C D A C H H R R V R C N H N N P C D N C I R L N I N C T W I K Q R P G T A C S E C R R R K L R C D G V R P R C R V C A Q S N V E C E I V T R R P A L A C E Q C R R R K V R C D R N L P C S T C V R S K H S L C T Y T S R R A A R A C V S C R A R K V R C D V V E G A P C G N C R W D N V E C V V Q E K R S K I S C E L C K A R K V K C D R V E P S C G W C A R N N R V C I Y K E
UniRef90_W6QFD8 UniRef90_E3Q2J4 UniRef90_E3QQL0 UniRef90_J9HHP4 UniRef90_J9HHP4	QRTYKACIPCRQRKAKCDGLPLGPPCARCRRELRECVFKRVYQACLPCRRRKVRCDLNPHDPPCVRCRRESKECFFSAITTPHACAECKRRKLRCDGQQPCGQCLSSRAPKRCFYDK
UniRef90_F0VM35 UniRef90_W2RZB2 UniRef90_W0TG8 UniRef90_G0RWA6 UniRef90_W6Q4H0 UniRef90_C4XYJ6 UniRef90_B6Q6D1 UniRef90_B7VSF1 UniRef90_M7WLE7 UniRef90_J9DLL8	SRKQRPCDGCRKRKVACEM LAGPPCERCTKLSKSCEFLE RRATVACRSCRQRKTKCDHLVPAQASDEMLRTKSAQIYIR KRIPKACSACRQSKVKCDGERP CTRCQKLEKQCVFFE QRRILSCIHCHSKKIKCSRVQP VCDNCNKLGIECKYSR RRGYQACDPCRKRKVKCDLNPRPPPCVRCRRESKRCEFSA TRSTAGCLACRSRKVKCDETLP ACLRCVAAQRECEYPP RRVTRACDQCRRKRIKCDSYPRDSPCVICTEAGQQCTYSR
UniRef90_U4L9S1 UniRef90_W9NN24 UniRef90_M2SNX4 UniRef90_R4XCQ8 UniRef90_B8M415 UniRef90_UPl0004415B94 UniRef90_Q870S0 UniRef90_E9DTE0 UniRef90_M2RZQ8 UniRef90_UPl000455D067 UniRef90_G1X7D2 UniRef90_UPl0004624321 UniRef90_Q4P507	RRSRNGCWNCKARKVKC GEEKPRCSNCERLDEDCDYKLTLIKGACQTCRKRKVKCDGAKPRCLACARKGSECEYFDKRPSVSCETCKQRKVKCDRASPACSWCLKNHSACVYLLKRISRACDSCNALRTKCDGHQPCRHCVELGVACQFNRKNVSSACRACKARKLKCSGPPCETCVKSKQECLIDASTVVIACRQCRARKLRCDSTRPFCARCKYQNTECVYSLVPTSVSCELCKQRK PSCGWCARNGALCEYKERRVSRACDHCHRMRTRCDSTRPFCSRCKYQNTECVYSLVPTSVSCELCKQRK PSCGWCARNGALCEYKERRVSRACDHCHRMRTRCNGQAPCSRCIELELYVCQYNRNRVPRACNACRKQKMRCEGADNPPCKRCRHAGLDCLFEKRRSRNGCWNCKARKVKC CEMKPRCSNCTRLGEECDYKLTRGSRACTVCRRLKMKCVGAENGPPCKRCQTGNHECIFEETRPVSACEACRAKKVKCLLSPDAPVCQNCLASGKECLFLA
UniRef90_K7GY36 UniRef90_N1PFL5 UniRef90_W7MJN4 UniRef90_UPl0003C0237F	T V V T L A C D R C R L R R M K C D G L R P S C K T C A A M S H A C R Y D S R K V T L A C D P C R E R K S R C D G L K P L C S T C R R R A L G L E C V Y R A

```
HPRKRSKLVEQNEALHDGLVNHHHHQQQQQHHHHPASVRD
NPKKRGLPTGYIRSLELLWGLVFQKIRGSEDVMRALMKST
PKKKRGVQTGYIRSLELLWGLVFQKIRGSEDVMRALMKST
PKKKRGVQTGYIRTLEKDTIAGNRLHRRWRKSMVQQEIDR
PSRKRGPPKGYIDAI EARLHQLEALLGTLIASPDPRAQS
VRQPRGPRKGYLKTL QSRLSALERQWNGQQKAAGGSPGE
RRRPGLRAGFGKELQERMDRLEATLQCHAEMIQTALAAT
PGKSSGVGEDRIRSL ESQVSSIQSTLSDLVTTLRAGISS
RLNWDGRSKKKDDGKLGVQVISFGGPQPISQPVSNGHSNG
SYTRGRFTTPPSSRGLDALLAAESHNVDFAADRDRRPSS
ERKKRGKA SRKDLAQAAAAAAAAAGGSPTSSVE
LARKRGKA SRKDLAQAAAAAAAAAAGGGQKSPTSSVE
LARKRGKA SRKDLAQAAAAAAAAAAGGGYVPESV
ORKKSGPKRGYVKHL EARLAQVETLLKGVDTAESSRSSP
PPKDPSSSTTNTADTGASSDRRLLEAQMSGMQSMISELVA
SRRQRSAKERAEKSLRESRCHGGEELEEICQSVEGQPVSIT
UniRef90_M2LL36
UniRef90_S7ZNN1
UniRef90_W3WJZ9
UniRef90_X8JJ04
UniRef90_Q0CS89
UniRef90_Q0CS89
UniRef90_M1W8A4
UniRef90_E6R0T0
UniRef90_W9ZNS7
UniRef90_K2QL46
UniRef90_J3NQV7
UniRef90_A2QL55
UniRef90_B6QBN2
UniRef90_E4V0Y9
 UniRef90_M9LWS6
UniRef90_S3CWR0
 UniRef90_R9PB53
UniRef90_M5FQ84
                                                                                                                                                                                                                            R D Q K I L V T
H V A R R R P A
S
E Q K K R G P K
V P K K R G P K
E R K K R G K A
E R R S K A K T
A R K K R G P K
A L R P H Y P K
P T K R T N N S
                                                                                                                                                                                                                                                                                                                                                                                 R G Y I D L E R K A G R E C S P G P E F S T H D P K A R S D G Q T P S K L R

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

K G S G S V I S K L R D E N H H E T P P Q P E L S L P S L Y I S A L E E R I A F L E A R M P D Y A E D H F N S G V L A L G S T A G P S S N A L V V A A A S N P N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       D A A D I D K K L D S S S P P Y S L S D T D T D I G T M V G D A S Y A S T S P K L L S N
 UniRef90_K2RVN0
UniRef90_M2UJQ5
 UniRef90_D3ZAI8
UniRef90_F4NVU6
UniRef90_F4NV06
UniRef90_E3QH51
UniRef90_A1C7P9
UniRef90_A2RA85
UniRef90_H6C2B7
UniRef90_AZKA85
UniRef90_H6C2B7
UniRef90_E3Q9H1
UniRef90_J8Q3Z1
UniRef90_A5K7P4
UniRef90_A5K7P4
UniRef90_A0DML3
UniRef90_C5MGL5
UniRef90_C7ZQY4
UniRef90_B0CUU2
UniRef90_B7Z798
UniRef90_B7Z798
UniRef90_J5JFL1
UniRef90_B2Q0W3
UniRef90_J5JFL1
UniRef90_B3C2D1
UniRef90_B3C2D1
UniRef90_B3C2D1
UniRef90_B3C3D1
UniRef90_B3C3D1
UniRef90_B8PGT1
UniRef90_B8PGT1
UniRef90_B8PGT1
UniRef90_L8FXK2
UniRef90_A0A010SFW5
UniRef90_A0A010SFW5
UniRef90_B9D_G7E7R9
                                                                                                                                                                                                                         GATNSSTATE STATE S
 UniRef90_G7E7R9
UniRef90_S7QLT2
 UniRef90_M7SJE6
UniRef90_B6HLH0
UniRef90_B6HLH0
UniRef90_H9J1U7
UniRef90_B6DST3
UniRef90_A0A017SL90
UniRef90_G8XZD6
UniRef90_Q4PBR6
UniRef90_G3JPD6
UniRef90_A0A010RB75
UniRef90_P52959
LIRIBEF90_W9Y0R6
                                                                                                                                                                                                                                                                                                                         GKSKPTGRVSKNKETTRI DKDIRKSEQSRNSEYDQSI GDDEGSTSNDFSNVQGMPNKNGSPVNGPLIPDGVSPMPVNVNNYSNQASGRRI DLLRKGHNPAASELPPSPPNPGPKKGYLQAL KTRIALLESKLAF HDIPRKSPKHGAEG NDGCLHTALRLPDKKNLLTASTAGQPVSTEAQLRCKTAAGGLRVGYGRELEEK INRLEALLQVMGRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QYVPINRNVDVQ
VYAATP
RPSTDH
PACDIF
PIFPAS
SNPMGM
LEDHIT
                                                                                                                                                                                                                                                                                                      K G K
R S R
V N K
K Q A
R G P
                                                                                                                                                                                                                                                KPSSKTRR
                                                                                                                                                                                                                                                                                       TKKGPKRK
UniRef90_P52959
UniRef90_P52959
UniRef90_W9Y0B6
UniRef90_B3M1N1
UniRef90_E3M2J4
UniRef90_E3Q2J4
UniRef90_E3QQL0
UniRef90_J9HHP4
UniRef90_J9HHP4
UniRef90_W2RZB2
UniRef90_W2RZB2
UniRef90_W6Q4H0
UniRef90_W6Q4H0
UniRef90_B6Q6D1
UniRef90_B6Q6D1
UniRef90_J9VSF1
UniRef90_J9DLL8
UniRef90_J9DLL8
UniRef90_U4L9S1
UniRef90_U4L9S1
UniRef90_W9NN24
UniRef90_M2SNX4
UniRef90_M2SNX4
UniRef90_R4XCQ8
UniRef90_B8M415
                                                                                                                                                                                                                                                                                                                                                            VERSRKRARSPESYETD<u>VSPRH</u>ATQLTKSPDSSI
KTEDGDDPDPDDVDDYT<u>VRN</u>GRKRV<mark>HV</mark>SGSPPV
SRKTLEALSQS LEE<mark>C</mark>RSILKRLFPNQDIQSLL
                                                                                                                                                                                                                               P E K R A W
T R R K R
H R Q R V I P
                                                                                                                                                                                                                     WP A K R Q R H R Y T E P E T L Q R L E S G S P G L S P L L S S V A R D L E N S E N P S V S I WP T S L P S E S P S T S G P S L S S L E R R V R N F E D V Q R D A N K Y H Q N Q Q Q P Q P T V Q T I S P V P S T S D P V S E R I E G V E S E V Q Y L R K Q L D P V S E R I E G V E S E V Q Y L R K Q L D P T R R K K K T S D A E P E Q E T P L R R D K R M M V G E Y G E S S S S L G S N G P G R K R K N G R G R S G D S A H A S E S G T V G E K R A R L S E S R D D D G Q P A K K R G P Q A G R A R T L E E K C A V F E R L M G Y L L A A V P N L E A H V R N Q N I N T S D R N F N S N Y N S N P L N T N V P K G H G R Q L L Q N R L N D H E E L L H H I Q S R K E E D V H D P R K K P G L R A G Y G R E L E S R L D K L E A L L L Q Q Q S Q I N N Y R K K R G K A A K K D V D A L S E T G S Q Q Y R S A S D R S V L G H T S L P A E Q R R K L N L K R K V D S L E N D R Q F L I R L L E S L R T G K E G H L T V P K R R G P D K R Q R S C K K R R P D A E P T S G S A K K K R K T D V E G E S P V R C S K D T L R N E I E Q L R R E Q R M D K L E A V L Q S H S D L Q E K K R R G K V S I T T P P S M H S Q T H L P Q V P R H I Q K Q R E E A A A G G P S R E A T L T G E A G L E R I R S L E A H V A D R Q T Q T S G Q F S N R G K R S T K K H P A L R A A R F A H C G P P S A N A R T L A F K K S S K R K S R E D T D E S S R E S P T D A L R A A R F A H C G P P S A N A R T L A F K K S S K R K S R E D T D E S S R E S P T D A L R A A R F A H C G P P S A N A R T L A F K K S S K R K S R E D T D E S S R E S P T D A L R A A R F A H C G P P S A N A R T L A F K K S S K R K S R E D T D E S S R E S P T D A L R A A R F A H C G P P S A N A R T L A F K K S S K R K S R E D T D E S S R E S P T D A L R A A R F A H C G P P S A N A R T L A F K K S S K R K S R E D T D E S S R E S P T D A L R A A R F A H C G P P S A N A R T L A F K K S S K R K S R E D T D E S S R E S P T D A L R A A R F A H C G P P S A N A R T L A F K K S S K R K S R E D T D E S S R E S P T D A L R A A R F A H C G P P S A N A R T L A F K K S S K R K S R E D T D E S S R E S P T D A L R A A R F A H C G P P S A N A R T L A F K K S S 
UniRef90_B8M415
UniRef90_UPI0004415B94
UniRef90_Q870S0
UniRef90_E9DTE0
 UniRef90_M2RZQ8
UniRef90_UPI000455D067
UniRef90_UP1000455D067
UniRef90_G1X7D2
UniRef90_UP10004624321
UniRef90_Q4P507
UniRef90_K7GY36
UniRef90_N1PFL5
UniRef90_W7MJN4
                                                                                                                                                                                                                             ESSR PTRQNNQALRDEVVSLRRQLAAGPHADSSSDLMTGNARTECSDDYTRAL HDRIR YLERQLQQASAFNAPIPG
```

UniRef90_UPI0003C0237F

```
130
T K M R S M E A N S GL A F T
M G K E A E G S D T L L A S F
S S A K S A K T S P A V D E S E
D P L A R H I I A R
G Q T L R A V S E S T S G A R P
G I R N S K A N L P S H Q E T R
H T P A G V A T T T P D H A
G Q S P P R A S Y H Q P R P P
M E G E S S N G T S V G D H H N
P W T G D E S S N Q L Y Y M W
E R G Q A D F K G G
Q N A P F Q G R Q N M F P I R T
L I A A P P Q P P P P P P P Q P Q
L S D H P L A E I L P T E S T
I Q R P P T E H S P I T A P S P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40

A F T R L L G L R L D P S
A S F K N S M M V V L E Q
E S E S S A D E A E L P L

V D E S P
G A R P P S S Q S S I E Q P
Q E T R R E T S T H L Y C T
D H A P P M G G I H I P G
R P P S I Y N T H P P A L
C S P Q I A A Q R H R S L S
C H H N D N N D K E L E A D
Y M W K T S R L H R A L E
S Q A I A A Q L N K
I R T A V P K S V E A D P
Q P Q Q Q P P H H S P H A
E S T S G S R I L P P P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FESKVHVPPDDARGQQVTVT

KDTRSGTNLDARSPNTPPPPPDTQP

KDTRPAGPAGSYLMAARSPNTPPPPPPDTQP

FEGSQESAYQLSSMLSRQMTTPPPPPPDTQP

FRESKVHTVPPPPPPDTQP

KDTRPAGPAGSTNEYTSY

PEGSQESAYQLSSNMG TQSSYNAHSARA

SPKFLSSNAYQLSSNTH SQSSYNAHSARA

SPKFLSSNAYQLSSNATHSARA
UniRef90_M2LL36
UniRef90_S7ZNN1
UniRef90_W3WJZ9
UniRef90_X8JJ04
UniRef90_Q0CS89
UniRef90_M1W8A4
UniRef90_E6R0T0
UniRef90_W9ZNS7
UniRef90_W9ZNS7
UniRef90_J3NQV7
UniRef90_J3NQV7
UniRef90_A2QL55
UniRef90_B6QBN2
UniRef90_B4V0Y9
UniRef90_M9LWS6
                                                                                                                                                                                                                                                                                                                                                                                          LEAS DGGGHGS A R T LD S R S Q R K G E Q T LD T G S P P N
                                                                                                                                                                                                                                                                                              DNVLSPRSETKQKRKAT
                                                                                                                                                                                                                                                                                                                                                                        TGGDCNNQTDNNAAPP
  UniRef90_M9LWS6
UniRef90_S3CWR0
  UniRef90_R9PB53
UniRef90_M5FQ84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                G Q D Y P D A P V H E Q P Y R S G S R P D P V A S S S A Q T S L P S V V T I P S Q L A V L D T P A S S P P Q V T S D T P A S A G V D S S L Q N L K S T K R A R H S T D T A S S P P Q V T S D T P A S S P P Q V T S D T P A S S P P Q V T S D T P A S S P P Q V T S D T P A S S P P Q V T S D T P A S S P P Q V T S D T P A S S P P Q V T S D T P A S S P P Q V T S D T P A S S P P Q V T S D T P A S S P P Q V T S D T P A S S P P Q V T S P T P G F W A A V T S N P T I S G S A Q P Q L P P S R N G E Q S L P P P S R N G E Q S L P P P S S Q L T S P L T S P T T S Q F G D S F G P L P S C S E D E P T S L V D G V A Y L S L M S S T L P T N N N S N K P R T K S T R L Q S K L M S S T L P T N N N S N K P R T K S T R L Q S K L M S S T L P T N N N S N K P R T K S T R L Q S K L M S S T L Q S K L M S S T L P T N N N S N K P R T K S T R L Q S K L M S S T L P T N N N S N K P R T K S T R L Q S K L M S S T L P T N N N S N K P R T K S T R L Q S K L M S S T L P T N N N S N K P R T K S T R L Q S K L M S S T L P T N N N S N K P R T K S T R L Q S K L M S S T L P T N N N S N K P R T K S T R L Q S K L M S S T L P T N N N S N K P R T K S T R L Q S K L M S S T L P T N N N S N K P R T K S T R L Q S K L M S S T L P T N N N S N K P R T K S T R L Q S K L M S S T R L Q S K L M S S T R L Q S K L M S S T R L Q S K L M S S T R L Q S K L M S S T R L Q S K L M S S T R L Q S K L M S S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K L M S T R L Q S K 
                                                                                                                                                                                                                                                                                                                                                                                                                D G T E G G
VA T MA P
D T P A S S S
I G A MV T A
B D L G E A S
A Q S T WA
A M P S P F G
A K S P R R
C T T L P S S
                                                                                                                                                                                                                                                                                            UniRef90_K2RVN0
UniRef90_M2UJQ5
                                                                                                                                                                                                                                                                                                                                                                                          DLDXSPLQER
                                                                                                                                                                                                                                                                                                                                                                        SASGGPHRQE
  UniRef90_D3ZAI8
UniRef90_F4NVU6
UniRef90_D3ZAI8
UniRef90_F4NVU6
UniRef90_F4NVU6
UniRef90_A2RA85
UniRef90_A1C7P9
UniRef90_A2RA85
UniRef90_H6C2B7
UniRef90_B3Q3Z1
UniRef90_A5K7P4
UniRef90_A5K7P4
UniRef90_A5K7P4
UniRef90_A6BQT8
UniRef90_C5MGL5
UniRef90_C7ZQY4
UniRef90_C7ZQY4
UniRef90_B0CUU2
UniRef90_B7Z798
UniRef90_B7Z798
UniRef90_B7Z798
UniRef90_B2D1
UniRef90_B2D1
UniRef90_B2D1
UniRef90_B3ZL4
UniRef90_B3ZL4
UniRef90_B8PGT1
UniRef90_B8PGT1
UniRef90_B8PGT1
UniRef90_B8PGT1
UniRef90_N4U8M5
UniRef90_N4U8M5
UniRef90_G7E7R9
IldiRef90_S70IT2
                                                                                                                                                                                                                                                                                UniRef90_G7E7R9
UniRef90_S7QLT2
UniRef90_M7SJE6
UniRef90_B6HLH0
UniRef90_B6HLH0
UniRef90_B6DST3
UniRef90_B6DST3
UniRef90_G8XZD6
UniRef90_G8XZD6
UniRef90_G3JPD6
UniRef90_G3JPD6
UniRef90_P52959
UniRef90_W9Y0B6
UniRef90_E3M1N1
UniRef90_E3M1N1
UniRef90_E3M2J4
UniRef90_E3M2J4
UniRef90_B0HP4
UniRef90_J9HHP4
UniRef90_J9HHP4
UniRef90_J9HHP4
UniRef90_G0RWA5
UniRef90_K0TFQ8
UniRef90_K0TFQ8
UniRef90_W2RZB2
UniRef90_W35
UniRef90_W440
UniRef90_W6U4H0
UniRef90_W6U4H0
UniRef90_W6U4H0
UniRef90_W8U4B2
UniRef90_W8VA5
UniRef90_W8VA5
UniRef90_W8VA5
UniRef90_W9NN24
UniRef90_W9NN24
UniRef90_W8NX4
UniRef90_W8NX4
UniRef90_W8NX4
UniRef90_R4XCQ8
UniRef90_W8NAB0
UniRef90_W8NBDA0
UniRef90_W8DDE0
UniRef90_W8DDE0
UniRef90_W8DDE0
UniRef90_W8DDE0
UniRef90_W8DO67
  UniRef90_M7SJE6
UniRef90_B6HLH0
  UniRef90_M2RZQ8
UniRef90_UPI000455D067
UniRef90_UP1000455D067
UniRef90_G1X7D2
UniRef90_UP10004624321
UniRef90_Q4P507
UniRef90_K7GY36
UniRef90_N1PFL5
UniRef90_W7MJN4
```

UniRef90_UPI0003C0237F

K Q D V T T L D T L E M V Q Q N V P

```
UniRef90_M2LL36
UniRef90_S7ZNN1
UniRef90_W3WJZ9
UniRef90_X8JJ04
UniRef90_Q0CS89
UniRef90_M1W8A4
UniRef90_E6R0T0
UniRef90_W9ZNS7
UniRef90_K2QL46
UniRef90_J3NQV7
UniRef90_A2QL55
UniRef90_B6QBN2
UniRef90_B6QBN2
UniRef90_E4V0Y9
UniRef90_M9LWS6
UniRef90_S3CWR0
UniRef90_R9PB53
UniRef90_M5FQ84
UniRef90_K2RVN0
UniRef90_M2UJQ5
UniRef90_D3ZAI8
UniRef90_F4NVU6
UniRef90_D3ZAI8
UniRef90_F4NVU6
UniRef90_F4NVU6
UniRef90_A2RA85
UniRef90_A1C7P9
UniRef90_A2RA85
UniRef90_H6C2B7
UniRef90_B3Q3Z1
UniRef90_A5K7P4
UniRef90_A5K7P4
UniRef90_A5K7P4
UniRef90_A6BQT8
UniRef90_C5MGL5
UniRef90_C7ZQY4
UniRef90_C7ZQY4
UniRef90_B0CUU2
UniRef90_B7Z798
UniRef90_B7Z798
UniRef90_B7Z798
UniRef90_B2D1
UniRef90_B2D1
UniRef90_B2D1
UniRef90_B3ZL4
UniRef90_B3ZL4
UniRef90_B8PGT1
UniRef90_B8PGT1
UniRef90_B8PGT1
UniRef90_B8PGT1
UniRef90_N4U8M5
UniRef90_N4U8M5
UniRef90_G7E7R9
IldiRef90_S70IT2
UniRef90_G7E7R9
UniRef90_S7QLT2
UniRef90_M7SJE6
UniRef90_B6HLH0
UniRef90_B01117
UniRef90_B6DST3
UniRef90_A0A017SL90
UniRef90_G8XZD6
UniRef90_G4PBR6
UniRef90_G3JPD6
UniRef90_A0A010RB75
UniRef90_P52959
UniRef90_P52959
UniRef90_P52959
UniRef90_W9Y0B6
UniRef90_W9Y0B6
UniRef90_E3M1N1
UniRef90_E3Q2J4
UniRef90_E3QQL0
UniRef90_J9HHP4
UniRef90_J9HHP4
UniRef90_W2RZB2
UniRef90_K0TFQ8
UniRef90_W6Q4H0
UniRef90_W6Q4H0
UniRef90_B6Q6D1
UniRef90_B6Q6D1
UniRef90_J9VSF1
UniRef90_J9VSF1
UniRef90_J9DLL8
UniRef90_J9DLL8
UniRef90_J9DLL8
UniRef90_U4L9S1
UniRef90_W9NN24
UniRef90_M2SNX4
UniRef90_M2SNX4
UniRef90_R4XCQ8
UniRef90_B8M415
UniRef90_B8M415
UniRef90_UPI0004415B94
UniRef90_Q870S0
UniRef90_E9DTE0
 UniRef90_M2RZQ8
UniRef90_UPI000455D067
 UniRef90_G1X7D2
UniRef90_UPI0004624321
UniRef90_Q4P507
UniRef90_K7GY36
UniRef90_N1PFL5
UniRef90_W7MJN4
```

UniRef90_UPI0003C0237F

UniRef90_M2LL36	210 220 230 24 G F L D S V M E Q L G F R W A R P D D H L F A G L A A M G M L W S D G S L N A A	0
UniRef90_S7ZNN1 UniRef90_W3WJZ9 UniRef90_X8JJ04	PPRAAQQSPADVRRSHRSQQTLPSTEMSSPLRAREPSTTA RILHSSHSGPPSRHAPTPPTLSPPDAQRRRLSSSGSVSPA	
UniRef90_Q0CS89 UniRef90_M1W8A4 UniRef90_E6R0T0	ECFPSMPTKLDPRAYVPQQLTPNSTMSN SSVGSMAPTSRLQSLQPTDAQNYYSQSQATLQSPLVAAPA HSTDPFRPYTSNTRVQPL GLTHTAQNSDTSAPPHFPDAF	
UniRef90_W9ZNS7 UniRef90_K2QL46	LISMPPLRHNLSVPPYPSPSESAFGSPSNPMSYHESVDSPY ASLQPLLSAVA YQWRPPAVQDPTSKDPSRRPSPEPDG	
UniRef90_J3NQV7 UniRef90_A2QL55 UniRef90_B6QBN2	HGLESPTALDLNGY EQPGSLSEMPYAARDTNSQSGSLSAPRLPPLPPHATR SNKMSSSRDTSPRRTGDSSGDEFPVPA GNATDPV	ĺ
UniRef90_E4V0Y9 UniRef90_M9LWS6	QEVIDELDELY FEKVHPSSPMLHKPRYYAAMNLAPSMRP SPATEFHQHYTPDTMTTDQLQRPPYPPSSGSLTSTSSHAG	
UniRef90_S3CWR0 UniRef90_R9PB53 UniRef90_M5FQ84	Y S R D A A N R T S F G A G A H S R F D P V A H A N S A V P A Q Q P S P S S H W Y R A T L G Q S P L G A G L G G A S P G Y A P T S P A Y S P T S P F V P T S P G	
UniRef90_K2RVN0 UniRef90_M2UJQ5 UniRef90_D3ZAI8	I P T T T L L F D G S A Y D L K L D D R R S A A D L D A P S L P S C L S R L D P L I R S I S L V H M Q M L L D T S D T P A S S S P P Q V T S D T P A S S L T P Q V T T D T P V S S S P P Q V T S	
UniRef90_F4NVU6 UniRef90_E3QH51	PTSNHPSYRILISNHQFHATDNQVISRDMSGASLISELIGIVPNGA	
UniRef90_A1C7P9 UniRef90_A2RA85 UniRef90_H6C2B7	SNRPPIPVSELQSLHMLHSSNPHPRSPPSILPSQRYNGGYGAEDNSTSLSLHDSTREVKKMRVPSVQNGTVRTQGLYSQSQLLQLQAPISPIGYVSVSDLAQQIFSDSPLPPMTSGMGS	
UniRef90_E3Q9H1 UniRef90_J8Q3Z1 UniRef90_A1YIA7	A A P A G V L S P P R S R N S V S A S S H P D E P M S E F P Y P S S F L D D T V K E I A N D S S S P I Q P V L S S N S K N S T P D E F L P N L K S S P T S P A Y S P T S P	
UniRef90_A5K7P4 UniRef90_Q6BQT8	G S P M N L N N T L L Q T P V M N S G S N N I T N N F F N T N Y M S N P P D S Y	
UniRef90_A0DML3 UniRef90_C5MGL5 UniRef90_C7ZQY4	NTNNSQSSNTNNGQQTSQSSNTNNGQQTSQSSNQQTSQSS YSLQQKHEQEQKSNIVASRAVVTPNSNHSPGSFASKAEFS NPAPTENDQGSALDLPPHLRSFEAIQSASADRARLGSDPA IGSSSTMSLISFRALTTSPLHRVSPMEEDPHAPGPS	
UniRef90_B0CUU2 UniRef90_R7Z798 UniRef90_G2Q0W3	I G S S S T M S L I S F R A L T T S P L H R V S P M E E D P H A P G P S N E A A S I L Q T K E V F S G H D A L N L L F E A T Q Q Q N N D F G H H R T G S P F L P F L N P A Q T P D Q Y Y Q Q H P L L Y	
UniRef90_J5JFL1 UniRef90_S8G2D1	I PVF S F L H R A S L S F R P T I F W O D R I S F S I A R W A Q S R Q A S A P F S S S S I R T R I T H	
UniRef90_A0A024J624 UniRef90_G8ZXL4 UniRef90_F9XLP6	P G E Q P T S N P Q S N A S F L P T P S S D V T P E T A A S N N P I F H S S S H R L N S P G R L L S S G S K G T M D G L L L P P L V P D T G E S V S T A S E S L Q R V F S P S S S E H H T Q R A L S P	
UniRef90_Q5B7U5 UniRef90_B8PGT1 UniRef90_L8FXK2	Y HV WS QQQKSDGQACLQHA MWT VA A SLSAPLY QETRRMLPLPLSPSVEYSRKSWWDN DLLYQAATDGSPTKRMK LLNSSGLDGS	
UniRef90_A0A010SFW5 UniRef90_N4U8M5	L Y M P T V R E T L N R P M T P S E K N L L Y A L C A L T S M H M S G K S L G A N D A R E V S D P M D T D R A N T P S T H D A S V P Q P A P W N D V S S P A S A	
UniRef90_G7E7R9 UniRef90_S7QLT2 UniRef90_M7SJE6	GDLSDIEDDTFKRKLHEELKLPAHGSAGSRKHSLHSPAGSFASPAVSGTGAPRT PSNVQQPLSQPSQYNPVGPSYNTGGVQLDPLLAKLQAGNSGSRYPSIWPSPSNSARH GSVSGDV	
UniRef90_B6HLH0 UniRef90_H9J1U7 UniRef90_B6DST3	GRTEDLINRQSLENRLAARQSVSSFNSGPSPLPQGSSPRSL PSYSPTSPNYSPTSPLYSP DLKGSDSENVKSKDNKSDPLIIYKDDTHLESTVNKLTQAV	1
UniRef90_A0A017SL90 UniRef90_G8XZD6	Q N F N A N A A P A Q Q S P F Y A Y Q P P Y V S P Q V P A I P A Q Q M P R Q S P	
UniRef90_Q4PBR6 UniRef90_G3JPD6 UniRef90_A0A010RB75	A V P P P H A S P S S H WS S P S S R S P G H R Y P S H S A Y A Q Q D Y P P P H D R V Q S S V P V L H Q R R Y L S WS R Q D G K S V A Q T A L Q T S P G E H A G P A D F G T W R P V N P T R P S A A V S V R A E T A S T P G S R H D P V L L N K L H S N D G N P Q R P V W S N N L M T T P S V F D S L R T F R	
UniRef90_P52959 UniRef90_W9Y0B6 UniRef90_E3M1N1	N H H H DIL IM S Q S D R A T S A A WY P T S T P A P S IL L IP D S	
UniRef90_W6QFD8 UniRef90_E3Q2J4	VETTTETSDHGVGVLVPGGQSNPRGPSNPGGPSNPGGPSN STLASSMMRTVVTSGNDALNLFEAATAQEDHSPDTGSESL DLLYKAATDRSVQLSKVQDPAAYHSSAYSPAASNHKRHES	
UniRef90_E3QQL0 UniRef90_J9HHP4 UniRef90_J9HHP4	DLLYKAATDRSVQLSKVQDPAAYHSSAYSPAASNHKRHESDPIPIEADDVNALSLSVDRQSSYASSIKAALMCLMKVQPAPSQPYGPSSPAYSPTSPSYSPTSPSYSPTSPAPSQPYGPSPAYSPTSPSYSPTSPSYSPTSPAPSQPYGPSPAYSPTSPSYSPTSPSYSPTSPA	
UniRef90_F0VM35 UniRef90_W2RZB2 UniRef90_K0TFQ8	S A VD MV I S P G G I G D G R V R G P S S Y S P T S P S P T S P A Y S P T S A F Y I P T G T S D A S L L R R Q A Y D G L G H T D A V A T G L K F R R V A D N S A Y P T E T P S G Q P T S E P S Y T P S L T P S E H P S V S F W P T S A P	
UniRef90_G0RWA6 UniRef90_W6Q4H0	G S E N L F S P P V N A R E Y G T L Q T L S P N E T S T Q P P Y A R S Q I L T R P P K R K R S G F E L R D E P	
UniRef90_C4XYJ6 UniRef90_B6Q6D1 UniRef90_J9VSF1	F F N T N Y A N N G G N Q Q K N T S S E D L Y S F N L S S F T F T S G Q S L N G N S H D A L H S E A A G R T E D L N R Q R L E N K A R Q S A G S Y G A H M S A T S T T D F S F L N E F L P F V S P P S L S N A Q S S T S A N N P T S L S D S T	
UniRef90_M7WLE7 UniRef90_J9DLL8 UniRef90_U4L9S1	DE DLAPSLASIKYPSPAASLPLPPVAGFPYPPAFPQPPENANPLNSNPLNANPLNSNPLNANPLNANPLNANPLNANPL	l
UniRef90_W9NN24 UniRef90_M2SNX4	T N E N N K T P T Y S N R L I Q Y H L P Y H A A K V V D P R L S S G N M L H W T D L T A L G G A L T R E P Y T P Y N E Q F Q P A M A	
UniRef90_R4XCQ8 UniRef90_B8M415 UniRef90_UPI0004415B94	Y S Q N S L T R F P A G P G P H L D H P F N L P P P D D T F V S H L I S L W L T W Q Y P W F N C I D P V I F I N A M Q S K D L Q Q S V D V N V S H K L E D Q D K L S Y I P L S S P I Q H S P S S Y N P T S R E Q P G Q H P T T G P H Q L A E F Q P S Q Y Q L H P V L A T E A L H S R A P P T T W	
UniRef90_Q870S0 UniRef90_E9DTE0 UniRef90_M2RZQ8	G S L G G L S A A S Q M P P L P S S A P G G Q A Y Y Q N Q P T L R S P T A P L S D P L G S G A A Y P P M H A F M P R F F L M Y A M N G L H L L P G S N	
UniRef90_UPI000455D067 UniRef90_G1X7D2	NI Q S V T S S R P A P R N A M T S T Q S Q G V N P E F H P P Q L P P S Y D N A A S S S S P P R N Y Q H L H P Y L W T L D G L P E R P P L T P S T A S T A D	
UniRef90_UPI0004624321 UniRef90_Q4P507 UniRef90_K7GY36	Q A A K S S T A E G S T S R I P S S F S S A S R R R S E S A S T H N A S T H L N H R F S H P A I G D P H P S Y S P T S P S Y S P T S P S Y S P T S P S Y S P T S P S Y S P	
UniRef90_N1PFL5 UniRef90_W7MJN4	GNPP <mark>CQHSL</mark> ADSATYGPQLALEF <mark>C</mark> DTRLRDLQLSHWSTVP S <u>S</u> AASFLKET <mark>CG</mark> TALPPSS <u>H</u> HSNPQA <mark>CTS</mark> QPTH	
UniRef90_UPI0003C0237F	GLTNSAPLNQSVPRY PSAVGFPPGSAPGLLHQQPVHPSG	

250 260 270 280 LPQIVDLAKRSLEGTSTMQPP GRVLLELPPNVWSLLDVYFTYTQCWLPL LEKHDMLRTA QPRHTHLPPDESDGEP UniRef90_Q0CS89 PSDQDLPPEEASWQHDVSAIPSNNPRWR ASAPHRNDGPKHPTNSAKRMKLSPRTDGFGRTLNYQRAGSYGPNDAEEPHFNPNTFDGHYLGPSSSDRPGGMSAHMMAGTAGHGGFASHSGMSSYPELPYSLQTQ UniRef90_M1W8A4 UniRef90_E6R0T0 UniRef90_W9ZNS7 UniRef90_K2QL46 UniRef90_J3NQV7 UniRef90_A2QL55 UniRef90_B6QBN2 UniRef90_E4V0Y9 D P V G L N L G H L S L D G R S R Y V G T T Y W A Y L S D E L N E L N Q L L R E UniRef90_M9LWS6 UniRef90_S3CWR0 TVPIHAAPIHAAPGYPLQQPPNFQTAYGHPPSKNDDHLLQ S S P T S R S P A N R Y P S H G A Y A Q Q E Y P P T S H H A H S S N S L H N H Y T S G A T S P F L T S P G A G A T S P F Y D P R R T A A M A T S P T Y S P T S UniRef90_R9PB53 UniRef90_M5FQ84 UniRef90_K2RVN0 UniRef90_M2UJQ5 DTPASSSPPQVTSDTPASSSPLQVTSDTTASSSPPQVTSDDSISAAIQPNQLSFNPA SLNSITMPSGNGFRSPLLSLDPGPTS
NENAYSLM NPQEHNPTPMNQFRLGN
IATSTEDMAEPAHRTEGLQSAKGSDGIATMP TVGSQQV
RSNGPSPSRTSTPFSKNAVSIDAVLTNGAPSPATTSTSSP UniRef90 D3ZAI8 UniRef90_F4NVU6 UniRef90_E3QH51 UniRef90_A1C7P9 UniRef90_A2RA85 UniRef90_H6C2B7 MNQFRLGN TVGSQQV ATTSTSSP UniRef90_H6C2B7 UniRef90_E3Q9H1 UniRef90_J8Q3Z1 UniRef90_A1YIA7 UniRef90_A5K7P4 UniRef90_Q6BQT8 UniRef90_A0DML3 UniRef90_C5MGL5 UniRef90_C7ZQY4 UniRef90_B0CUU2 UniRef90_B7Z798 NYREQENTDAAYPNIP
YSPTSPSYSPTSPSYSPTSPSYSPT
HSVVSPVYSVTSPKYSPTSPKYSPTSPKYSPT
PFNNRSGMTPPLSNINTSGLLAKSNQQNRSNF
[TSQSSNTNNGQQTSQSSNTNI SQSSNTNNGQQ]
TSIDPSALLGFNPVESESETI NFTTDREPIQK
PSGQQSI ATQAPSQRDAASATFPQNAQ DSNS YSPT NPN<u>M</u> A S S P S S Y F NPNMMKYH QFNLSSFP NTNNGQQT PPGSLTNT GTNSAETP UniRef90_R7Z798 UniRef90_G2Q0W3 UniRef90_J5JFL1 S M H R P S T V S A T T P G S Q T M F T S P R D H L L R T F D P R E Q P R S A P HVAPTTSDDTAEPARSKRRITADIPGSHVSWND YENPSPVTTQSEPGKAKHEATAAAVEHYSAPIEGPNIFFE NPHQTQQQLQQLLLLPQLMTLSNSEKFVAFDLPNSPSLQ UniRef90_S8G2D1 UniRef90_A0A024J624 UniRef90_G8ZXL4 UniRef90_F9XLP6 UniRef90_Q5B7U5 UniRef90_B8PGT1 DMLDSQNSYSRPDASGG SARDNQGFPQQQPYSTPRF QANNLRPMGPPSQAHNETRDPGPTS
QQVSPLPGKVQPGTAPHLTPQLYNLHAFASTDMHLRSHLT
TPKSGNERPSDAARSSP
TPAPTLPPISSMPTMGGPSQPISS
RTAQFLNTLEEPDASSHLPAFIRPLPAKIAAEDVAYLHTK
GGSFVRTPRSGMSVGGSTYYPAGTSGPVDPQIADPGPQRE
LYSPASPRYSPSSPNYSPASPAYSTTSNFPTTSPNYSPSS
NELKSLQNAPSSIKSS
NSGLIQQSHLSIPQQNQTAQPDSIQQSNAVGNDKARETYY
IMISPGALAPEREMSQRAPPSLPQQIPSMPHGDVNAMNSY
PAPSSSGHHHHHHPPPSYPQHPSPHPYPHQQQYQQPPPHHA UniRef90_L8FXK2 UniRef90_A0A010SFW5 UniRef90_N4U8M5 UniRef90_G7E7R9 UniRef90_S7QLT2 UniRef90_M7SJE6 UniRef90_B6HLH0 UniRef90_B6DST3 UniRef90 A0A017SL90 UniRef90_G8XZD6 UniRef90_Q4PBR6 UniRef90_G3JPD6 UniRef90_A0A010RB75 UniRef90_P52959 LE E Q D S T A Q L P A F L R P L P T K L A A E D V K Y L Q L K UniRef90_P52959 UniRef90_W9Y0B6 UniRef90_E3M1N1 UniRef90_W6QFD8 UniRef90_E3Q2J4 UniRef90_E3QQL0 UniRef90_J9HHP4 UniRef90_J9HHP4 UniRef90_F0VM35 UniRef90_W2RZB2 UniRef90_K0TFQ8 PGTPSNPGTPSNPGTPSNPGTPSNPGGPSNQGTPSNPGTPAGPPSAGPSTQGRTPGNYDSAFESVARIIRPVASIPAIPQQPLVVTPGLNSRPPAPVKLAPQPIDPELTRRLRNSLITTPLHSAEVMHNFPSLRQKSAVTKDTQRVPWSYSPTSPSYSPSYSPTSPNYTPATYSPTSPSYSPSSNSYSPTSPSYSPTSPSYSPTSPNYTPATYSPTSPSYSPSSNSYSPTSPSYSPTSPSYSPTSPNYTPATVLSVTSPVAGPGDGKTPLSPFSPSNNPMSPHFSASSPSYSKSSQKAPVSSSVPSEIPSVSAFPSMSAVPTSQPSMHPSVSIWPTALPTSLPSE UniRef90_K0TFQ8 UniRef90_G0RWA6 UniRef90_W6Q4H0 UniRef90_C4XYJ6 LADFIDKGLITLE CAVSYFNTFRYIPIFDPQYDTFDSVRS
NAVPNKIFPVNSSGKFDQDSPRKSDEPYRSPSVGVLKKTD
SSTMPRNPHHPYPKRSHQMSADGYSDTSA
SNNTVLPLNTVASVSASSSKHAPLPQFGNFTKSLLLNRRK
LPDPFSYAAHAGPSNFPLALQTLADAAVPEAAAASAFAGG
NSNPNANPLNSNPLNANPLNSNPLNSNQLNSNPLNAKQYS
AWNHSLTPINTNPLQSPFSPYTPGPGPFSPAHTTSPITSF
SV SVTGALFSELLQMYFLYEYPTFPFLHMDSFEDLVTS UniRef90_B6Q6D1 UniRef90_J9VSF1 UniRef90_M7WLE7 UniRef90_J9DLL8 UniRef90_U4L9S1 UniRef90_W9NN24 UniRef90_M2SNX4 UniRef90_R4XCQ8 SITGSEMNNLNSLFGPTAQSPRHELGQSPRFNSGPDIFQRSSLCSPFLVNAMLAQASFF SMQDIMSDLNFLFTTSSYWLSFINIPLFFRDLHEPDLRGRTTITSDDGLVQHLLALYFYPTFASLSKEHFLKDFMDGRPRQTAVSTPPDQDMP TPVSIPTEYANMAYHMHYQQAARQSSPHSYGSADTGSPQSSTPTQTYGFNTHASAQSLPSFSSIQGAGGAVQQAHTSSRYSDLSYMSEESMFSSSSGYDFYQMSSPTPSLTHLTIGSPTG UniRef90_B8M415 UniRef90_UPI0004415B94 UniRef90_Q870S0 UniRef90_E9DTE0 UniRef90_M2RZQ8 UniRef90_UPI000455D067 UniRef90_G1X7D2 UniRef90_UPI0004624321 GAYVESFVPSHDPSHYGHPVDTTAASGSTPVGGPSFFLQQTSPSYSPTSPTYSPTSPTYSPTSPTYVSNDFAASVIJSLYLQNMHP UniRef90_Q4P507 UniRef90_K7GY36 UniRef90_N1PFL5 UniRef90_W7MJN4

SLNQMNAQTMHPSQPQGSYASPPPMSPL

KAMSSS

UniRef90_UPI0003C0237F

```
290
                                                                         300
                                                                                                310
                                                                                                                        320
UniRef90_M2LL36
                            Y Q Y T D G P L M M S S D V A G S G D H A A L W A L L A L A T F Q Y A A N K S S
UniRef90_S7ZNN1
UniRef90_W3WJZ9
UniRef90_X8JJ04
UniRef90_Q0CS89
UniRef90_M1W8A4
                            R H M S L P P S R A G S M G P P D I F G P E E I I N P L G E M S N M A G L V E A T P T F F P S Y L S N P L T P A T S A T S Q L S P E P E D L K P P H Q K D R N Y
UniRef90_E6R0T0
UniRef90_W9ZNS7
UniRef90_K2QL46
UniRef90_J3NQV7
                            S P T S Y S R I G T S P L S A Y P L S G E T A S P W G M S M S S P P A T H A T Q
UniRef90_A2QL55
UniRef90_B6QBN2
UniRef90_E4V0Y9
                            QHESRE VPPSNDGATDA [ MVSVDQPMATNPSYPPGQYRS [
UniRef90_M9LWS6
                            HHSGLDALQRRPGHDTDLRDQPSNPWQH
UniRef90_S3CWR0
                            PHPSYPQHLSSHTYPPHQQYPQVPPHYASAAHPPPPPQRHPPALQMTSPAYTPTSPNFSPTSPSFSPTSPNPSP
UniRef90_R9PB53
UniRef90_M5FQ84
UniRef90_K2RVN0
UniRef90_M2UJQ5
                            T P A S S S S P L Q V T S D T P A S S I T P Q S S P P Q V T S D T P A S S S S P S H P T V P P L H N S Q S Q F Q L L Q L R Q N Q L Q Q Q E L Q N R N L Q G V
UniRef90 D3ZAI8
UniRef90_F4NVU6
UniRef90_E3QH51
UniRef90_A1C7P9
UniRef90_A2RA85
UniRef90_H6C2B7
                            STENPPNTFLGLSPPAQSPGWLPLPSP SPANFPSFSMASPMELIQPLLNQTTVPTINWLPQDLANASNGRRHSINTYQKAPLHGPKCLYRSDSATSQTAEPRLQS
UniRef90_H6C2B/
UniRef90_E3Q9H1
UniRef90_J8Q3Z1
UniRef90_A1YIA7
UniRef90_A5K7P4
UniRef90_Q6BQT8
UniRef90_A0DML3
                            PQYSPTSPQYSPTSPQYSPTSPQYSPTSPQYSPTSPQYSPPNNPSSPPKYSPTSPKYSPTSPQ YSPSSPPNNPSSPDNQNNNSFLPNSSNNNKSAASQLSIEISNSLNPYSSNPATSQSSNTNNTSQSSNTNNGQQTSQSSNTYIGQQTSQSSNTNNYGPLSWICLTKIDNGLVNLWPS
UniRef90_C5MGL5
UniRef90_C7ZQY4
UniRef90_B0CUU2
                            EAVLDPALTRTYTN
UniRef90_R7Z798
UniRef90_G2Q0W3
UniRef90_J5JFL1
UniRef90_S8G2D1
UniRef90_A0A024J624
                            QE SPGANWLF NLSSTHSFSASDQQQGQSHIS PAH DPPAGSIGSIF SPSRFPLPQGQHNFSAQQNGQ TVNIQQNS
UniRef90_G8ZXL4
UniRef90_F9XLP6
UniRef90_Q5B7U5
UniRef90_B8PGT1
UniRef90_L8FXK2
                            TRGSMP
UniRef90_A0A010SFW5
UniRef90_N4U8M5
                            ATNGLPS
UniRef90_G7E7R9
UniRef90_S7QLT2
UniRef90_M7SJE6
                                                      PLQNALLRCYIEYVHPYMP
UniRef90_B6HLH0
                            SPVNNPP
                                  SPTSLSYSPTSPGYPGYSPSSPR YSPNSPVYSPTSS
UniRef90_H9J1U7
UniRef90_B6DST3
                            MTAADPS
VSSSDPSSFHGVSR YD
SAQHTTPPQRHPSNAAH
UniRef90 A0A017SL90
UniRef90_G8XZD6
                                                             Y D S E G T Q K N P A P T Y Q T K P S T L P P A R
UniRef90_Q4PBR6
UniRef90_G3JPD6
UniRef90_A0A010RB75
UniRef90 P52959
                            GALSVPTL
                                                      PLQNALLQAYVEYVHPYMPLMDLNSF
UniRef90_F52959
UniRef90_W9Y0B6
UniRef90_E3M1N1
UniRef90_W6QFD8
UniRef90_E3Q2J4
UniRef90_E3QQL0
UniRef90_J9HHP4
                            SNQGTPSNPGTPSNPGGPSNPRTPSNPGTSSNPGSPTKKP
                            DLSGEP
                            PSYSPTSPNYSPSSP
HYSPTSPSYSPKYSPTSP
BYSPTSPNYSPSSP
HYSPTSPSYSPKYSPTSP
BYSPTSPKYSPTSP
BYSPTSPMYSPTSP
UniRef90_J9HHP4
UniRef90_F0VM35
UniRef90_W2RZB2
                            UniRef90_K0TFQ8
UniRef90_G0RWA6
UniRef90_W6Q4H0
                            S N S N I N G I L N G N S T N F V D G P R S T V P V V T N I S N N V A T S S T Y
UniRef90_C4XYJ6
UniRef90_B6Q6D1
                           IKMGGPEGLGQSDGTRTPSIPPYAIHPR LQMVDSFLQAFGGKGKGREVLAMDDPVLPDGRSALLELYFNQVVQPVLPMLNYTSNP LNSNPLNSNSLNANPLNTNPRNANPLNSLNPTNHS PPGHHHSSSPDIPHAQPHSPHEKSYHPPPMMLQSPRRQFCSSLLVNAVLAAGCQGYAKIANRTEFWNPRTLQYQ
UniRef90_J9VSF1
UniRef90_M7WLE7
UniRef90_J9DLL8
UniRef90_U4L9S1
UniRef90_W9NN24
UniRef90_M2SNX4
UniRef90_R4XCQ8
                            PSTSVASDDRQLKYPLLAQHTRAL
UniRef90_B8M415
                            MQSLVMSAL
FCS SLLVNALLALGCRFSSQPSTRANPNDPYSS
UniRef90_UPI0004415B94
UniRef90_Q870S0
UniRef90_E9DTE0
                            GVS A N S S Q H S G P MLS R Y PVLK PLLP HLG S [ M N [ P T A C D L L
UniRef90_M2RZQ8
UniRef90_UPI000455D067
                            SHS PPSPHGSFT D LGAFRRQRS LS TSNTSSPPHPSE LT
UniRef90 G1X7D2
UniRef90_UPI0004624321
                            HSPSNASVFSNRSSTMYAASRPLNPPPLDSFRP
SPTSPTYSPTSPSYDGYSPSSPKYSPSSPTYSPTSPSYSP
UniRef90_Q4P507
UniRef90 K7GY36
```

UniRef90_UPI0003C0237F AAGTPPPQVRPGSAPMDVGGYPSMPHPAVQDRLLPGQQHP

UniRef90_N1PFL5 UniRef90_W7MJN4

```
330
                                                                                 340
                                                                                                           350
                                                                                                                                      360
UniRef90_M2LL36
                               Y E R S A Q S R S G N A A Q L F H L A R S L I P A E G Y S
UniRef90_S7ZNN1
UniRef90_W3WJZ9
UniRef90_X8JJ04
UniRef90_Q0CS89
UniRef90_M1W8A4
                               A VE R A R E E Q A A Q S T G K A P T P G D P G S G K R G A A D M E R D Q S S D H E E E Q I P R R G S L H Q R M V S Y S E T E T Y G H D R G N D I P R N N D T M
UniRef90_E6R0T0
UniRef90_W9ZNS7
UniRef90_K2QL46
UniRef90_J3NQV7
                               YPPQQQHVSPQ
UniRef90_A2QL55
UniRef90_B6QBN2
UniRef90_E4V0Y9
                               T G G H Q L N R A L L F S G E S P T A L D K N V E P Y M L E D M P T R R Q S D
UniRef90_M9LWS6
UniRef90_S3CWR0
                               SNASQGTNGPGNSNHGFATSPQYSPTSPQYTPTS PQYS PTSPHLSP
UniRef90_R9PB53
UniRef90_M5FQ84
UniRef90_K2RVN0
UniRef90_M2UJQ5
                               PQVTSDTPASSSSPPQVTSDTPSSSSSPPQVTSDTPASSS
SQSQLSHSQSNLHTPASVSQGMTTQPVFDLPASTNRN
UniRef90 D3ZAI8
UniRef90_F4NVU6
UniRef90 E3QH51
UniRef90_A1C7P9
UniRef90_A2RA85
                               F S T T L R Y P T S G L L D T S L S Q A P WY Q S V I H G T E S
                                                                                                                                SSL
UniRef90 H6C2B7
UniRef90_H6C2B/
UniRef90_E3Q9H1
UniRef90_J8Q3Z1
UniRef90_A1YIA7
UniRef90_A5K7P4
UniRef90_Q6BQT8
UniRef90_A0DML3
                               T S P Q Y S P T S P Q Y S P T S P Q Y S P T S P Q Y S P T S P Q Y S P T S P Q Y S P T S P Q Y S P Y S P Y A L A S P K F S P T S P A Y S L S S P V Y D Q S G N A R S K S Q H P
                               N G Q Q T S Q S S N T N N G Q Q T S Q S S N T Y [ G Q Q T N N G Q Q T S Q S S N
UniRef90_C5MGL5
UniRef90_C7ZQY4
UniRef90_B0CUU2
UniRef90_R7Z798
UniRef90_G2Q0W3
UniRef90_J5JFL1
UniRef90_S8G2D1
                               A A S M E K P A I I N R P E P V K Q N N P P T N T N K Y M N A Q S Y A A Q Q H H T Q L H S R H S S E V P Q Q Q D G Q H S
UniRef90_A0A024J624
UniRef90_G8ZXL4
UniRef90_F9XLP6
UniRef90_Q5B7U5
UniRef90_B8PGT1
UniRef90_L8FXK2
UniRef90_A0A010SFW5
UniRef90_N4U8M5
UniRef90_G7E7R9
UniRef90_S7QLT2
UniRef90_M7SJE6
UniRef90_B6HLH0
                               NYSPSSPNYTSGSVYSPTSPT
UniRef90_H9J1U7
UniRef90_B6DST3
UniRef90 A0A017SL90
UniRef90_G8XZD6
                               Y S
UniRef90 Q4PBR6
UniRef90_G3JPD6
UniRef90_A0A010RB75
UniRef90 P52959
UniRef90_F52959
UniRef90_W9Y0B6
UniRef90_E3M1N1
UniRef90_W6QFD8
UniRef90_E3Q2J4
UniRef90_E3QQL0
UniRef90_J9HHP4
                               K D N E T T T E T S D H G V G V L V P G G P S N P G T P S N P G G P S N P G
                               S Y S P T S P S Y G G S P Q Y T P A S P Q Y S T S P K Y G S N N F P T Y S P S A S Y S P T S P S Y G G S P Q Y T P A S P Q Y S T S P K Y G S N N F P T Y S P S A P Y S P Q S P S Y G G A P G Q G P L S P S F T Q S P R Y S P S S P A A Y S P T M
UniRef90_J9HHP4
UniRef90_F0VM35
UniRef90_W2RZB2
                               VPSLEPSTQPSVNPSDHPSTSPTGDPSASPSALPSESPST
UniRef90_K0TFQ8
UniRef90_G0RWA6
UniRef90_W6Q4H0
                               T L Q N L S S D L S D T E N S Q L N N P S L N S L N A Y P S N P A T T M N
UniRef90_C4XYJ6
UniRef90_B6Q6D1
                               A H D E A L F E F G P S H R H R N L S N N T L T A G T V D S N A F P S P T D K S R F L R W S A H L P A S Q P S T S S A S L I P P S L Y Y A V F A A K Q Y S N Y T S N P L N T N P P L N A N T L N A K Q Y S N Y T S N P L N S N P
UniRef90_J9VSF1
UniRef90_M7WLE7
UniRef90_J9DLL8
UniRef90_U4L9S1
UniRef90_W9NN24
UniRef90_M2SNX4
UniRef90_R4XCQ8
UniRef90_B8M415
UniRef90_UPI0004415B94
UniRef90_Q870S0
UniRef90_E9DTE0
                               E F Y F Q S S S S V F M E P V S P Y
UniRef90_M2RZQ8
UniRef90_UPI000455D067
                               Y S N G L A T T V P S L S S S V P T T A G L S S Q L Y Y A S P V T P S N Q D T I
UniRef90 G1X7D2
UniRef90_UPI0004624321
UniRef90_Q4P507
UniRef90 K7GY36
                               TSPQYSPTSPQYSPSSPTYPSSPSYNPTSPRSFGSPQYSP
UniRef90_N1PFL5
```

UniRef90_UPI0003C0237F FQQLPSCPPLQPHHHQSSPPHPHHQPWAQLH

PSPQSTV

UniRef90 W7MJN4

```
370
                                                                           380
                                                                                                    390
                                                                                                                            400
UniRef90_M2LL36
UniRef90_S7ZNN1
UniRef90_W3WJZ9
UniRef90_X8JJ04
UniRef90_Q0CS89
UniRef90_M1W8A4
                             DKEGLSKKT
ALSGMSPSEHSAFES
UniRef90_E6R0T0
UniRef90_W9ZNS7
UniRef90_K2QL46
UniRef90_J3NQV7
UniRef90_A2QL55
UniRef90_B6QBN2
UniRef90_E4V0Y9
                                                     LLYKGFMSGVHALSPVLHPPTLLQS
UniRef90_M9LWS6
UniRef90_S3CWR0
                             PSESFS
TSPRYSPTSPWHGASTPTSPASPTSPSYSPA
UniRef90_R9PB53
UniRef90_M5FQ84
                                                                                                                SPAYS
UniRef90_K2RVN0
UniRef90_M2UJQ5
                            L P Q V T S P A S S S P P Q V T S D T P A S S S P P Q
UniRef90 D3ZAI8
UniRef90_F4NVU6
UniRef90 E3QH51
UniRef90_A1C7P9
UniRef90_A2RA85
UniRef90_H6C2B7
                             VSENVS QTPSGYTSLGGNTESPSQSSH
UniRef90_H6C2B/
UniRef90_E3Q9H1
UniRef90_J8Q3Z1
UniRef90_A1YIA7
UniRef90_A5K7P4
UniRef90_Q6BQT8
UniRef90_A0DML3
                            T S P S Y S P
LS P A Y L LQ S P V Q V K Q H D V S V F S P L Q Q A N A E E V Q N D D P F S
                             TNNGQQTS
                                                            QSSNTNNGQQTSQSSNTYIIGQQTSQSS
UniRef90_C5MGL5
UniRef90_C7ZQY4
UniRef90_B0CUU2
UniRef90_R7Z798
UniRef90_G2Q0W3
UniRef90_J5JFL1
UniRef90_S8G2D1
UniRef90_A0A024J624
UniRef90_G8ZXL4
                             P S K Q P S P H H H A Q N S \square S D S Q P R S S Q Q Q
UniRef90_F9XLP6
UniRef90_Q5B7U5
UniRef90_B8PGT1
UniRef90_L8FXK2
UniRef90_A0A010SFW5
UniRef90_N4U8M5
UniRef90_G7E7R9
UniRef90_S7QLT2
UniRef90_M7SJE6
UniRef90_B6HLH0
UniRef90_H9J1U7
UniRef90_B6DST3
UniRef90 A0A017SL90
UniRef90_G8XZD6
UniRef90 Q4PBR6
UniRef90_G3JPD6
UniRef90_A0A010RB75
UniRef90_P52959
UniRef90_F52959
UniRef90_W9Y0B6
UniRef90_E3M1N1
UniRef90_W6QFD8
UniRef90_E3Q2J4
UniRef90_E3QQL0
UniRef90_J9HHP4
                             P S
                                         SPGGPSNPPSNPGTPSNPGSPTKKPK
                             S P A F S
S P A F S
UniRef90_J9HHP4
UniRef90_F0VM35
UniRef90_W2RZB2
                             APSAV
UniRef90_K0TFQ8
UniRef90_G0RWA6
UniRef90_W6Q4H0
UniRef90_C4XYJ6
UniRef90_B6Q6D1
UniRef90_J9VSF1
                            ASSY ISPSSPFASS IPPSAPESY
LNANPLNSNPLNANPLNSNPLNATP
UniRef90_M7WLE7
UniRef90_J9DLL8
UniRef90_U4L9S1
UniRef90_W9NN24
UniRef90_M2SNX4
UniRef90_R4XCQ8
UniRef90_B8M415
UniRef90_UPI0004415B94
UniRef90_Q870S0
UniRef90_E9DTE0
UniRef90_M2RZQ8
UniRef90_UPI000455D067
                             R G N P Y I S S D K S H R R S V E N F A Q S F A S Q S Y S A Q S H N S P P F T
UniRef90 G1X7D2
UniRef90_UPI0004624321
UniRef90_Q4P507
UniRef90 K7GY36
                             TSPTYSPTSPSYTPSSP
                                                                           QYSPTSPAYTPS
UniRef90_N1PFL5
UniRef90 W7MJN4
```

PVPQHSPSEPFLEKPVPDMTQVSGPNAQLVKSDD

UniRef90_UPI0003C0237F

UniRef90_M2LL36 UniRef90_S7ZNN1 UniRef90_W3WJZ9 UniRef90_X8JJ04 UniRef90_Q0CS89 UniRef90_M1W8A4 UniRef90_E6R0T0 UniRef90_W9ZNS7 UniRef90_K2QL46 UniRef90_J3NQV7 UniRef90_A2QL55 UniRef90_B6QBN2 UniRef90_M2W96 UniRef90_M9LWS6 UniRef90_S3CWR0 UniRef90_R9PB53 UniRef90_M5FQ84 UniRef90_K2RVN0 UniRef90_M2UJQ5 UniRef90_D3ZAI8 UniRef90_F4NVU6 UniRef90_E3QH51 UniRef90_A1C7P9 UniRef90_A2RA85 UniRef90_H6C2B7 UniRef90_H6C2B7 UniRef90_E3Q9H1 UniRef90_J8Q3Z1 UniRef90_A1YIA7 UniRef90_A5K7P4 UniRef90_Q6BQT8 UniRef90_A0DML3 UniRef90_C5MGL5 UniRef90_C7ZQY4 UniRef90_B0CUU2 UniRef90_B7Z798 UniRef90_R7Z798 UniRef90_G2Q0W3 UniRef90_J5JFL1 UniRef90_S8G2D1 UniRef90_A0A024J624 UniRef90_G8ZXL4 UniRef90_F9XLP6 UniRef90_Q5B7U5 UniRef90_B8PGT1 UniRef90_L8FXK2 UniRef90_A0A010SFW5 UniRef90_N4U8M5 UniRef90_G7E7R9 UniRef90_S7QLT2 UniRef90_M7SJE6 UniRef90_B6HLH0 UniRef90_H9J1U7 UniRef90_B6DST3 UniRef90_A0A017SL90 UniRef90_G8XZD6 UniRef90_Q4PBR6 UniRef90_G3JPD6 UniRef90_A0A010RB75 UniRef90_P52959 UniRef90_F52959 UniRef90_W9Y0B6 UniRef90_E3M1N1 UniRef90_W6QFD8 UniRef90_E3Q2J4 UniRef90_B3QQL0 UniRef90_J9HHP4 UniRef90_J9HHP4 UniRef90_F0VM35 UniRef90_W2RZB2 UniRef90_K0TFQ8 UniRef90_G0RWA6 UniRef90_W6Q4H0 UniRef90_C4XYJ6 UniRef90_B6Q6D1 UniRef90_J9VSF1 UniRef90_M7WLE7 UniRef90_J9DLL8 UniRef90_U4L9S1 UniRef90_W9NN24 UniRef90_M2SNX4 UniRef90_R4XCQ8 UniRef90_B8M415 UniRef90_UPI0004415B94 UniRef90_Q870S0 UniRef90_E9DTE0 UniRef90_M2RZQ8 UniRef90_UPI000455D067 UniRef90_G1X7D2 UniRef90_UPI0004624321 UniRef90_Q4P507 UniRef90_K7GY36 UniRef90_N1PFL5 UniRef90_W7MJN4

UniRef90_UPI0003C0237F

HaiPaf00 A1CN74	1 10	20	30	40
UniRef90_A1CNZ4 UniRef90_H6BRG0 UniRef90_G2RDD8		GKQARRP	SQSDQEPTSPP	PAYKR
UniRef90_S3CVZ4 UniRef90_V5FRT8	PPGMESMAASTGSS	SGTPGVSS	A Q M S S A N L Q A Q T S E H T R T D A H Q	KRAYR
UniRef90_E6ZX15 UniRef90_X8IW40		GASTSKS	K P E D A P S P S E P V S T M S Q S E A G P	KAKKR
UniRef90_F0Y4D3			S K V D S N S P S S A	
UniRef90_W3X7S7 UniRef90_Q59QC7	SPNSTLNTSEFSSDE	NLKTNNSE	P P K K V S K S S T G	KRKYH
UniRef90_W9SEA2 UniRef90_N1QKR1	SPSTQSQGQSSPKRK	A E D A G S S V		
UniRef90_B2WNK8 UniRef90_G9NB25		GEAAER	DKDHEGRG <u>A</u> GK	QQSKP
UniRef90_G7XK40 UniRef90_G9MFA2	DANSVSSHDDGSSA	DETTPAAS	PPKSSGVAK SSQNGSTGASS	KKRKR
UniRef90_N4TV76 UniRef90_R0IKS5	QSS	S G M R S P G V]DSDSPGKPSRP	
UniRef90_F0XHQ0 UniRef90_V2YT37			TSQGP	P E K T N
UniRef90_R9Al32 UniRef90_J9MNZ7	0 1/ 0 0 5 0 0	N 0 0 0 0 1 0 0	DNNSVDSGQDT	K H R R I T K R
UniRef90_U1LNH4 UniRef90_U1G2R9	SPSSHT[]AES VNVHNPHLSRPVH	P S S M N G S D	A G G S N N G A G D V K S P G G G T E A A T	TTAKP
UniRef90_S3BLY5 UniRef90_N4V4U8	VNVHNPHLSRPVH	SFQS	APTPASSSAHG NLSASKPDIKP	QLSKR
UniRef90_UPI000440BC36 UniRef90_G3JL99	MSPLHTSPSVAHITHH	DSSK	A A A G	SRRYR
UniRef90_F4S305 UniRef90_R7RYJ1			ADQPPTT	K S Q G K P R
UniRef90_F0XT49 UniRef90_T0KBN6	К	D P S H M S S L	VEGSSRKRKRV TGLRSRFKNSM	<u>IS</u> S <u>S</u> AK
UniRef90_G3JQM8 UniRef90_F9GB00		DPSNRATA	SSADGGV SSAKRSAPCDG	QRPWK
UniRef90_W9X1C2 UniRef90_W2SBU1		SGNEKKA	A P A T K D S P S T R S P S Q Q E A N T S S	S S K M H A A K R R
UniRef90_K1XEG2 UniRef90_C9SGA4	TTPRPK	TAMDTGKP	P P A S S S F S A A <u>H</u>	YFPSR
UniRef90_W6PRG9 UniRef90_V9DJU9				PPKRR
UniRef90_V9DGI2 UniRef90_B6HEG6			A Q G Q D P A T P P Q A N P A V P A T E	QQPKR
UniRef90_B2AU02 UniRef90_X0GTC3		SRGT	S P V H D T H S S H S K R T R N S I P T F T	G D A R H S K R R A
UniRef90_R9AIZ3 UniRef90_N4UQM9	S G H P A T Q D S M D V D T T G S S G W S E	LPRLSDII EPISPPSS]T Q S D R N P N G N Q R Q R A G T S S M T G	R P K F P G R K K
UniRef90_C5MIH2 UniRef90_UPI000462169B	HSVGMPSSQSKPQIJS	PKSDDSS LPSASGPA	NGIKVLNGSQD RNNLSESPSSQ	YKFK SRPPR
UniRef90_H6BQ85 UniRef90_B3L428	HSVGMPSSQSKPQIS SPYDVQD	LQAGRKRR	ESELDGNDSSD	RAAVR
UniRef90_A0A010QFR2 UniRef90_G3JPK8	MT P MDNDSSASTPSGPSKP	PASSATAA STGSTPQG	R Q Q S D P T S A A T R S D S A S A A T S S	G N S G S Q N S K R
UniRef90_B6QE64 UniRef90_G4TGW2	НТА	TAASQRHN	RTSEVTNEGSV QSLQAEASLKG	PRKRR
UniRef90_L7I2K1 UniRef90_I2H0V2	SPPQKK	RKESTSAG	T G N D A D S G E P A R D K E K T S S D Q L	TKIITK
UniRef90_K9H575 UniRef90_W7ICR8	LS E M D R A D S Q G P D R G D	PATQDAS	SAAIL VIKIVIESQT	QGPKK
UniRef90_B6HBE5 UniRef90_W6Q1U6	MSP	APVQVNSS	SKLPSPGFNAG	A R P Y R
UniRef90_H6BMQ2 UniRef90_H8X4W0	LTPAPSNDSPRSV	ASSMAASR	MSPATASTD AMSQPKKTGR SQQF	KRRKH
UniRef90_M2T3M5 UniRef90_G8Y2C9		TPS	P S T S T R S D N P G	A S S K R P Q R K R
UniRef90_W9WST4 UniRef90_W7I9I1	N L Q A G R K M S T A G S S A K R K H D A L T P A N MVS S E S N P A N S	R R E S E L D P G P D S S T N S	NDMNDSAAV RDSSPEPGSAT	R
UniRef90_F2TH79 UniRef90_Q5B600	PANMVSSESNPANS SVMSSSPQPQPA	RKATSKSL ADSGKPOP	T K P T Q D F S P K M	IGEKTH NPASR
UniRef90_S3C842 UniRef90_K9GCT0	or wood at at at A	A D O O R T Q T	TIESWATT ASI	H R
UniRef90_J3QAK7 UniRef90_R7QB26	PTSSPSRTPSIITPS	PSOTPTSS	SSSSAPES PSRTPSITPSP	GKPAR
UniRef90_R7QB26 UniRef90_R7QB26 UniRef90_R7QB26	PTSSPSRTPSLTPS PTSSPSRTPSLTPS PTSSPSRTPSLTPS	P S Q T P T S S	PSRTPSLTPSP	SQTPT
UniRef90_R7QB26 UniRef90_Q5AX84 UniRef90_S3C939	TIOUTURIFULIFO	QSP	E Q T M D P H S L P A A T P S P A T	HDIRR
UniRef90_S3C939 UniRef90_W9L9T3 UniRef90_C3YS03			ADQLT	PQTQR
UniRef90_N1S7S5	ATCANAKDATA		CDKCNDCDNTT	K O OWB
UniRef90_N4UQF9 UniRef90_M9M7M7	A LS A N A K D A L N H S VS H S A E S G L S		ASTPPPTNTTA	GFTGR
UniRef90_K5UPX1 UniRef90_Q6C764	n o v o n o A E o G L S	SUKIAVNP	SQRT	GKPKR
UniRef90_W9ZIG2 UniRef90_B6H9U6			QRATAADASG	
UniRef90_N1PC69 UniRef90_J3NP47		АА	S E A A P E E T A S A	N P R K R
UniRef90_UPI000456053B UniRef90_W6Q4U8			SAGTSTGQGP	
UniRef90_W3WXH2 UniRef90_S7W5T7				TGNRR
UniRef90_H6BLY3	DESKKSTPTSQTAQR	C DIVIC MT F T	DTPTONKPDTV	AAPKP

		50	60	70	80
UniRef90_A1CNZ4 UniRef90_H6BRG0 UniRef90_G2RDD8 UniRef90_S3CVZ4 UniRef90_V5FRT8	RRLSRACD QRRKPSCD	SCRNRKSRO QCNQLRTKO ACRERKVKO	DGQHP DATE TT:	S C S L C V E L G F E C N C A H C L E F Q L G C E S C S E C S S R N V K C C	EY∐R ⊋FTK
UniRef90_E6ZX15 UniRef90_X8IW40 UniRef90_F0Y4D3	K Y A S Q A C N	VCRRRRTK(DGTQP	CSACTRAGVRCTCNNCTAYNYRCTCCEPCTISGHECS	F F S S S W T A
UniRef90_W3X7S7 UniRef90_Q59QC7 UniRef90_W9SEA2	ATYKLSCS QKSRNGCS	LCRSRKIKO TCKKRRVKO	DRVYP DEQRP	CCHCVRSGSE <mark>C</mark> VCGNCTKLKLDC	/FPQ GYLH
UniRef90_N1QKR1 UniRef90_B2WNK8 UniRef90_G9NB25 UniRef90_G9NB25 UniRef90_G9NB25 UniRef90_N4TV76 UniRef90_R0IKS5 UniRef90_R0IKS5 UniRef90_V2YT37 UniRef90_V2YT37 UniRef90_U4LNH4 UniRef90_U4LNH4 UniRef90_U1G2R9 UniRef90_U1G2R9 UniRef90_B3BLY5 UniRef90_B3BLY5 UniRef90_F9S3BLY5 UniRef90_F9S3BLY5 UniRef90_G3JL99 UniRef90_F4S305 UniRef90_F4S305 UniRef90_F4S305 UniRef90_F6SJQM8 UniRef90_T0XT49	N R K K K R R K R R R R R R R R R R R R	Y	G G G G G G G G G G G G G G G G G G G	CTRCLKRNIGHL GSCDRKSYGLQCS CDRKSYGLQCS CSWCARHPEACC CSWCARHPEACC CSWCARHPEACC CCGWCSRAAGACC CCGWCSRAAGACC CCGWCSRAAGACC CCGWCSRAAGACC CCGWCSRAAGACC CCGCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	RDMERKERGQQ RVKARP EEERERDSQKKTDK
UniRef90_V9DJU9 UniRef90_V9DG12 UniRef90_B6HEG6 UniRef90_B2AU02 UniRef90_R9AIZ3 UniRef90_R9AIZ3 UniRef90_N4UQM9 UniRef90_C5MIH2 UniRef90_UPl000462169B UniRef90_H6BQ85	RRIALACT RRVWKACE PYAARACT KRSRAGCL GTACA YRSRNGCL REASTACR	S C R N R K S R C S C R A R K S R C R C R M K K T K C T C R R R K G K C T C R R R K V K C R C R S Q K R C T C K V R K K K C Q C R A R K R C Q C N Q L R T K C	N G A R P K C D G G F P C D G Q Q P C D M T A P P C D S E E K P C D S T R P F C D S T	A C S L C V E L G F E C \ C S T C T E L G L T C \ C K R C K D D G L V C \ C D Y C G N R G Q T C \ V C L K C T S L G R E C \ S C T N C A R S G H P C \ T C N D C Q R F G K K C \ C H N C L R R N N E C \ C A H C T D N S L V C \	Q Y V Q F A G / Y D G F Y P N / R Y V D / Y D A
UniRef90_B3L428 UniRef90_A0A010QFR2 UniRef90_G3JPK8 UniRef90_G3JPK8 UniRef90_B6QE64 UniRef90_G4TGW2 UniRef90_L712K1 UniRef90_L712K1 UniRef90_L712K7 UniRef90_W71CR8 UniRef90_W6Q1U6 UniRef90_H6BMQ2 UniRef90_H6BMQ2 UniRef90_M2T3M5 UniRef90_M2T3M5 UniRef90_W71CP8 UniRef90_W71CP8 UniRef90_W71P11 UniRef90_W71P11 UniRef90_W71P11 UniRef90_S3C842 UniRef90_S3C842 UniRef90_R7QB26	R R T P A A C C C C C C C C C C C C C C C C C	CRKRKSRC CKKRKVKO ECKRRKKVKO PCRSRKTRC OCRRC OCRRC OCRC OCRC OCRC OCRC OCRC	R P H A D G G F P H A A D G G F P H A A D G G F R P G G F R P G G F R F R F R F R F R F R F R F R F R	R C C R C R R Q K V E C C R C R K R R S E A C L C R K R R S E A C L C R W D N K T C C C N N K T C C C N N C L E L C R V Q G A E C L C R V Q G A E C L C R V Q G A E C L C R V Q G A E C L C R V Q G A E C C C N N C L E L C R V Q G A E C C C A N C S L Y H L C C R C S N C S L Y H L C C R C S N C S L Y H L C C R C S N C S L Y H L C C R C S N C S L Y H L C C R C S N C S L Y R L A G L E C C C S N C S C A N C S R R E S K E C C C S N C T R N K K S C C C S N C V R R E S K E C C S N C T R W S R P C T S C C C S N C T R W S R P C T S C C C S N C T R W S R P C T S C C C S N C T R S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S Q T P T S P S L T P S P S L T P S P S Q T P T S P S L T P S P S L T P S P S L T P S P S L T P S P S L T P S P S Q T P T S T C C C R R L R C C C C C C C C C C C C C	VYYYLIYHYYYYYYYFFFFSSSYWYYYYLIYHYYYYYYYFFFFSSSYWYYYYYYFFFFSSSYWY
UniRef90_N1S7S5 UniRef90_N4UQF9 UniRef90_M9M7M7 UniRef90_K5UPX1 UniRef90_Q6C764 UniRef90_W9ZIG2 UniRef90_B6H9U6	HRASVACA IRSSRACL KKTNVACN RKAHRACI	N	C	C S N C I N S K L E C S E C T A C A K S G A E C I C N N C S K D N T L C E A C S Q C F K R S H P C I C E R C V A R G F A D T C S Q C L D D G K D C A	IKN EYG DYTP CVD
UniRef90_B6H906 UniRef90_N1PC69 UniRef90_J3NP47 UniRef90_UPI000456053B	KKSSRA <mark>C</mark> D	N C A K T K T K C Y C H V N H Q P (DNAKP	CSRCAGRNLRC1 RCSYCEKHDKQCL	_ Y <u>L</u> R
UniRef90_W6Q4U8 UniRef90_W3WXH2 UniRef90_S7W5T7	K Y V T T A C V	T C R K R R I K (G C R E S K I K (DGTTP	CTN <mark>CV</mark> KSKRICE TCSNCQNRGRECE	
UniRef90_H6BLY3	K R V R T G C L	T CRERHLK(D EGLP	T C Q N C K R S N R K C	

UniRef90_A1CNZ4 UniRef90_H6BRG0	90 PTAGNVRA	100 S	110 120 Q G P S G Y D E R □ R
UniRef90_G2RDD8 UniRef90_S3CVZ4	ERKKRG KA ETNRRM SS	SRKDQHVGAHN IKQVQDLEKQI	PHLARTGAQPKHGSL TQVKRENSHLRSLLN
UniRef90_V5FRT8 UniRef90_E6ZX15 UniRef90_X8IW40	Q G Q Q I F N A S V P R D Q D A D R S R G K Y E I L E S D S N E S N R P V T K Q Y L	IL E K IL Q K R V E W L K V E T L L S A L R S IF G I R A K I O M I F	E H I I R K K T G T D V S D I V A P H V A Q Q E R G E L N V S E I A L L E P S D E H T M M
UniRef90_F0Y4D3 UniRef90_W3X7S7	RKRMNR PRKTKNSE	LLNSRLESIVG	P S P A N V N M E T L R D M D M S D Q
UniRef90_Q59QC7 UniRef90_W9SEA2 UniRef90_N1QKR1	EP EPREPPKRSKSELV]A N N E P P S K K R K R K VS S S S E P T P P L N G H T A A H L H G N G A G
UniRef90_B2WNK8 UniRef90_G9NB25	PSRRRGPPNRHAEA EPRESDPKKKTV <u>V</u> S	∐K K R R ∐ G G G D F	D S G G S T P Q S P T N A A H K T A S T A S V D D S D T
UniRef90_G7XK40 UniRef90_G9MFA2 UniRef90_N4TV76	DNPRTASQDEYURV RQKPGSRUGFSLE APRQTRURRHGAQS	L EAKVNRIDA	LCLRAGVSAPDLHRD LLQSLGRRVEEHIAN VLEQMIEKLGDRINE
UniRef90_R0IKS5 UniRef90_F0XHQ0	P A Q R V V P S R K L V D K R K K P G L R A G Y G R E	L S N N L E Q Y K S V L E A R L D R L E S	L
UniRef90_V2YT37 UniRef90_R9Al32 UniRef90_J9MNZ7	ATKKRGPPKGYIIDS	II IS D K R II IF IV V I IA	SSKESLTDRLLESVN NLIELPGSTHVINSI FLLGYLLSQVADIEG
UniRef90_U4LNH4 UniRef90_U1G2R9			T P A P N G E R Q Y F S P D Y
UniRef90_S3BLY5 UniRef90_N4V4U8 UniRef90_UPI000440BC36	PV RQSKEHLRTE PSRE ASLTGE	E QLR QR QR S S A GLE RIR S LE A	SSGNGTSADGDADDQ DQVIAALVRSDMWED HVAELRRSQLNLQHT
UniRef90_G3JL99 UniRef90_F4S305 UniRef90_R7RYJ1	AAKSR PMRASPSR RTDYLLN TPKBBGBDKGABTB	H S A D R G D G L S H P E D K A W Q M K M E	HVAELRRSQLNIQHT QGQYTASFAHDAHSA EKVNSLTKSVDQLFL
UniRef90_F0XT49 UniRef90_T0KBN6	T K P D WMD G G E R Q K E	LTYGRGREPPI MADHLKKQVKV	PKRRRRTTTTTAPE PLAQEFSPTGPSLNE QANNRRERKYLQSLD
UniRef90_G3JQM8 UniRef90_F9GB00 UniRef90_W9X1C2		K () K = H K K	Q A N N R R E R K Y L Q S L D T T T T S N S A N V D D G P S R S S G S P R P L F V T S R L R T K T T E K S T S T Q S Q C
UniRef90_W2SBU1 UniRef90_K1XEG2	PRQRQVPSRRSVEK LKWGNEVGPYNST	I S Q T L Q E Y R A	I L Q K L F P N V H P E S L A V L P D F S A R Q V F G H S R L F S S P V F G Q P A T T P S G L E A P P M P Q E K D T A
UniRef90_C9SGA4 UniRef90_W6PRG9 UniRef90_V9DJU9	S N Q P R I D H N T R V D K R K L P L R V A I E L	JI ML E RII QL L E D L S S R V E QL <mark>C</mark> H E	R L F S S P V F G Q P A T T P S G L E A P P M P Q E K D T A
UniRef90_V9DGI2 UniRef90_B6HEG6	PAAG NVKPVQPTS TDQTVVVGKEHFQT	DYDERLRAIEE IEE RLHHLES	TLRLLVNQKVTFAGE LLDQGRASSKRSWSD VHKLYAMVRNHQTWD
UniRef90_B2AU02 UniRef90_X0GTC3 UniRef90_R9AIZ3	E GVPPVT A T R G P A Q P N A P S G K R K R T S Y D	P S A F Q S D E S D Q S D A H D S S T L P E	RLSQPRTPAAAHGPP PSAYDDDSYNDPFNN SLRRVAPEELERAPE
UniRef90_N4UQM9 UniRef90_C5MIH2		ILIN K EIVIEII IU E 3 U	
UniRef90_UPI000462169B UniRef90_H6BQ85 UniRef90_B3L428	AHKKRGRPKRETEQ		R P A D A E P S S A S A K K K A S N N Q P P G A Q A S V S R
UniRef90_A0A010QFR2 UniRef90_G3JPK8 UniRef90_B6QE64	PII I ROSKENILIRGE	II	VS KVD S G NVD G V VR G D Q VF S A L VR S N L WE D R N A N E I E R L T T L VE N
UniRef90_G4TGW2 UniRef90_L7I2K1	APKRRGPDKQNRKR SRRRK	LYKKRPSLSPP KNIFAGS	D P S S K V S A S T A S D Q E T L G A G Q L G T P V S T D T
UniRef90_I2H0V2 UniRef90_K9H575 UniRef90_W7ICR8	VTKTLGPAKGYVES PGLKLDAGDK	LEARLEKLDKL	A D L Q N A V K N T E Q A D N L V K L L P G V D L S Q E V D L L Q N A L P S T P P G S G M
UniRef90_B6HBE5 UniRef90_W6Q1U6	VPSKRWQTERPTSP	NADTSVLSAPD GTHPSQQNVDQ	SKSWAGPPVMEPVPG SPTSTNHRDVDELMD
UniRef90_H6BMQ2 UniRef90_H8X4W0 UniRef90_M2T3M5	V R R H E A G K A Q H R S E	ELEELKQAKLE IEEARQDQNNS	H N N H A E V T I D E P S V R Q Q V M S E Q K L D S K S E N S I P R G A V A S S A T P T
UniRef90_G8Y2C9 UniRef90_W9WST4	KPNKNGSP IVING	SIL I IP D GIVIG P M P	V
UniRef90_W7I9I1 UniRef90_F2TH79 UniRef90_Q5B600	P E Q R R [<u>I</u> KKTKI <u>NEKA<mark>C</mark> AENAELLSRLR</u>	A
UniRef90_S3C842 UniRef90_K9GCT0 UniRef90_J3QAK7	TRRKR KT	EDDG <mark>V</mark> ESDYI <u>V</u> KTNPTSATLLA	R
UniRef90_R7QB26 UniRef90_R7QB26	RTPSLTPSPSQTPT RTPSLTPSPSQTPT	S S P S R T P S L T P S S P S R T P S L T P	LDLKCLPRTPEQARG SPSQTPTSSPSRTPS SPSQTPTSSPSRTPS
UniRef90_R7QB26 UniRef90_Q5AX84 UniRef90_S3C939	PQD LPPSPLKAE	L S R I WE Q L D H I	S P S Q T P T S S P S R T P S A A I V Q G R N P R S S P S P E V I R D Y H T E E D S L F L
UniRef90_W9L9T3 UniRef90_C3YS03	HRRGLWRRDQTGRR PQQPFLKP	EERAR ATSSSASTETS	S D S H Q H P N L P S G S T G
UniRef90_N1S7S5 UniRef90_N4UQF9 UniRef90_M9M7M7	D G D M R R Q S A K K A I V		V L R E H N I D Q P Q P S P E
UniRef90_K5UPX1 UniRef90_Q6C764	SHRRRGTKKRKSDD GVRKKPSKGLSPA	GSESDLEMDME PGVNVQPKLSP	TSSTPSVGPPAKRKA SGEPSGDMEPSMSPD ATRSARSSSAGFPDT
UniRef90_W9ZIG2 UniRef90_B6H9U6 UniRef90_N1PC69	R P T R R A S K N	ANRMGI PEGA	VALPNGVIQTVGVDN
UniRef90_J3NP47 UniRef90_UPI000456053B	PQKKRGPAQGYRNA	LHSMR ES	A A A WG A A L T L V P E L A
UniRef90_W6Q4U8 UniRef90_W3WXH2 UniRef90_S7W5T7	Q R V V F K N P I G L F G S S D D R R K L S A R V A I E	V L F S R L S Q F I S	DQQHMRGPMPNDYGS ENSLEPPPIDDEQAA HSISHSSLF
UniRef90_H6BLY3	KRGIRLNFI D	I Q C G R P P H L L P	RTHDWKVTFQDDSRE

```
UniRef90_A1CNZ4
UniRef90_H6BRG0
UniRef90_G2RDD8
UniRef90_S3CVZ4
UniRef90_V5FRT8
UniRef90_V5FR18
UniRef90_E6ZX15
UniRef90_X8IW40
UniRef90_V3X7S7
UniRef90_W3X7S7
UniRef90_Q59QC7
UniRef90_W9SEA2
UniRef90_N1QKR1
UniRef90_B2WNK8
UniRef90_G9NB25
UniRef90_G7XK40
UniRef90_G9MFA2
UniRef90_N4TV76
UniRef90_R0IKS5
UniRef90_F0XHQ0
 UniRef90_V2YT37
UniRef90_R9AI32
UniRef90_J9MNZ7
UniRef90_U4LNH4
UniRef90_U1G2R9
UniRef90_S3BLY5
UniRef90_S3BLY5
UniRef90_S3BLY5
UniRef90_N4V4U8
UniRef90_UP1000440BC36
UniRef90_G3JL99
UniRef90_F4S305
UniRef90_F0XT49
UniRef90_F0XT49
UniRef90_T0KBN6
UniRef90_G3JQM8
UniRef90_G3JQM8
UniRef90_W2SBU1
UniRef90_W2SBU1
UniRef90_W2SBU1
UniRef90_W2SBU1
UniRef90_W6PRG9
UniRef90_V9DJU9
UniRef90_V9DJU9
UniRef90_V9DGI2
UniRef90_B2AU02
UniRef90_B2AU02
UniRef90_B2AU02
UniRef90_B2AU02
UniRef90_B2AU02
UniRef90_N4UQM9
UniRef90_N4UQM9
UniRef90_N4UQM9
UniRef90_N4UQM9
UniRef90_UDININGAGAGOR
UniRef90_C5MIH2
UniRef90_UPI000462169B
UniRef90_H6BQ85
UniRef90_B3L428
UniRef90_A0A010QFR2
UniRef90_G3JPK8
UniRef90_B6QE64
UniRef90_G4TGW2
UniRef90_L7I2K1
UniRef90_I2H0V2
UniRef90_K9H575
UniRef90_W7ICR8
UniRef90_W7ICR8
UniRef90_B6HBE5
UniRef90_B6HBE5
UniRef90_W6Q1U6
UniRef90_H8X4W0
UniRef90_M2T3M5
UniRef90_G8Y2C9
UniRef90_W79I1
UniRef90_F2TH79
UniRef90_G5B600
UniRef90_S3C842
UniRef90_K9GCT0
UniRef90_J3QAK7
UniRef90_R7QB26
UniRef90_R7QB26
UniRef90_R7QB26
UniRef90_R7QB26
UniRef90_Q5AX84
UniRef90_S3C939
UniRef90_W9L9T3
UniRef90_C3YS03
UniRef90_N1S7S5
UniRef90_N4UQF9
UniRef90_M9M7M7
UniRef90_K5UPX1
UniRef90_Q6C764
 UniRef90_W9ZIG2
 UniRef90_B6H9U6
UniRef90_B6H9U6
UniRef90_N1PC69
UniRef90_J3NP47
UniRef90_UPl000456053B
UniRef90_W6Q4U8
UniRef90_W3WXH2
UniRef90_S7W5T7
                                                                                                                                                      GSPQQQPSTIT
RTDEGKRLAAA
PLGGQSPGPGY
AAAQHPMLAPR
SCQSGRDESTS
QPPQSASFQFA
EKYH
                                                                                                                                                                                                                                         PASPKDAMSAL
VRDPQQQDS
GFSPVSPGYVP
PADPAVMGYPS
PRTSLPPRRASGL
PLEPEPKRQKL
                                                                                                 VYT
LVE
QS
LPP
LKP
ASE
                                                                                                                        Q P P T
A A V A
P M R T
Q Q A A
D I P Q
E D V T
Y V G G
                                                                                                                                                                                                                                                                                                                                                    KTQ
LIQ
GYA
QMH
LLE
LFS
SLK
                                                                                                                                                                                                                                                                                                                                                                                   Q P Q P A P S P A P S P
                                                                                                                                                                                                                                                                                                               A L P
                                                                                                                                                                                                                                                                                                                                      Ε
                                                                                                                                                                                                                                                                                                                                              Ε
                                                                                                                                                                                                                                                                                                                                                                           ASTS<mark>C</mark>FY
                                                                                                                                                                                                                                                                                                                             TSP
FPS
QDP
GHT
SIP
                                                                                         E L
T L
S I
I A
```

```
UniRef90_A1CNZ4
UniRef90_H6BRG0
UniRef90_G2RDD8
UniRef90_S3CVZ4
UniRef90_V5FRT8
UniRef90_E6ZX15
UniRef90_X8IW40
UniRef90_F0Y4D3
UniRef90_W3X7S7
UniRef90_W3SEA2
UniRef90_N1QKR1
UniRef90_B2WNK8
UniRef90_B2WNK8
UniRef90_G9NB25
UniRef90_G9MFA2
UniRef90_G9MFA2
UniRef90_N4TV76
UniRef90_R0IKS5
 UniRef90_R0IKS5
UniRef90_F0XHQ0
  UniRef90_V2YT37
UniRef90_R9AI32
UniRef90_J9MNZ7
UniRef90_U4LNH4
UniRef90_U1G2R9
UniRef90_S3BLY5
UniRef90_U1G2R9
UniRef90_S3BLY5
UniRef90_N4V4U8
UniRef90_UPi000440BC36
UniRef90_G3JL99
UniRef90_FAS305
UniRef90_F7RYJ1
UniRef90_F0XT49
UniRef90_T0KBN6
UniRef90_G3JQM8
UniRef90_W2SBU1
UniRef90_W8X1C2
UniRef90_W2SBU1
UniRef90_W2SBU1
UniRef90_W5BU1
UniRef90_W6PRG9
UniRef90_V9DJU9
UniRef90_V9DJU9
UniRef90_V9DJU9
UniRef90_W5BU1
UniRef90_W6PRG9
UniRef90_W6PRG9
UniRef90_W6PRG9
UniRef90_W6PRG9
UniRef90_W6PRG9
UniRef90_W6PRG9
UniRef90_V9DGI2
UniRef90_V9DGI2
UniRef90_V9DGI2
UniRef90_B3AU02
UniRef90_B3AU02
UniRef90_B6HEG6
UniRef90_B0HEG6
UniRef90_B0HEG6
UniRef90_B0HEG6
UniRef90_B0HEG9
UniRef90_B0HEG9
UniRef90_B0HEG9
UniRef90_B0HEG9
UniRef90_B0HEG9
UniRef90_B0HEG9
UniRef90_B0HEG9
UniRef90_B0HEG6
 UniRef90_B6QE64
UniRef90_G4TGW2
UniRef90_B6QE64
UniRef90_C4TGW2
UniRef90_L712K1
UniRef90_L712K1
UniRef90_L712K1
UniRef90_L712K1
UniRef90_K9H575
UniRef90_W7ICR8
UniRef90_B6HBE5
UniRef90_B6HBE5
UniRef90_H6BMQ2
UniRef90_H8X4W0
UniRef90_M2T3M5
UniRef90_W9WST4
UniRef90_W9WST4
UniRef90_G8Y2C9
UniRef90_W9WST4
UniRef90_C5B600
UniRef90_S3C842
UniRef90_C5B600
UniRef90_S3C842
UniRef90_R7QB26
 UniRef90_N4UQF9
UniRef90_M9M7M7
 UniRef90_K5UPX1
UniRef90_Q6C764
UniRef90_W9ZIG2
  UniRef90_B6H9U6
UniRef90_B6H9U6
UniRef90_N1PC69
UniRef90_J3NP47
UniRef90_UPl000456053B
UniRef90_W6Q4U8
UniRef90_W3WXH2
UniRef90_S7W5T7
                                                                                                                                                             VDG PTTQYAEQPTSGPSPNDFSPAMNNGFLHNTPMPGFSVAFRAFFGDDAAASTVGAGESEGESRREPVRGVHVAPLALGAMSPWTGTNGMGATSPAYSPTSPRIFGGATSPSYSPTSLQPLNTPSFYYPAHVQPPSHMWHLQPLAQTDVAFPGLPSQNWTWNDLRGDIFDTQAAPEDPLQPYNHSVSSSSLPPDFTKPSSSTSAPLPPDPTKPSSSTSAPLPPDPTAAPLIPHQQLPAPEAYTNSYTEPPQALYQSASHQYNESAT
```

```
## STATE OF THE PROPERTY OF TH
UniRef90_A1CNZ4
UniRef90_H6BRG0
UniRef90_G2RDD8
UniRef90_S3CVZ4
UniRef90_V5FRT8
UniRef90_E6ZX15
UniRef90_X8IW40
UniRef90_F0Y4D3
UniRef90_W3X7S7
UniRef90_W3SEA2
UniRef90_N1QKR1
UniRef90_B2WNK8
UniRef90_B2WNK8
UniRef90_G9NB25
UniRef90_G9MFA2
UniRef90_G9MFA2
UniRef90_N4TV76
UniRef90_R0IKS5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
UniRef90_G9MFA2
UniRef90_G9MFA2
UniRef90_R0IKS5
UniRef90_F0XHQ0
UniRef90_P0XHQ0
UniRef90_V2YT37
UniRef90_U9MNZ7
UniRef90_U9MNZ7
UniRef90_U1G2R9
UniRef90_U1G2R9
UniRef90_G3BLY5
UniRef90_G3JL99
UniRef90_G3JL99
UniRef90_F0XT49
UniRef90_F0XT49
UniRef90_F0XT49
UniRef90_F0XT49
UniRef90_F0XT49
UniRef90_W2SBU1
UniRef90_W2SBU1
UniRef90_W9X1C2
UniRef90_W9X1C2
UniRef90_W9X1C2
UniRef90_W9X1C2
UniRef90_U9DGI2
UniRef90_U9DGI2
UniRef90_U9DGI2
UniRef90_W9DGI2
UniRef90_W9DGI2
UniRef90_W1UP

UniRef90_B6QE64
UniRef90_G4TGW2
UniRef90_L712K1
UniRef90_L9H0V2
UniRef90_K9H575
UniRef90_W7ICR8
UniRef90_B6HBE5
UniRef90_H6BMQ2
UniRef90_H6BMQ2
UniRef90_H6BMQ2
UniRef90_H73M5
UniRef90_W9WST4
UniRef90_W9WST4
UniRef90_W9WST4
UniRef90_W9WST4
UniRef90_W79I1
UniRef90_F2TH79
UniRef90_W9WST4
UniRef90_W9WST4
UniRef90_T2TH79
UniRef90_R7QB26
UniRef90_N4UQF9
UniRef90_N4UQF9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STLDSMHVQGAAQGFGFPLGDDYSVAFMGKAPMVESPDWL

SSLSTFST FQPPLSHATLPTFP

DGDDYTSPEHPSYSTMHDGMLFGFYSLAHSLENFHPPPSK
AATDSPHTKVDGVPDGLPTGQPQNTYAP AGTSSHRNEYY
PSVESTYGLLPQHGYASTSHTTSIVSAWKQSRHKHPSESA
ESKPSYTQAVTQLSLPTSPQQLALTL
SPSRTPSLTPSPSQTPTNSPSRTPSLTPSPSQTPTSSPSR
SPSRTPSLTPSPSQTPTNSPSRTPSLTPSPSQTPTSSPSR
SPSRTPSLTPSPSQTPTNSPSRTPSLTPSPSQTPTSSPSR
SPSRTPSLTPSPSQTPTNSPSRTPSLTPSPSQTPTSSPSR
IWYPLLHADFTNEFLEAVITSCFPFSLSSC
DLSIDMSTDYSYLDLIQDNQVFTP
GLAAALDPDRSVDREPRSHLDELPQSNQETADMPRKDDPL
SITPSVPSGTTLASAQQPNVPNAPRVDDPQQPHPNMTTAS
ADLPNTEDHFVMVGTSSMPSPQSASLAQSGVHESEDDSS
KQEDIIHRLLSTKGNLSFDQLSGRLRFFGPTANSHV
LAEPVASRSQSYVRSPLPTHERSATHSQPPPSSSYNPSSS
LPAPAGSDMQDLQTLAPLRNQ ADMQPPPQQRRRTSSAAA
TGEGDFSSD WFSDLQLSGRLRFFSPTLQPNLGHGG
SPMASSPYMAGGDPNSTFSPMHQLGQE
HDLPNMSKDSSEAGSSPDFMLDWSQMQMPLGYDGMITPQM
ADAASGGRPRRPSTSLTGQPLSSTGSRAEQSSILTPSPSNA
PSYSPASPNYS PSSPTGHGMSYSPTSPA
GSIPSPHTGASSTSLTGQPLSSTGSRAEQSSILTPSPSNA
ENTLVPPNVTDFSQGQQSVQLDQTSALHTS
GSIPSPHTGASSTSAPLPPDTKRSSTADPSTSPA
ENTLVPPNVTDFSQGQQSSQLSP
UniRef90_K5UPX1
UniRef90_Q6C764
UniRef90_W9ZIG2
UniRef90_B6H9U6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             H D L P N M S K D S S E A G S S A D A A S G G R P R R P S T S L P S Y S P A S P N Y S E N T L V P G S L P S P H T G A S P L A L K S S S T S A P L P P D P T K A A M A P F P D T L H S T S L P
UniRef90_B6H9U6
UniRef90_N1PC69
UniRef90_UPl000456053B
UniRef90_W6Q4U8
UniRef90_W3WXH2
UniRef90_S7W5T7
```

```
250 260 270
PNYSPTSPSFSPASPAFSPTSPSYSPTSPAIGGAGRHL
VSLKAIGPSRHLGNAINQPLVSRAVSPVTTLSDSPPMTR
YALQTQSPTGYSAGASNGFRLANSPLSAYPMGGETASPP
UniRef90_A1CNZ4
UniRef90_H6BRG0
UniRef90_G2RDD8
UniRef90_S3CVZ4
                                                          A T A V L I G S S D G T M S S S F Y N A S R E T L P L A L Q N E D L P A L R A L L F H S L A D E S R P P S P G A G S H R S S D N P T D H A G L S Y E T H R H
UniRef90_V5FRT8
UniRef90_E6ZX15
UniRef90_X8IW40
                                                         PAYSPTSPAYSPTSPAYSP

TSPAYSPTSPAYSPTS
SPDSAGPLLHPPAFQIQY

TNSEFKESNQRK

TLSPGGPNTTPALPSGASSSDPTPPPQAPVSDPTT

HVNDPDLASLNSTVQSATTSNAGPQQRPPSQPMQPPSLPT
YLDRPTLN

VESQQNSAFNRPGGPSEMLSGFGNSNGLAGGGSVSAGHMP
DTLASPAPPREFYGSSSIASLMRFARLSVPMQSSP
AVNDFPP
NGDDNVTLRASSSAHNPFFFGYLPFDSVPVINHPESAQVP
VDNRPDALPPPEHGQELVESYFGRVHPFFPLIDE
GMGASRSYLGSDQDLPPY
FERGQPPPL
PYQSDLSNSQSASDCSEPPNAVFA
QGIWNFPAPGIWPASH
PFNNVQNSLPDIEGRVNLLPATRRPLPLLPSKEDGRPDIE
UniRef90_F0Y4D3
UniRef90_W3X7S7
UniRef90_Q59QC7
UniRef90_W9SEA2
UniRef90_N1QKR1
UniRef90_B2WNK8
UniRef90_G9NB25
UniRef90_G7XK40
UniRef90_G9MFA2
UniRef90_N4TV76
UniRef90_R0IKS5
UniRef90_F0XHQ0
UniRef90 V2YT37
UniRef90_R9AI32
UniRef90_J9MNZ7
UniRef90_U4LNH4
UniRef90_U1G2R9
UniRef90_S3BLY5
                                                           VPHTPYGQSQASMSSYPDLPYSALQAHSPTGYSSNGGGFR
UniRef90_S3BLY5
UniRef90_N4V4U8
UniRef90_UPI000440BC36
UniRef90_G3JL99
UniRef90_F4S305
UniRef90_R7RYJ1
UniRef90_F0XT49
UniRef90_T0KBN6
UniRef90_G3JQM8
UniRef90_F9GB00
UniRef90_W9X1C2
                                                          GPPSGMRHPYADPSQQHHHHSLGNESANSGS
PQNVAAGHPP
RSDHSNNNLPFSFVQDRYRTQIPIFSLMPNPNSSPTELTA
VPEAFITSAEEDDSEQQQQANQDGAQLGAEPSVQFSRKSW
LQGHYVGPSSGVSFLHETVSFSQAASSSIFTF GDAPLPE
DANLGFIMIYLDYVFPFLFPFYKPA
I ASATQNFTNSLDQFHFHPPFLRPLPSKITPEDVSYLQMK
LPAFIRPPPQHLDNRDMYYLSHKLCLSIPDPEFRDELLRV
VQQDIFESRQDSWTEGDFDFNSLDMPHVAHQFEPQCSIVQ
SPHSIPEHPSSTTPTDSPKPSPQDEPLLISA
LRSPSVGTFSNRSTTLNVDSPASTPPLFIGARDDIPDIWS
UniRef90_W9X1C2
UniRef90_W2SBU1
UniRef90_K1XEG2
UniRef90_C9SGA4
UniRef90_C9SGA4
UniRef90_W6PRG9
UniRef90_V9DJU9
UniRef90_V9DGI2
UniRef90_B6HEG6
UniRef90_B2AU02
UniRef90_B2AU02
                                                          SPTSPMFGATSPGFGPTSPSFSPASPAFTPTSPAYSPTSPRQHINVRSLPAEARAQHLILFFFSDTGMLFPYIHEQDILRTAATSSIFLPPDQETSVLIDQYFGNTGLLFPYIHEDTFRESATSAITMSPASLSYHDFDMSGCPTPSVDGRFPPHTTQSPTSHHPMLPSVDGNDALSSSIPHWQPRRHCDRHQLMQFRLMAPTSPLTNEYASFLSSTPFFTPPSPILNQDTSPDNEYLAHEVGMLSLANSKESKYLGPSSGVPFARLIFSAIPQSQGFLNLRDLSALESHGNNQGTGNSGKIEEIENPGSPDIREII
UniRef90_R9AIZ3
UniRef90_N4UQM9
UniRef90_C5MIH2
UniRef90_UPI000462169B
                                                                                                                                                                                                                                            REII
                                                            A L T S P M F L S E P L P T Q P R L R P L L P H I E S I I P P A L A <mark>C</mark> D L L E Q
Y H L S S N V N A G G S S G L N D T K A F Y S P T S P K N Q M D E M N P N M M K
UniRef90_H6BQ85
UniRef90_B3L428
UniRef90_A0A010QFR2
UniRef90_G3JPK8
                                                           ELHGPPQNMETEPTDESQLPRFRGLEQVLSPLSDPEMQRNQAPCS
NVEQNIPRGPSSSFNRQTW
QFLSSLEEPDLSIFSQ LPAFVKPLPAKLASEDVKYLHAKKENSSLNNST
UniRef90 B6QE64
UniRef90_G4TGW2
UniRef90_L7I2K1
UniRef90 I2H0V2
UniRef90_K9H575
UniRef90_W7ICR8
                                                           LSQGFRTGPESLVLALGQASTRGSISRIPPHEVPPGMSYF
UniRef90_B6HBE5
UniRef90_W6Q1U6
UniRef90_H6BMQ2
                                                          LLRDIVPNFNRMATNIFFATDPGADESITRRSDALGRYFQNISHSVDPVVAPTGAATKLSRTRSQDELATTVSDMTKQLTNLLGHDSGAENSIIFPIYRMHQNHTEHLSNNLNFPSEHDSDPASDA
UniRef90_H6BMQ2
UniRef90_H8X4W0
UniRef90_M2T3M5
UniRef90_G8Y2C9
UniRef90_W9WST4
UniRef90_W7I9I1
UniRef90_F2TH79
                                                          VPA
NPGNGAYNSGRPSGRSTSRNDQPENPYLARPD
SDRTSNP
UniRef90_Q5B600
UniRef90_S3C842
UniRef90_K9GCT0
UniRef90_J3QAK7
UniRef90_R7QB26
UniRef90_R7QB26
                                                           T P S L T P S P S Q T P T S S P S R T P S L T P S P S Q T P T S S P S R T P S L T P S L T P S P S Q T P T S S P S R T P S L T P S L T P S P S Q T P T S S P S R T P S L T P S L T P S P S Q T P T S S P S R T P S L
UniRef90_R7QB26
UniRef90_Q5AX84
UniRef90_S3C939
UniRef90_W9L9T3
UniRef90_C3YS03
UniRef90_N1S7S5
                                                           D M G L I S R P S A Q Y L Y E G F F K H F N C L V G L L D P N L Y T F S E P R T A L P S P Q H P N L P N T R D Q P Q Q L H P I P Q S T S S V T T E A I T D I L S A R M G A L D G Q L R Y Y G P T S N L H M Y A D G L Q S L S S P S
UniRef90_N4UQF9
                                                         T A D H M P W P R G A Y S H P S T S S S P S L S R R N T Y L N G N N A V D T S T K G R Q N G Y G S K I V A C N F C R A R K T R C D G G H P A C S N M V Y S S G Q P N S A V S N S L L L G N S Q S P N T H S P H N Q D Q M D R V S P A S Y A C P S P E S A Y F G R V L D H S S T G D P D S L S T G F P T G G L T E Y Q A T T S T F G G F S P A A R S P G G Y S P T S P F N T S P L M N P D L G F D S S L V L A E G H D G M P E V A N G S F P P L I T P L E T D G S K A A L G S V N P E R S H P S V S A R Y G A V T S P Q Y S P A S P R F S P A S P N Y S P A S P A H A S V Q N V P Q I A S P I G Q T A E E Y A S N L S P M
UniRef90_M9M7M7
UniRef90_K5UPX1
UniRef90_Q6C764
UniRef90_W9ZIG2
UniRef90_B6H9U6
UniRef90_N1PC69
UniRef90_J3NP47
UniRef90_UPI000456053B
UniRef90_W6Q4U8
UniRef90_W3WXH2
UniRef90_S7W5T7
```

P P D P T K P S S S T S A P L P P D P T K P S S S T S A P L P P D P T K P S S S

```
290
S P T S P T S P K Y T P T S P G W S P T S P Q T Y S P T S P G S P T S P G G P T A V N S L P S E S R F A S H V P Q N G Y S H A N L R Y P V L E P L V P H L G N I I P L S L A C D L I
UniRef90_A1CNZ4
UniRef90_H6BRG0
UniRef90_G2RDD8
UniRef90_S3CVZ4
                               LSVALYTMFSTS
QSS
UniRef90_V5FRT8
UniRef90_E6ZX15
UniRef90_X8IW40
UniRef90_F0Y4D3
                               P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P T S P A Y S P S S P A Y S P
UniRef90_W3X7S7
UniRef90_Q59QC7
                               S Q T Q M P P Q P T V P L T S M G A A T T T S S H Q Q A N M P S R L S P T L P S G A S S S D P T P L P Q A P V S D P T T T T P T L P S G S S S F D P Q V A P G Q D T T R P S S T Y Q L D S
UniRef90_W9SEA2
UniRef90_N1QKR1
UniRef90_B2WNK8
UniRef90_G9NB25
                               GSMLPPSNFDSKSMT
UniRef90_G7XK40
UniRef90_G9MFA2
UniRef90_N4TV76
                               YLWSL
UniRef90_R0IKS5
UniRef90_F0XHQ0
                               ANSNTPDHQVNGNTYSENSPQLQFPAPSS
UniRef90 V2YT37
UniRef90_R9Al32
UniRef90_J9MNZ7
                               I ML F L S S L L R N S
UniRef90 U4LNH4
UniRef90_U1G2R9
UniRef90_S3BLY5
                               TAATPLSTYHAMGSAG
                                                                           AGEPASPPWMNMSSSPPPRQQQ
UniRef90_S3BLY5
UniRef90_N4V4U8
UniRef90_UPI000440BC36
UniRef90_G3JL99
UniRef90_F4S305
UniRef90_R7RYJ1
UniRef90_F0XT49
UniRef90_T0XPNI6
                               WANTIHPFV SSVILTHGSSHHPSPRS
WDNLLAFYASYHHNG SQQLHLTQTQRHASYSQII
YDASFPLLLRSEANSLL
UniRef90_T0KBN6
UniRef90_G3JQM8
UniRef90_F9GB00
                               GALTLPAI PLQNALLQAYVEYIHPFMP
YITVVHSFLP
LEDCDRPLFEHLLQNVLPLLFPVLEAYQHDSVRSNVILPS
UniRef90_W9X1C2
UniRef90_W2SBU1
                               HDRPLKRMRARYGHDAGPSYDLSMPPPNSGSFTP
UniRef90_K1XEG2
UniRef90_C9SGA4
UniRef90_W6PRG9
UniRef90_V9DJU9
                               GYQSPTSPSYSPTSPNYSPTSPAYGSPTSPSYSPTSPAFS
UniRef90_V9DGI2
UniRef90_B6HEG6
                               YSTA
                                ΥΑ
UniRef90_B2AU02
                               SAGS | PTSL NWLNAARTSSTAVMDALEFTSQPAAHYGGY
                               S WLSL

Y S R P S P P T A S S P T A L P P I M S E G V Y A N N I I N A N P Q S K Q L L H
L S V S W T A T Q G G S I T R K S S P A H H P F P P S W T S E V D L Q H F A D A
S S P D F N S M L E S F E N S T Q L L H S P N L T Y A D L V T G L N S F
UniRef90_X0GTC3
UniRef90_R9AIZ3
UniRef90_N4UQM9
UniRef90_C5MIH2
UniRef90_UPI000462169B
                               Y F T S S T S A Y L R P A N P Y I L G
Y H S V L S P A Y A S P T S P K Y S P T S P K Y S P T S P K Y S P T S P K Y S P
UniRef90_H6BQ85
UniRef90_B3L428
UniRef90_A0A010QFR2
UniRef90_G3JPK8
                               SSGT
UniRef90 B6QE64
UniRef90_G4TGW2
                               GALALPDLSLQNA
                                                                         L L Q S Y V E Y V H P Y M P
UniRef90_L7I2K1
UniRef90 I2H0V2
UniRef90_K9H575
UniRef90_W7ICR8
                               SAALLPSLMTRTT
UniRef90_B6HBE5
UniRef90_W6Q1U6
UniRef90_H6BMQ2
                               EHVFVPAVSSVDTTSWHDLCCQLLAMARGSSTLSNALVAL
UniRef90_H8X4W0
UniRef90_M2T3M5
UniRef90_G8Y2C9
                                  STALPPNLPNTPTSLLPPNALP
                               A T S V S D P G S F H S S S R Y D S D G T Q K N V A Y T Y S T K P S A L P P T R Y F T S S T S A Y L R P A N P Y L L G
UniRef90_W9WST4
UniRef90_W7I9I1
UniRef90_F2TH79
UniRef90_Q5B600
UniRef90_S3C842
UniRef90_K9GCT0
UniRef90_J3QAK7
                               T P S P S Q T P T S S P S L T P S L T P S L T P S P S Q T P T S S P P R T P S L T P S P S Q T P T S S P P R T P S L T P S P S Q T P T S S P P R T P S L T P S P S Q T P T S S P P R T P S L T P S P S Q T P T S S P P R T P S L
UniRef90_R7QB26
UniRef90_R7QB26
UniRef90_R7QB26
UniRef90_Q5AX84
UniRef90_S3C939
                               YTRSRSSLLFTMVLTISSRIFQPESH
RISSQPSSIPN MPMEDQMQQPHPSPTTISSVPTGTTSP
RRVSI
UniRef90_W9L9T3
UniRef90_C3YS03
UniRef90_N1S7S5
UniRef90_N4UQF9
                               PASSYPSTAHPSRTTASAPTSQHYSQAYSSQHAHSHHQADARRSLPCNYVNDPSSGNPKGRPKTAGGSSPSAPPSTRSSPPQAATPS
YLSHYDHAFSSNRQYQLYQGQEPFLNQSNTYAPPLPLEDPPGYSPSSMMTSPGFSPASPTFQPTSPAYSPTSPAYGQASPLERSFSDMDLSNSAAAFHQHRQSMASVQTSSQ
UniRef90_M9M7M7
UniRef90_K5UPX1
UniRef90_Q6C764
UniRef90_W9ZIG2
UniRef90_B6H9U6
UniRef90 N1PC69
UniRef90_J3NP47
                               YTPTSPVYSPTSPAAARPGGGKGFSPTSPAYSPTSPQYSPLASSSMHGRRESETNLVPQMTQPLPTLYHYQPPLGQLPQQ
UniRef90_UPI000456053B
UniRef90_W6Q4U8
UniRef90_W3WXH2
UniRef90_S7W5T7
```

TSAPLPPDPTKPSSST

UniRef90_H6BLY3

SAPLPPDPTKPSSSTSAPLPP

```
S P G Y S P T S P A F S P S Y \boxed{\mathbb{V}} P P P P \boxed{\mathbb{C}} \boxed{\mathbb{L}}
                                                                                                                     350
                                                                                                                                                  360
UniRef90_A1CNZ4
UniRef90_H6BRG0
UniRef90_G2RDD8
                                  DLYFSSSSSAQMHPMSPY
UniRef90_S3CVZ4
UniRef90_V5FRT8
UniRef90_E6ZX15
UniRef90_X8IW40
                                  S S P A Y S P G S P A Y S P T Y D G P N H G E T L A G T T P A G G G E Y S P K A
UniRef90_F0Y4D3
UniRef90_W3X7S7
UniRef90_Q59QC7
                                  S K P Q P E T L Q S S I P A T T S G S P G M S Y P G C P S N S D P F G R S S D K P T P Q P Q A P L S D L T T P S P G P N T T P T L P S G A S S S D P T P P P Q A
UniRef90_W9SEA2
UniRef90_N1QKR1
UniRef90_B2WNK8
UniRef90_G9NB25
UniRef90_G7XK40
UniRef90_G9MFA2
UniRef90_N4TV76
UniRef90_R0IKS5
UniRef90_F0XHQ0
UniRef90 V2YT37
UniRef90_R9Al32
UniRef90_J9MNZ7
UniRef90_U4LNH4
UniRef90_U1G2R9
UniRef90_S3BLY5
                                  QQQQQTPPAQYHHPQNMSAHMHSFNGMAMHNCPAMHPAC
UniRef90_S3BLY5
UniRef90_N4V4U8
UniRef90_UPl000440BC36
UniRef90_G3JL99
UniRef90_F4S305
UniRef90_F7RYJ1
UniRef90_F0XT49
LipiRef90_T0KRN6
                                  TDMRILFQKSNY
UniRef90_T0KBN6
UniRef90_G3JQM8
UniRef90_F9GB00
UniRef90_W9X1C2
                                  LENNKAYLHSAAATHMKGNRQFSTFTADDDAMRH
UniRef90_W2SBU1
                                  E F L S T S Y Y N S G S T S N P L T P A S D T G D D G Y R P Y S S R S P H L S Q
UniRef90_K1XEG2
UniRef90_C9SGA4
UniRef90_W6PRG9
UniRef90_V9DJU9
                                  P T S P T S P T S P V Y S P T S P M Y S P T S
                                                                                                         PMYGGGG
                                                                                                                                      NKQSP
UniRef90_V9DGI2
UniRef90_B6HEG6
UniRef90_B2AU02
UniRef90_X0GTC3
UniRef90_R9AIZ3
UniRef90_N4UQM9
                                 YFQTLHPLYPFLDEETISDH
VQHETQLPPSPLYLPELADPTCSYLYNYYADVL SKKLSL
UniRef90_C5MIH2
UniRef90_UPI000462169B
UniRef90_H6BQ85
UniRef90_B3L428
                                  \mathsf{T} \mathsf{S} \mathsf{P} \mathsf{K} \mathsf{Y} \mathsf{S} \mathsf{P} \mathsf{T} \mathsf{S} \mathsf{P} \mathsf{K} \mathsf{Y} \mathsf{S} \mathsf{P} \mathsf{T} \mathsf{S} \mathsf{P} \mathsf{Q} \mathsf{Y} \mathsf{S} \mathsf{P} \mathsf{T} \mathsf{S} \mathsf{P} \overline{\mathsf{V}} \mathsf{P} \mathsf{H} \mathsf{Y} \mathsf{S} \mathsf{P} \mathsf{Y} \mathsf{A} \square \mathsf{A} \mathsf{S} \mathsf{P} \mathsf{K} \mathsf{F} \mathsf{S} \mathsf{P}
UniRef90_A0A010QFR2
UniRef90_G3JPK8
UniRef90 B6QE64
UniRef90_G4TGW2
UniRef90 L7I2K1
UniRef90 I2H0V2
UniRef90_K9H575
UniRef90_W7ICR8
UniRef90_B6HBE5
UniRef90_W6Q1U6
UniRef90_H6BMQ2
                                  SQLHFNFSTTEHNKGPHALRNGENLSHY
UniRef90_H8X4W0
UniRef90_M2T3M5
UniRef90_G8Y2C9
UniRef90_W9WST4
UniRef90_W7I9I1
UniRef90_F2TH79
UniRef90_Q5B600
UniRef90_S3C842
UniRef90_K9GCT0
UniRef90_J3QAK7
                                  T P S P S Q R L S M T P T D S P S R T P S P T P R R S Q R R A G A T E A N P S Q T P S P S Q R L S M T P T D S P S R T P S P T P R R S Q R R A G A T E A N P S Q T P S P S Q R L S M T P T D S P S R T P S P T P R R S Q R R A G A T E A N P S Q
UniRef90_R7QB26
UniRef90_R7QB26
UniRef90_R7QB26
UniRef90_Q5AX84
UniRef90_S3C939
UniRef90_W9L9T3
UniRef90_C3YS03
UniRef90_N1S7S5
                                  F P Q Q P L D A P R E D L P Q Q P H P V T T S S A P
                                                                                                                  GTASPSPLYPNL
UniRef90_N4UQF9
UniRef90_M9M7M7
                                  YHHSDAWPASSSSP
UniRef90_K5UPX1
                                  TAQAQ
UniRef90_Q6C764
                                  KSPLERH
TSPSYSPTSPGFSPTSPSPTSPSFSPASPAFSPTSPSYSP
UniRef90_W9ZIG2
UniRef90_B6H9U6
UniRef90_N1PC69
UniRef90_J3NP47
                                 ASPAFSPTSPQYSPASPQSPSSPAFGG ATSPGPAASGGA
LRSHEQYLPYQLPHQQ
UniRef90_UPI000456053B
UniRef90_W6Q4U8
UniRef90_W3WXH2
UniRef90_S7W5T7
```

D P T K P S L S T S A P L P P D P T K P S S S T S A P L P P D P T K P S S S T S

```
370
                                                                                                                                             400
                                                                                     380
                                                                                                                 390
UniRef90_A1CNZ4
UniRef90_H6BRG0
UniRef90_G2RDD8
UniRef90_S3CVZ4
UniRef90_V5FRT8
UniRef90_E6ZX15
UniRef90_X8IW40
UniRef90_F0Y4D3
UniRef90_W3X7S7
UniRef90_Q59QC7
                                 S S E A G T A Y S P S G Q Y S S G G G Q Y S P T A E A P P
                                 S L P N I S P N M S I P A N P L S P L S N P L T P P P R G P N T T P T L P A S S S D P T P P P Q A P I S N P T T A
UniRef90_W9SEA2
UniRef90_N1QKR1
UniRef90_B2WNK8
UniRef90_G9NB25
UniRef90_G7XK40
UniRef90_G9MFA2
UniRef90_N4TV76
UniRef90_R0IKS5
UniRef90_F0XHQ0
UniRef90 V2YT37
UniRef90_R9Al32
UniRef90_J9MNZ7
UniRef90_U4LNH4
UniRef90_U1G2R9
UniRef90_S3BLY5
                                         GVSASSLLPATASPTRASSSTGSQMPSS
UniRef90_S3BLY5
UniRef90_N4V4U8
UniRef90_UPl000440BC36
UniRef90_G3JL99
UniRef90_F4S305
UniRef90_F7RYJ1
UniRef90_F0XT49
LIDIRef90_T0KRN6
UniRef90_T0KBN6
UniRef90_G3JQM8
UniRef90_F9GB00
UniRef90_W9X1C2
UniRef90_W2SBU1
                                DSPNSLLSGPPGIPAPTSNPE
UniRef90_K1XEG2
UniRef90_C9SGA4
UniRef90_C9SGA4
UniRef90_W6PRG9
UniRef90_V9DJU9
UniRef90_V9DGI2
UniRef90_B6HEG6
UniRef90_B2AU02
UniRef90_B2AU02
                                T S P S Y S P T S P T Y A L P S P T S P A S P R S P Q A R N Q S P T S P Q Y S
UniRef90_R9AIZ3
UniRef90_N4UQM9
UniRef90_C5MIH2
UniRef90_UPI000462169B
                                 APSSQNDS
UniRef90_H6BQ85
                                TSPAYSUSSPVYDQSSNARNRNQ HPUSPAYUUQSP
UniRef90_B3L428
UniRef90_A0A010QFR2
UniRef90_G3JPK8
UniRef90 B6QE64
UniRef90_G4TGW2
UniRef90_L7I2K1
UniRef90 I2H0V2
UniRef90_K9H575
UniRef90_W7ICR8
UniRef90_B6HBE5
UniRef90_W6Q1U6
UniRef90_H6BMQ2
UniRef90_H8X4W0
UniRef90_M2T3M5
UniRef90_G8Y2C9
UniRef90_W9WST4
UniRef90_W7I9I1
UniRef90_F2TH79
UniRef90_Q5B600
UniRef90_S3C842
UniRef90_K9GCT0
UniRef90_J3QAK7
UniRef90_R7QB26
UniRef90_R7QB26
UniRef90_R7QB26
UniRef90_Q5AX84
UniRef90_S3C939
UniRef90_W9L9T3
UniRef90_C3YS03
UniRef90_N1S7S5
                                 PSTSMGPFYHWPPPPHMGMMY PRPPLYPPQL
UniRef90_N4UQF9
UniRef90_M9M7M7
UniRef90_K5UPX1
UniRef90_Q6C764
UniRef90_W9ZIG2
UniRef90_B6H9U6
                                T S P A T G G A R H L S P T S P T S P K Y T P T S P G W S P T S P Q S P N F S
UniRef90_N1PC69
UniRef90_J3NP47
UniRef90_UPI000456053B
                               ASPRRS
UniRef90_W6Q4U8
UniRef90_W3WXH2
UniRef90_S7W5T7
                                 APLPPDPTKPSLSTSAPLPP
                                                                                                   DPTKPSSSTSAPL
```

UniRef90_A1CNZ4 UniRef90_H6BRG0 UniRef90_G2RDD8 UniRef90_V5EPT9 UniRef90_V5FRT8 UniRef90_E6ZX15 UniRef90_X8IW40 UniRef90_F0Y4D3 UniRef90_W3X7S7 UniRef90_Q59QC7 UniRef90_W9SEA2 UniRef90_N1QKR1 UniRef90_B2WNK8 UniRef90_G9NB25 UniRef90_G7XK40 UniRef90_G9MFA2 UniRef90_N4TV76 UniRef90_R0IKS5 UniRef90_F0XHQ0 UniRef90 V2YT37 UniRef90_R9Al32 UniRef90_J9MNZ7 UniRef90_U4LNH4 UniRef90_U1G2R9 UniRef90_S3BLY5 UniRef90_S3BLY5
UniRef90_N4V4U8
UniRef90_UPI000440BC36
UniRef90_G3JL99
UniRef90_F4S305
UniRef90_R7RYJ1
UniRef90_F0XT49
UniRef90_T0KBN6
UniRef90_G3JQM8
UniRef90_F9GB00
UniRef90_W9X1C2
UniRef90_W2SBU1
UniRef90_K1XEG2
UniRef90_C9SGA4 UniRef90_K1XEG2 UniRef90_C9SGA4 UniRef90_W6PRG9 UniRef90_V9DJU9 UniRef90_V9DGI2 UniRef90_B6HEG6 UniRef90_B2AU02 UniRef90_X0GTC3 UniRef90_N4UQM9 UniRef90_N4UQM9 IJniRef90_C5MIH2 UniRef90_C5MIH2 UniRef90_UPI000462169B UniRef90_H6BQ85 UniRef90_B3L428 UniRef90_A0A010QFR2 UniRef90_G3JPK8 UniRef90_B6QE64 UniRef90_G4TGW2 UniRef90_L7I2K1 UniRef90_L7I2K1
UniRef90_L9H0V2
UniRef90_K9H575
UniRef90_W7ICR8
UniRef90_B6HBE5
UniRef90_W6Q1U6
UniRef90_H6BMQ2
UniRef90_H8X4W0
UniRef90_M2T3M5
UniRef90_G8Y2C9
UniRef90_W9WST4
UniRef90_W7I9I1
UniRef90_F2TH79
UniRef90_Q5B600 UniRef90_Q5B600 UniRef90_S3C842 UniRef90_K9GCT0 UniRef90_J3QAK7 UniRef90_R7QB26 UniRef90_R7QB26 UniRef90_R7QB26 UniRef90_Q5AX84 UniRef90_S3C939 UniRef90_W9L9T3 UniRef90_C3YS03 UniRef90_N1S7S5 UniRef90_N4UQF9 UniRef90_M9M7M7 UniRef90_K5UPX1 UniRef90_Q6C764 UniRef90_W9ZIG2 UniRef90_B6H9U6 UniRef90_B6H9U6 UniRef90_N1PC69 UniRef90_J3NP47 UniRef90_UPI000456053B UniRef90_W6Q4U8 UniRef90_W3WXH2 UniRef90_S7W5T7

```
10
                                                                                                                                             20
                                                                                                                                                                                                                                        40
UniRef90_F9XJ13
                                                                                                                                                                                                                           SSKP
UniRef90_Q5AXZ8
UniRef90_Q2EG98
                                                                                                                                                      ESGPRNPKSVTGRTSTGRR
                                                     S P N S S I T P T D S N N T P R S I T T G P S S T S I P P A T K R K N M A E S A I S E E N S Q A S C P A R I S F L P V N D P A S P P R L R R M S D H G D T P S P R S R S E S A P A S S T Q P S P K K R T S V N P E G K V T K R P R R P G A P E P K S P A S S L S R G N E L S E D A A H G S S A R S D A H N D P S G P L P R K R M G G I G H T S I S P A V A S D G A G Q A R K R N A G M A G L D S S P G S K R R
UniRef90_G3AZ37
UniRef90_W9NCJ9
UniRef90_G2QSU3
UniRef90_E6ZKE5
UniRef90_UPI0001F2A492
UniRef90_A0A017SAS4
UniRef90_W3XJW2
UniRef90_Q5B4P4
UniRef90_A0A024J832
UniRef90_K2R7Z7
UniRef90_W6XXI1
UniRef90_G3XSV0
UniRef90_A5DZ99
UniRef90_V5E5S0
                                                                                                                                                                   S P A G G T V P G S H R
D M G Q S G Q T D R R Q K P K L
T Q G Q R P R
                                                             SPKPPV
SQSSDNRPETITNGIPKSASEEGVNPLKRRPR
MQPESEKKSKKTPR
DPATSKKAR
PGPNTSASPRG
PIHPLASPDAARPLPAPSYRNDEPSPSTSASRETRKPS
KESSKDEVETKKASRKEGAPRRPRR
TASRSQQPPRKR
UniRef90_B0CT77
UniRef90_G2Q3H0
UniRef90_G2Q3H0
UniRef90_A0A017SES3
UniRef90_G7DWE6
UniRef90_S3C7F7
UniRef90_S7RQK0
UniRef90_C4R011
UniRef90_A0A024SI31
UniRef90_UPI00022563B0
UniRef90_E9EU40
UniRef90_BU8BB9
UniRef90_G7X913
UniRef90_G8AIQ1
UniRef90_S8AIQ1
UniRef90_S8AIQ1
UniRef90_S8AIQ1
UniRef90_D4B4E1
UniRef90_S3BSR0
UniRef90_S3BSR0
UniRef90_RAIX7
UniRef90_G2Q3H0
                                                                                               MSPEPPSDPSGSGVSSGTEPPTSDATTTPPMTGALRTESRRKTSGNGSDVVPGPHTSHDTHGLPSHSTQDHSL
                                                                                   GPSSSSTVSPGPGPQTNRKERG
SPRRSISPPAQH
NSTGDTPNLKRKASPPTMSANAA RAAKM
MSTHQHQNKRAKQSHTTDDTSVIPLQSMDSRGK
KR
UniRef90_R9AIX7
UniRef90_W9YSS1
UniRef90_I1GJM7
UniRef90_UPI000441852F
UniRef90_UPI000359623A
UniRef90_UPI000359623A
                                                                                                                                                 SDRRGTGDRTSEDEADVKKR
                                                                                 D P G L S S S S N V S P R P G P Q S N R K E R G
MS T H A Y P Q A P P L P S P T A A D F R S G G A A G V T P P V T H
D N S D G R R P S S T Q R L P V N P R R H K V A P E Q R
H T G K Q S D V I A S L A T P T P A R A P H S K P
UniRef90_S0DPN8
UniRef90_S8BT75
UniRef90_G0RVW4
UniRef90_R9NZZ0
UniRef90_F9X8Y2
UniRef90_F0X8M3
                                                                                                                                                                                  \verb|SAGAPSASV|GHVR| \\ \verb|KV| 
UniRef90_Q6CWF0
UniRef90_A0A024JGM2
                                                                                                                                                                    NTQASPTTTANSKKKF
UniRef90_A7SXN4
UniRef90_S3CZ54
                                                                                                   MSDEIRPKSITKVR
PSPMDTEDSPGIPRSKR
RSPSAEIDDPTPQRKSGEQDDTKV
PQDKPRSQSQSGAGPSAAGGGASSTTGAQH
PRPKKPGVEPK
UniRef90_F9F5F4
UniRef90_J9VLZ9
UniRef90_UPI00015C36A5
UniRef90_E3RXL2
UniRef90_UPI0003F0B822
UniRef90_S0ENB8
UniRef90_D4D1Y9
UniRef90_U3JE66
                                                                                                                                                                                                                      ARELK
UniRef90_U3JE66
UniRef90_W5MCF5
UniRef90_U7PRI0
UniRef90_F9WYB9
UniRef90_B8N5T4
UniRef90_Q1K521
UniRef90_UP1000258DB64
UniRef90_S0DP32
UniRef90_G4N0R9
UniRef90_S5N7Z5
UniRef90_G3ARF6
UniRef90_C5G1A6
                                                                            DATSQSDDSADESPPLKKRSVKR
SPDQDDSGSNGLKRKADDGQSQSQQRARR
PTSASASQPTPSTSSSAPPPGPPSGPPTSQVVSKR
QQPGPMDNSTSRKAPSAAKDAGRPSKR
AGTKDLTKSGSDTKPKDHHPTPADDQKAPKKR
                                                     T T N A T G P Q S A R P R A S L S A S H N P R R L P V N P R R A P E H R M M D S D A P T R G A T Q G R H L D G D G D G S G A N G G K A G D D D T P D M S
                                                                                                                                                                                                    PTNKPAKKK
UniRef90_C5G1A6
UniRef90_Q4PD88
                                                                             T P A A S T S T L A K P A S S S T T G T P T P S S A S K E S G S S K R
UniRef90_L0PB90
UniRef90_A5ABU4
UniRef90_S8C4B6
UniRef90_B0Y786
UniRef90_F9X2S7
                                                     S N G D A S S A A S P Q S T R P Q Y T P E N D S Q Q S P R H V P K I
S P E A L H S A N A T P D S Q Q G S S N V A N A A D A A A Q D
MS N M M S S S Y A P S S A S G N G L T R N T P D A S Q A V D N S N A K S F K R
P S F P A S G D G S K G P R P P G S S S S R R
S N L S S T A S V T A P D T L S H S Q N S K R R
UniRef90_F9GGM0
UniRef90_UPI0004560555
UniRef90_G3JTX1
UniRef90_G9N831
UniRef90_U7PL37
UniRef90_G4TJF5
UniRef90_X0KUU7
                                                                                                         A DVP E A GLANRSPEDPVKASDLKDDADG
                                                          RLI
SQHHPGAPNVSRSPIPPASTPRKRKKTGEPSEGEAVRRL
ALSAGAKDTPNLDASHKNVSPKSHTARQTSKQQIR
SPPLSTHQKTKRTQRR
NDGDGTRAGASEGSPQPGSQQGQKRKRVFS
SHSEPLSEPSGTFVSISDAGGSSRSKR
UniRef90_N4TWS3
UniRef90_D5GHU7
UniRef90 R7SBF8
UniRef90_UPI0002C5677B
UniRef90_I2G353
UniRef90_B0CVQ1
UniRef90_J9VK46
UniRef90_V5IRC7
                                                                                     T S P V T R P M P E N N T T S A S T K A G A L R T T K Q R T P M N A G P S E F N K D T S N P E L D N N N K R R R S S P S S E P
```

QSSVSVRSPGGDSDNAARPSRPPGSRR

UniRef90_E3RNM4

UniRef90_F9XJ13 UniRef90_Q5AXZ8	50 60 70 80 K R V R T G C L T C R E R H L K C D E A M P H C N N C K K S N R T C G V V P R A C S S C R R R K V K C N G E K P C E A C R W Y K R P E E C T Y P E
UniRef90_Q2EG98 UniRef90_G3AZ37 UniRef90_W9NCJ9 UniRef90_G2QSU3 UniRef90_E6ZKE5 UniRef90_UPl0001F2A492 UniRef90_A0A017SAS4 UniRef90_W3XJW2 UniRef90_Q5B4P4 UniRef90_A0A024J832	T K S R N G C L T C K K K R L K C D E T K P S C L K C L K K N L A C G G Y A R R A Q L S C E K C R R R K S R C E I P D G Q S T C L R C L R E G E T C D F R S R R A A R A C V S C R A R K V R C D V V E G A P C G N C R W D D V E C I V Q E I R N S Q A C L E C R K A K I K C N G K R D A Q N C S R C E A K G L E C N W T A S K I A L A C N S C R E K K I R C D G T K P C G P C V R R S Y R N D Q C V Y N P R R S R N G C W P C K S R K V K C D E E K P S C L N C R Q N Q N D Q C D Y S L R R T T K A C D D C R R K K I K C D G K R P C S S C A D F N S D C T Y A R Q P V K R A C N E C R Q Q K L R C D V Q D P W T D C S R C R R L K L E C K I E S R I A Q A C D R C R S K K I R C D G K R P H C S Q C A A V G F E C K T S D
UniRef90_K2R7Z7 UniRef90_W6XXI1 UniRef90_G3XSV0 UniRef90_A5DZ99 UniRef90_V5E5S0 UniRef90_B0CT77 UniRef90_G2Q3H0 UniRef90_G7DWE6 UniRef90_S3C7F7 UniRef90_S7RQK0 UniRef90_C4R011 UniRef90_N1PZK0 UniRef90_A0A024S131	Q R A A K A C F S C A E S K L R C E G G K P C R R C V E R G L P C R F K R R R G A C D S C R Q R K V R C N G D Q P C N Q C Q R C S L G C H Y R S R V A R R A C L S C R E K K I K C D G E P V T R T C S N C K F L D I D C V F S C M E C R L S K V K C S G G D L C T R C K R L G K E C Y Y K V R G A R A C T V C R A A K M K C V G E D G Q K S C Q R C K R A N A E C V F E K R R A T I A C E V C R S R K S R C D G T K P K C K L C T E L G A E C L V P C R S R K S R C D G T K P K C K L C T E L G A E C L V P C R R S H M T C D D Q R P C S R C I K R D I A H L C R D T R S K S G C H T C R G R K V K C D E A R P V C N M C I R L H L T C E Y L A S M T V I A C R Q C R A R K I R C D S T R P M C N N C L K R G N E C E Y D A Q K V Q V A C V Y C R R S H M I C D D S R P C Q R C L K R G N E C E Y D A R K T A A C F S C S K R G T I C D R K R P Y C G P C I G Q G Q I C S G Y P R A C D E C R S R K L A C S K E P N G C D R C L K D G H P C V Y S A
UniRef90_UPI00022563B0 UniRef90_E9EU40 UniRef90_I8U8B9 UniRef90_G7X913 UniRef90_S8AIQ1 UniRef90_K3V3E6 UniRef90_D4B4E1 UniRef90 S3BSR0	LACVTCRSRKLKCDRSKP ALAKRACDQCKFRKIKCSLSQP RSCITCRRRKVRCNKKTP ALAAQACETCRNRKQRCD ERRPKCGTCQRFKLECRY R RRGYQACDPCRKRKVKCDLNPRPPPPCVRCRRESKRCEFSA TRIRKACDICRMRKVKCDGVSPCKP CQALGAQCTFRY
UniRef90_R9AIX7 UniRef90_W9YSS1 UniRef90_I1GJM7 UniRef90_UPI000441852F UniRef90_UPI000359623A UniRef90_UPI000359623A	MKKQKACLTCRRAKLKCELPVPGEPCKRCMSTGVECRFRKVTLACEQCRERKRKCDGVRPLCGSCARRQPPSKCVWSQTKTQRACDSCRSRKLRCDVDADPPVCQHCKQYGFDCTFFL
UniRef90_S0DPN8 UniRef90_S8BT75 UniRef90_G0RVW4 UniRef90_R9NZZ0 UniRef90_F9X8Y2 UniRef90_F0X8M3	ALAAQACET CRNRKQRCDEQRPK KRSYQACIPCRRRKVRCDLGPHSPPCVRCRRESKECFFSA KRVATACNNCNVRRVKCSGGNPCGQCSASNRECVYPT DRLSLACNPCRKRKVRCDAHQPKCHNCIRRGDVCVTSD RRISRACDQCNQLRTKCCDGQNPCAHCTEFGLGCEYIR
UniRef90_Q6CWF0 UniRef90_A0A024JGM2 UniRef90_A7SXN4 UniRef90_S3CZ54 UniRef90_F9F5F4 UniRef90_J9VLZ9 UniRef90_UPl00015C36A5 UniRef90_E3RXL2	K R S T F A C I S C H S M K Q K C N P T D P R H P C I R C A K L N K I C Q F D L T K S R L G C I T C K K R R L K C D E T K P T C Q L C T K R K V Q C E Y A K K R A P K A C L S C R A R K V R C D V S Q R G R P C M N C Y L D S E T C V V T G R R L N F A C N Y C R S R K T R C D E Q Q P S C Q A C I L A G I A C V T E D K R A T V A C N A C R A R K I K C S G D K P I C T T C A K G S V P C E Y P V K R V Y Q A C I P C R R R K V R C D L N P S D P P C V R C R R E S K E C Y F S A K R S R N G C W P C K A R K V K C G E E K P Q C T N C E R Q G E A C D Y S E E P S H R R S H S L F G T V I S A Y H N
UniRef90_UPI0003F0B822 UniRef90_S0ENB8 UniRef90_D4D1Y9 UniRef90_U3JE66 UniRef90_U5MCF5 UniRef90_U7PRI0 UniRef90_F9WYB9	EEPSHRRSHSLFGTVISAYHN RATLSCSSCRQRKLKCDRDEP CSNCVTRNVSCQYAP SRKDRPCDACRQRKTACVIVT KPPCRFCESKCVTCSFIS DHPSPRCELCKQRKVKCDRGQP SCGWCTRNGATCEYKE NRVSIACNECKRRKLKCNGQTP CQRCGNLNLECVYAP
UniRef90_F7VKD9 UniRef90_B8N5T4 UniRef90_Q1K521 UniRef90_Q1PI000258DB64 UniRef90_S0DP32 UniRef90_G4N0R9	K R T P T A C T E C R K K R A K C D G D K P C R K I A V A C D E C R V R K I R C D G G Q P C G P C T K K A D P G V Q C V Y T R K V N H A C L Y C R R S H M T C D L E R P C T R C I K R N I G H L C H D Y S Q K R V A T A C N A C N V R R V R C S G E H P C R Q C Q S S R D C I Y P L R F R A R A C A R C S R S K L R C I R R A E P G P C L R C A R L G T T C S L P
UniRef90_S5N7Z5 UniRef90_G3ARF6 UniRef90_C5G1A6 UniRef90_Q4PD88 UniRef90_L0PB90 UniRef90_A5ABU4	K S N I R A C D G C A I R K V K C E A T R P C S H C V A N N I K C T S I R T R V S Y S C H T C R R R K V K C D K R T P H P V C G N C V K T G T E C M Y D A K K A T R A C I H C Q K A H L T C D D S R P C Q R C V K K G L A E S C M D S R R I R A C T E C K R H K V R C D M N A G E T V C Q R C R R M G L E C V Y N K
UniRef90_S8C4B6 UniRef90_B0Y786 UniRef90_F9X2S7 UniRef90_F9GM0 UniRef90_UP10004560555 UniRef90_G3JTX1 UniRef90_G9N831 UniRef90_U7PL37 UniRef90_G4TJF5 UniRef90_X0KUU7 UniRef90_N4TWS3	PKRTRACESCRSLKVRCDTANPEGSCRRCAKARRECLFTVSRS GCYTCRLRRKKCD EERPACTACTKLGLKCDYKPISTTNACIECRRKKRCDGNQPCGQCNWYQHPEL CAYSKGVTPNACKECRKKRAKCDGKPCGQCNWYQHPEL CAYSKSVHRACTSCRKKRAKCDGKKPCGRCK AQKDVECVYEL SRVHRACTSCRKKARCEG PEHPPCRRCKAAGIDCIFEKRKGTRSCWACKHRKTSCVFVSPQDSCKGCQRRRLPCISQDSRVPAACLACRSKHLKCDGQTP CSRCVGSNFECLYVATRIRKACDICRMRKVKCDGVSPCKPRSHEACARCRQKKIKCD SGHPSCSACVLAGVTCQQEDRRSHEACASCRDRRIBCVVIGNOTECTACSKSGTFCLINN
UniRef90_D5GHU7 UniRef90_R7SBF8 UniRef90_UPI0002C5677B UniRef90_I2G353 UniRef90_B0CVQ1 UniRef90_J9VK46 UniRef90_V5IRC7 UniRef90_E3RNM4	KRSTRACLSCRFRKVRCDVSVRGQPCTNCHLDCKNCLVVGNRTKTGCITCRRRKKKCDEGKPECFNCKRGGFVCEYSGTKTGCLTCRRRKKKCDEGKPECFNCKRGGFVCEYSGTKTGCLTCRLRKKRCDEGKPVCACCTRLGLECMYEERCDVNYGLICRNNWQKGGRTCLNYHKRVVRACEVCRRKKVKCNGQKPCSHCVAFAEQCIYVDKKITVACNFCRSRKLKCDGGRPACGQCLKRSNPCDYMPPRVQLACFYCRTKRVRCSGTKPRCEGCIKADVECEWPA

```
90 100 110 120 S R R R K R G V R L N F I L D T WE S K P P T Y V T A WG T H D WN V E F Q D E S R Y E R K S S P S P D Y R S T L T R L F P G T A P E Q L V N L P R E K L L E L M T G R P Q V T S D T L A S S S P P Q G T S D T P A S S S P P Q V T S A T T R F K WR S F N D E S T A H P H T S P S T L R R H L E L A S I S V T G K S I K V K Y K R R G T A Q A S S P T V T N P A A R R S S T S A V N G Q P S R R R K G P A G V G A R A G T A E A L R A K S L G A A P P F I A A N S R R G K K P G T K N L A T R A R E Q S E A M Q R H Q P D S Q F H A R S S N E N S R S T S R D E Y L H A L H Q R I K D L E D C S R A G V K L N WE G R T R R K F S V E L P S P V C D S S T H I F S S V S P P A F H Q S L A S E K E A K S N E P A S K S A D A E A L E K K L H A A E S L L R R I L P Q V D N F K R V G K R S R N A E M E R E I E L R K Q I A S V Q S G S V G Q Q Q S H L K L S R R A F P R G Y T E S L E D R V R Q L E S E N N K L L N L D E Q M E M L A
  UniRef90_F9XJ13
UniRef90_Q5AXZ8
UniRef90_Q2EG98
 UniRef90_G3AZ37
UniRef90_W9NCJ9
 UniRef90_G2QSU3
UniRef90_E6ZKE5
UniRef90_E62RE5
UniRef90_UPI0001F2A492
UniRef90_A0A017SAS4
UniRef90_W3XJW2
UniRef90_Q5B4P4
UniRef90_A0A024J832
UniRef90_K2R7Z7
                                                                                                                                                                                             PQKSRPEQST
LGRQR
VQSNRGGRKSDS
HRRGRKSDS
HRRGRKSDS
CIKLDA
GDDKRKVSLRA
ESGSSERKRSA
VPKRRGPDKHP
EQNSKRLKRKS
TQLTWNVSRGK
QKPMGRPRK
                                                                                                                                                                                                                                                                             GRPEQSTRRKSPCSIDKSQPTTPPSEIVVFSGSTNRRLSSAACSDPTVMEGPPVHPESRGGRRKRKDANDDETISMHESITDINMGSALLRGRKSDSSKIQKLERTVDSLSRALEQFSRNKGAGSPRKPGSKLSEASKVLRRLEKGLHSAKLKSPSADSALLGIKLDAGDKLILERTVDSLSRALEQFSRNKGAGSPRKPGSKLSEASKVLRRLEKGLHSAKLKSPSADSALLGIKLDAGDKLILERLNRIESLLQMNLVANQGNGINRKVSLRAATELFSARIDQLTQFIEDHGLESPHMKPESEKKSASRGLSETPVA PALLPSATTSAGPSQVPDDASAVRLHDRRIGAGSIKKRQYTNWRPQRIVARGPDKHPTRQRSCKKRRAADDGAPGANKKKRRTVSEQKRLKRKS SQEEEQSDSHQQTMSPMMQSSLSMSPPWNVSRGKFRGLSLPVANASEAAVPDAARRR
UniRef90_W6XXI1
UniRef90_G3XSV0
UniRef90_A5DZ99
UniRef90_V5E5S0
UniRef90_A5DZ99
UniRef90_V5E5S0
UniRef90_B0CT77
UniRef90_B0CT77
UniRef90_G2Q3H0
UniRef90_G7DWE6
UniRef90_S3C7F7
UniRef90_S3C7F7
UniRef90_C4R011
UniRef90_N1PZK0
UniRef90_N1PZK0
UniRef90_H00022563B0
UniRef90_E9EU40
UniRef90_I8U8B9
UniRef90_G7X913
UniRef90_G7X913
UniRef90_B8AIQ1
UniRef90_BAIX7
UniRef90_S8AIQ1
UniRef90_W9YSS1
UniRef90_W9YSS1
UniRef90_UPI000441852F
UniRef90_UPI000359623A
UniRef90_UPI000359623A
UniRef90_S0DPN8
UniRef90_S0DPN8
UniRef90_S0DPN8
UniRef90_S0DPN8
UniRef90_GRVW4
UniRef90_GRVW4
UniRef90_GRVW4
UniRef90_F9X8Y2
UniRef90_F9X8Y2
UniRef90_F0X8M3
UniRef90_F0X8M3
UniRef90_Q6CWF0
UniRef90_Q6CWF0
UniRef90_Q6CWF0
UniRef90_Q6CWF0
UniRef90_Q6CWF0
                                                                                                                                                                                                  SRRK
PQKK
PGRA
                                                                                                                                                                                                                                                                  P T
R G
P R
                                                                                                                                                                                                                                                                                                 FKRRNVKE EARLAQVEPTGHRVSQIRQQQTHVLSKVKRPQDAELLSRLRRLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
K
G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Y L K E
N P L T
V I E H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VNKGVDE
PQSQVNS
LSEKKAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         G
S
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CSVESKIDHIGTRENTTHPVICOS ASVERDKRDKRMMVADGSVSERNSDAPTETASTPTTSTPPARLSTVLPSICOS ASPGTSETSASDSSSTVLPSICOS ASPGTSETSASDSSSTVLPSICOS ASPGTSETSASDSSSTVLPSICOS ASPGTSETSASDSSSTVLPSICOS ASPGTSLQPPPARLQPAPTSLQPPPARLQPAPTSLQPPPARLQPAPTSLQPPPARLQPAPTSLQPPPARLQPAPTSLQPPPARLQPAPTSLQPPPARLQPAPTSLQPPPARLQPAPTSLQPPPARLQPAPTSLQPPPARLQPAPTSLQPPPARLQPAPTSLQPPPARLQPAPTSLQPPPARLQPAPTSLQPPPARLQPAPTSLQPPPARLQPAPTSLQPPPARLQPAPTSLQPPPARLQPAPTSLQPPPARLQPAPTSLQPRAPTSLQPAPTSLQPAPTSLQPPPARLQPAPTSLQPRAPTSLQPPPARLQPAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPTSLQPRAPT
                                                                                                                                                                                                 EPQPTKKDKTL
TRRKRK
ISRHRGPVSRF
RTRAHDDE
ERWRHIP
                                                                                                                                                                                                                                                                                                                                                                                  VELDRLK
ISEESEDK
AGGGWP
WQASVEDR
ALEALDAR
                                                                                                                                                                                                EPQ
TRR
ISR
                                                                                                                                                                                                PITETRFKKKRLEEEAAAAAEKD
RLQPA
RLQPA
RLQPA
EPQPTKKDKTLVEILDRLKTVES
TRRRGPGELTGSGGEEDGPSRK
PVEKVSVPRTELEELRRKVDAYE
PRKAGAPPAVRQKATRRSALQRA
                                                                                                                                                                                          PRKAGAPPAVRQKATRRSALQRAREVEQKEQRQLLLQSRR

ERKKRGKASRKDLARQAAAQAAATAVSQGKTDDGQNSGDS
SKRRRRKKKKKKLGTVGDDGNLSGYVGAMKNGGASTTNGDGS
NFKWRFFEDGALKDTKLTKKPPQGPSKNIHVNNLATVTNT
SNPKPNNPSSNPKPNNPASNPKPNN
RASRLRKSQKPATAQPESHTHTHSHAHAHTHGRQASPPSD
RRRKRREAGKSTDGGSVTSASPSEYGLQAGTDGAVERRHS
VRKRKRDNTKKKKDDGGSVTSASPSEYGLQAGTDGAVERRHS
VRKRKRDNTKKKKDDGGSVTSASPSEYGLQAGTDGAVERRHS
VRKRKRDNTKKKKKDSGSDQLDPALAAPLFSQTSNMPEPKAA
TRRKRKVDDDDMTDLFDDPDHDDYLLRNGRKQLRSGESPVM
IRLNWGGRAKREMMGAGSGTPSAASGSPYQSMFSFEEEGP
SRRQSVPTPQLPHNKSNALSPTNSQPKLSPSNSLKRSPQN
WPRGR
TPKPRRRSPAKSQ
EKDAEHSTSPPVNMATNSSGPTQH
LPRSCVPNRLPVSHPSPHVPN
ARTPSPTPSARRFGSPVLLPRAPQ
ARTPSPTPSARRFGSPVLPRAPQ
CAGFKDSQEYKEMTSQLSMLQEQVNSLWDTMNA
PV RQSKDTLRNEIDQLKREQRNNEHVLNALRRTDKWDE
GKQKLAMRNYLNTLERLKFLQGPHRTPAKAPTSVESVEP
EPRDTESRKA
KSVLGTSTLHDSENSELEDLKHK
VDLYERVLRDTVPAAVSN
EARPRGPKKGQARRVGQLEQKLDGIMSLLTASQQLLNQNN
 UniRef90_Q6CWF0
UniRef90_A0A024JGM2
 UniRef90_A7SXN4
UniRef90_S3CZ54
 UniRef90_F9F5F4
UniRef90_J9VLZ9
 UniRef90_UPI00015C36A5
UniRef90_E3RXL2
UniRef90_UPI00015C36A5
UniRef90_E3RXL2
UniRef90_UPI0003F0B822
UniRef90_D4D1Y9
UniRef90_U3JE66
UniRef90_U7PRI0
UniRef90_U7PRI0
UniRef90_F7VKD9
UniRef90_F7VKD9
UniRef90_F7VKD9
UniRef90_G1K521
UniRef90_UPI000258DB64
UniRef90_UPI000258DB64
UniRef90_G4N0R9
UniRef90_G5N7Z5
UniRef90_G3ARF6
UniRef90_G3ARF6
UniRef90_C5G1A6
UniRef90_UPI000456055
UniRef90_B0Y786
UniRef90_B0Y786
UniRef90_B0Y786
UniRef90_B0Y786
UniRef90_UPI0004560555
UniRef90_UPI0004560555
UniRef90_GN831
UniRef90_GN831
UniRef90_GN831
UniRef90_GN831
UniRef90_GN831
                                                                                                                                                                                                 E R K K S G P K N L H R K T L D S I N S L S E V I E I N A A A Q R N R P E D N H H R V K R K R D V S K P A G K D G R R K K A K Y L L D D D E L E E L R R Q K E A K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q P S R S T S A N T N G
E A D L S T P Q E S L R
K A A K Q A V Q Q K N A
                                                                                                                                                                                           S

QTLLDDDELEELRKQKEAKAAKQAVQQKNA

S

QTLLDDDETEWKATIELAMADLLRKAQLP

PTRKRQKRTDSRVAELEKKIDRLTATLNAKRRGDTPNDKS

PQWWSAETRRTQKERIKDRIRQTKVMEKHGSLQEYMERIR

PAQRVIPSRKLVERLQSQVEQYHSLFARLFPGKELENILT

LVRRS
KEDLRTEIESLRQKQRSGDQVFAALVRPELWEE

PPRETG
ATAPDAGSERIKSLETQMSDMQAMMGELVNT

VPEEEAIAAAGGTRDLNTRLARVEDLMRIVLANTHDATIN

SRRGYKGPR

RGPAHNPNKRHATSPPDTDSLS

VSRHRGPTSRFA AGSAWSAGVAASTSGGASAAGRGNGNA

RHRNKFQARAHQEIIEQQLTETILILQKWIPDFDPNKTQP

DDERRRPISKAYMSSLSDRISMLEGLLEKGVAPPPATHP

RASR
KINWQKPPGRSANAAGAPV

KRPRWMNQRDVVTRTAAELTDTINQVKRGKRRSRASESIK

IRVLCCEDKSPCTSSPATEPTSTSTRQRSSGVTGLWATTT

VKDRSAYSRRYVESLEMRLERLERAWAIAFESGGCMGTCR

QNKRRGTMRQRNKGESESESESGDERSASAEAEEPSLSPE
UniRef90_G9N831
UniRef90_U7PL37
UniRef90_G4TJF5
UniRef90_X0KUU7
 UniRef90_N4TWS3
UniRef90_D5GHU7
 UniRef90_R7SBF8
UniRef90_UPI0002C5677B
  UniRef90_I2G353
 UniRef90_B0CVQ1
UniRef90_J9VK46
UniRef90_V5IRC7
```

PAQRVVPSRKLVDKLSNNLDLYKTLLTKLYGTQNLESLAT

UniRef90_E3RNM4

```
160
UniRef90_F9XJ13
UniRef90_Q5AXZ8
UniRef90_Q2EG98
UniRef90_G3AZ37
UniRef90_W9NCJ9
UniRef90_G2QSU3
UniRef90_E6ZKE5
UniRef90_UPI0001F
UniRef90_E62RE5
UniRef90_UPI0001F2A492
UniRef90_A0A017SAS4
UniRef90_W3XJW2
UniRef90_Q5B4P4
UniRef90_A0A024J832
UniRef90_K2R7Z7
UniRef90_W6XXI1
UniRef90_G3XSV0
UniRef90_A5DZ99
UniRef90_V5E5S0
UniRef90_A5DZ99
UniRef90_V5E5S0
UniRef90_B0CT77
UniRef90_B0CT77
UniRef90_G2Q3H0
UniRef90_G7DWE6
UniRef90_S3C7F7
UniRef90_S3C7F7
UniRef90_C4R011
UniRef90_N1PZK0
UniRef90_N1PZK0
UniRef90_H00022563B0
UniRef90_E9EU40
UniRef90_I8U8B9
UniRef90_G7X913
UniRef90_G7X913
UniRef90_B8AIQ1
UniRef90_BAIX7
UniRef90_S8AIQ1
UniRef90_W9YSS1
UniRef90_W9YSS1
UniRef90_UPI000441852F
UniRef90_UPI000359623A
UniRef90_UPI000359623A
UniRef90_UPI000359623A
UniRef90_S0DPN8
UniRef90_S0DPN8
UniRef90_S0DPN8
UniRef90_BAIX7
UniRef90_UPI000359623A
UniRef90_S0DPN8
UniRef90_BAIX7
UniRef90_UPI000359623A
UniRef90_BRBT75
UniRef90_BRBT75
UniRef90_GRVW4
UniRef90_GRVW4
UniRef90_F9X8Y2
UniRef90_F9X8Y2
UniRef90_F0X8M3
UniRef90_Q6CWF0
UniRef90_Q6CWF0
UniRef90_Q6CWF0
UniRef90_Q6CWF0
                                                                                                             QQRH
QSLA
P
UniRef90_Q6CWF0
UniRef90_A0A024JGM2
UniRef90_A7SXN4
UniRef90_S3CZ54
UniRef90_F9F5F4
UniRef90_J9VLZ9
UniRef90_UPI00015C36A5
UniRef90_E3RXL2
UniRef90_UPI00015C36A5
UniRef90_E3RXL2
UniRef90_UPI0003F0B822
UniRef90_D4D1Y9
UniRef90_U3JE66
UniRef90_U7PRI0
UniRef90_F7VKD9
UniRef90_F7VKD9
UniRef90_F7VKD9
UniRef90_U7PRI0
UniRef90_U7PRI0
UniRef90_F7VKD9
UniRef90_F7VKD9
UniRef90_F7VKD9
UniRef90_G4N621
UniRef90_U7B8N5T4
UniRef90_U7B8N5T4
UniRef90_U7B8N5T4
UniRef90_U7B8DB64
UniRef90_U7B8DB64
UniRef90_U7B8BB64
UniRef90_G3ARF6
UniRef90_G3ARF6
UniRef90_G3ARF6
UniRef90_U7B88
UniRef90_G9N831
UniRef90_U7PL37
UniRef90_G4TJF5
UniRef90_X0KUU7
UniRef90_N4TWS3
UniRef90_D5GHU7
UniRef90_R7SBF8
UniRef90_UPI0002C5677B
 UniRef90_I2G353
UniRef90_B0CVQ1
UniRef90_J9VK46
UniRef90_V5IRC7
```

```
| Representation | Authority |
UniRef90_F9XJ13
UniRef90_Q5AXZ8
UniRef90_Q2EG98
UniRef90_G3AZ37
UniRef90_W9NCJ9
UniRef90_G2QSU3
UniRef90_E6ZKE5
UniRef90_E62RE5
UniRef90_UPI0001F2A492
UniRef90_A0A017SAS4
UniRef90_W3XJW2
UniRef90_Q5B4P4
UniRef90_A0A024J832
UniRef90_K2R7Z7
UniRef90_W6XXI1
UniRef90_G3XSV0
UniRef90_A5DZ99
UniRef90_V5E5S0
UniRef90_A5DZ99
UniRef90_V5E5S0
UniRef90_B0CT77
UniRef90_B0CT77
UniRef90_G2Q3H0
UniRef90_G7DWE6
UniRef90_S3C7F7
UniRef90_S3C7F7
UniRef90_C4R011
UniRef90_N1PZK0
UniRef90_N1PZK0
UniRef90_H00022563B0
UniRef90_E9EU40
UniRef90_I8U8B9
UniRef90_G7X913
UniRef90_G7X913
UniRef90_B8AIQ1
UniRef90_BAIX7
UniRef90_S8AIQ1
UniRef90_W9YSS1
UniRef90_W9YSS1
UniRef90_UPI000441852F
UniRef90_UPI000359623A
UniRef90_UPI000359623A
UniRef90_UPI000359623A
UniRef90_S0DPN8
UniRef90_S0DPN8
UniRef90_S0DPN8
UniRef90_BAIX7
UniRef90_UPI000359623A
UniRef90_S0DPN8
UniRef90_BAIX7
UniRef90_UPI000359623A
UniRef90_BRBT75
UniRef90_BRBT75
UniRef90_GRVW4
UniRef90_GRVW4
UniRef90_F9X8Y2
UniRef90_F9X8Y2
UniRef90_F0X8M3
UniRef90_Q6CWF0
UniRef90_Q6CWF0
UniRef90_Q6CWF0
UniRef90_Q6CWF0
 UniRef90_Q6CWF0
UniRef90_A0A024JGM2
UniRef90_A7SXN4
UniRef90_S3CZ54
UniRef90_F9F5F4
UniRef90_J9VLZ9
 UniRef90_UPI00015C36A5
UniRef90_E3RXL2
 UniRef90_UPI0003F0B822
UniRef90_S0ENB8
 UniRef90_U3JE66
UniRef90_U3JE66
UniRef90_U3JE66
UniRef90_W5MCF5
UniRef90_U7PRI0
UniRef90_F7VKD9
UniRef90_F7VKD9
UniRef90_Q1K521
UniRef90_Q1K521
UniRef90_UPI000258DB64
UniRef90_S0DP32
UniRef90_G4N0R9
UniRef90_G5N7Z5
UniRef90_G3ARF6
UniRef90_G3ARF6
UniRef90_UPI000456055
UniRef90_UPI0004560555
UniRef90_B0Y786
UniRef90_B0Y786
UniRef90_B0Y786
UniRef90_B0Y786
UniRef90_F9X2S7
UniRef90_F9X2S7
UniRef90_F9X2S7
UniRef90_G3JTX1
UniRef90_G3N831
UniRef90_G3N831
UniRef90_UPI000457
 UniRef90_G9N831
UniRef90_U7PL37
 UniRef90_G4TJF5
UniRef90_X0KUU7
   UniRef90_N4TWS3
   UniRef90_D5GHU7
   UniRef90_R7SBF8
UniRef90_UPI0002C5677B
UniRef90_I2G353
UniRef90_B0CVQ1
UniRef90_J9VK46
UniRef90_V5IRC7
```

```
UniRef90_F9XJ13
UniRef90_Q5AXZ8
UniRef90_Q2EG98
UniRef90_G3AZ37
UniRef90_W9NCJ9
UniRef90_G2QSU3
UniRef90_E6ZKE5
UniRef90_UPl0001F2A492
UniRef90_A0A017SAS4
UniRef90_W3XJW2
UniRef90_W3XJW2
UniRef90_G2B4P4
UniRef90_A0A024J832
UniRef90_K2R7Z7
UniRef90_W6XXI1
UniRef90_W6XXI1
UniRef90_G3XSV0
UniRef90_A5DZ99
UniRef90_V5E5S0
UniRef90_BOCT77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PTPANSPTS
YSLLS
S
TNPSL
LGLPT
RRNSF
TWRSH
UniRef90_A5DZ99
UniRef90_BOCT77
UniRef90_BOCT77
UniRef90_G2Q3H0
UniRef90_G2Q3H0
UniRef90_G7DWE6
UniRef90_S3C7F7
UniRef90_S7RQK0
UniRef90_C4R011
UniRef90_N1PZK0
UniRef90_UPl00022563B0
UniRef90_E9EU40
UniRef90_E9EU40
UniRef90_BSAIQ1
UniRef90_G7X913
UniRef90_G7X913
UniRef90_S8AIQ1
UniRef90_BBU8B9
UniRef90_BSAIQ1
UniRef90_BSAIQ1
UniRef90_W9YS1
UniRef90_H1GJM7
UniRef90_I1GJM7
UniRef90_UPl000441852F
UniRef90_UPl000359623A
UniRef90_SBBT75
UniRef90_BSBT75
UniRef90_GCWF0
UniRef90_F0X8M3
UniRef90_F0X8M3
UniRef90_F0X8M4
UniRef90_J9VLZ9
UniRef90_J9VLZ9
UniRef90_UPl00015C36A5
UniRef90_E3RXL2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Y G Q S N
D S D R A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                T H
S A
S S
L G
H D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HPPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       L D
S T
T E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     UniRef90_F9F5F4
UniRef90_J9VLZ9
UniRef90_UPI00015C36A5
UniRef90_UPI0003F0B822
UniRef90_S0ENB8
UniRef90_D4D1Y9
UniRef90_U3LE66
UniRef90_W5MCF5
UniRef90_U7PRI0
UniRef90_F9WYB9
UniRef90_F9WYB9
UniRef90_G1K521
UniRef90_Q1K521
UniRef90_U7BR00
UniRef90_S0DP32
UniRef90_G4N0R9
UniRef90_G4N0R9
UniRef90_G5G1A6
UniRef90_C5G1A6
UniRef90_C4PD88
UniRef90_Q4PD88
UniRef90_Q4PD88
UniRef90_B8C4B6
UniRef90_B90
UniRef90_F9CG1A6
UniRef90_B90
UniRef90_G4NB9
UniRef90_G4NB9
UniRef90_G5G1A6
UniRef90_G5G1A6
UniRef90_G4TJF5
UniRef90_G3JTX1
UniRef90_G3JTX1
UniRef90_G3TJF5
UniRef90_G4TJF5
UniRef90_G4TJF5
UniRef90_G4TJF5
UniRef90_U7PL37
UniRef90_N4TWS3
UniRef90_D5GHU7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QRAVRHEAEP
SFMHQLKMAVD
SAFMSD DH
QQLQ
                                                                                                                                                                                                                                    DTRIQEPSYGLSRTHSIQLSHPGATPQN

TAQPTEQPTSQPTAQPTEQPTSQPTAQPTEQPTSQ
ASIPLPTGTAIKQDEPSSAQ SSTLASPPMSKSETANST
GNKSVSTSGSVSRQSSPRRNSDDASNEDFPIPTGLSTDLV
SNNGALPFDLSFDPSTHNFGSEATSLEYSLLSSMLNGTDLY
SPASVVFSPTSPQLAGMSPSFSPTSPMCSPLSPSPTSPAY
APMGSLYEVTQLSDIQTTSPGRHHAPDRA
TS SSAPPKSQFAVPKYHARHRMPTPETDPSSITSPAQGS
QTQASAGLEWTQNTLGYTQP
IDKASSYTGVSSINAAMKVILKTAPFAWAFISQPSAQTSN
PWHSSFHSETSTRSNSHPDLMDWTTDLRGPPQNRVGSWAA
TAAAGPGGAESPSAKSDMDRRIYPWSAPSPRLGSGLSSSV
LLQEAAAEPSFYATLVCTQPHSRLTRQS
RCIDSF YRYFHGSHPFVLPKEHLLRFSNENSIDP
ASIPSVGSAAS PSMPSVPYSNSFFDAVATNARHSPAAA
SQLVSPASPHAPFFRNNSQSQQHSQAASSGSASSQFVFPP
DIVHRLLSNLSFDQGSGLKFFGPT
DGPPVRETSSSEQGSTHSLRMTAPNIPPSRPGAQRTSTST
ATPTNNAVITSHPTSVSQATVATASGSSMPRERSEKE
SDLDLDPEFLSLLGFSPSYPLQYPPF PGTLMFPFMNNNPA
PSSPGTTRGVTSPTSVSQATVATASGSSMPRERSEKE
SDLDLDPEFLSLLGFSPSYPLQYPPF PGTLMFPFMNNPA
PSSPGTTRGVTSPTSVSQATVATASGSSMPRERSEKE
SDLDLDPFLSLLGFSPSYPLQYPPF PGTLMFPFMNNPA
PSSPGTTRGVTSPTSVSQATVATASGQLSSSK
LSLPDPSPSTPVPMSAPSLPPLRPASEQQAAQRKRVPGKS
LSLPDPSPSTPVPMSAPSLPPLRPASEQQAAQRKRVPGKS
LDPNSTASDIKLTPAREMVPLTSLSLSNNDNPSGGEFGFF
GAPTSPTYAPTTYTPNPAAAYANTNTATPQRHSSVASVA
LRVQGISDDVNGLSSMSVDRLSSYVGVSSITAALKVIVRCA
 UniRef90_N4TWS3
UniRef90_D5GHU7
 UniRef90_R7SBF8
UniRef90_UPI0002C5677B
UniRef90_I2G353
UniRef90_B0CVQ1
UniRef90_J9VK46
UniRef90_V5IRC7
```

II 'B (00 F0VI40	4.0000	250 260	270	280
UniRef90_F9XJ13 UniRef90_Q5AXZ8 UniRef90_Q2EG98 UniRef90_G3AZ37 UniRef90_W9NCJ9 UniRef90_G2QSU3	PQGTSDTF NQHHHTQLT	LQFTETQLVDAYFASSSPPQGTSETFMSNPSFQNIHLSF	P A S N S P P Q G T S E T P T L S A L I N S A F G H	PGFSSP
UniRef90_E6ZKE5 UniRef90_UPI0001F2A492 UniRef90_A0A017SAS4 UniRef90_W3XJW2	GSTRLQYYG FS <mark>H</mark> AQKPGF	GTSSTASLMRFAWC ASNSQSPSYYPG[QRMPSRPAGTSAE PIDFLLDKPEDH	TRYSRL
UniRef90_Q5B4P4 UniRef90_A0A024J832 UniRef90_K2R7Z7 UniRef90_W6XXI1 UniRef90_G3XSV0	PSYSPTSPS	NNGPSTSFYS YSPTSPSSPTSPA NHHRLLSSFPSIF		
UniRef90_A5DZ99 UniRef90_V5E5S0 UniRef90_B0CT77 UniRef90_G2Q3H0	FRTILINPNF	R P L S E D N Y V G H F H A S D S A R D G E P G A E E A P A A V P V T P N F R E G P E S C G Q A S L F	RGSS	RASEDNA
UniRef90_A0A017SES3 UniRef90_G7DWE6 UniRef90_S3C7F7 UniRef90_S7RQK0	GAALYDTIS	T A A N G T T G H T P A F S P S A T L P P Y F P L C	PITPSVIQPPTST	TEPATYT
UniRef90_C4R011 UniRef90_N1PZK0 UniRef90_A0A024SI31 UniRef90_UPI00022563B0	FTDTDFHLF DPISADTT	NNGNINTGNVQEILDYPQTPGSIAFS	S E P Y S Q S A P I S Y T	
UniRef90_E9EU40 UniRef90_I8U8B9 UniRef90_G7X913 UniRef90_S8AIQ1 UniRef90_K3V3E6	NHDGFLFGF PQFVITSPA HSPPSVDWE	QEPSHTRALWPSS YSVSHSLHDFLPF YSPSSPAGASPSY TVQRLSKGYFDVV	P	PNFSPAS
UniRef90_D4B4E1 UniRef90_S3BSR0 UniRef90_R9AIX7 UniRef90_W9YSS1 UniRef90_I1GJM7	NVVSTKPEK	. GRT DLNRQQMEY C SLSDIDAMSFEPV SSTSSFLGVVRLII LESSTVLPSLPPAE	//GITPSIVIFPGQPST	SHDIVA
UniRef90_UPI000441852F UniRef90_UPI000359623A UniRef90_UPI000359623A UniRef90_S0DPN8 UniRef90_S8BT75	N Q P P T S S N Q N Q P P T S S N Q S T L N L S P P S	QPPTSSNQPPTSSN QPPTSSNQPPTSSN QPPTSSNQPPTSSN GVDWETMQRLSAYF GTSTSSGA <u>P</u> RRSFF	N Q P P T S S N Q P P T S N Q P P T S S N Q P P T S F D V I N M L H P I L D F	S S N Q P P T S S N Q P P T R Q W F N S N
UniRef90_G0RVW4 UniRef90_R9NZZ0 UniRef90_F9X8Y2 UniRef90_F0X8M3	T L L L I Q D G N S I D Q L Q T S T H A P G S A T S F M G S L G A A H N	I G E W P S G G	Q	NEYRAF NRFKVL YNLSQL
UniRef90_Q6CWF0 UniRef90_A0A024JGM2 UniRef90_A7SXN4 UniRef90_S3CZ54 UniRef90_F9F5F4	RLKSPSLSS NPKPN <u>N</u> PSS	LISQHQRLLPKPWL NFSYLANPAMAEV NPKPNNPSSNPKF ISMSGGGHIPWTSE	W	RNLSRSN
UniRef90_J9VLZ9 UniRef90_UPl00015C36A5 UniRef90_E3RXL2 UniRef90_UPl0003F0B822 UniRef90_S0ENB8	GRPGLNSRH VRQQNGFSS HSSLSPYHF	R K A R F R V P Y F R F F S S S H H N D R P G Y H S F E S P E T R F A D S Q S F Q Y Q P H H Q P Y T D R L V S R Y F T S T	R H A S R Q E A S T E S II P H A G S P D Y S V L Q A	AAPMSQD
UniRef90_D4D1Y9 UniRef90_U3JE66 UniRef90_W5MCF5 UniRef90_U7PRI0	VDQPA PPQPSLPVS FFRRFGHTS	GQPSPHVPNPLSL <mark>C</mark> GHNNNAQRPPSPQL GGSGPLSGLSPSLL	PNPLPMSPTLSF RNKKISPPPSPC	PTLSPC
UniRef90_F9WYB9 UniRef90_F7VKD9 UniRef90_B8N5T4 UniRef90_Q1K521 UniRef90_UPI000258DB64	RVTSPHRRT LILGANQSA	HSQTARSNSLSEA SDTILGASHAPGL VSGLPNANNNGN PSYSQPSPQNTPY	<u>.</u>]M	NYVLPP SGMLPP
UniRef90_S0DP32 UniRef90_G4N0R9 UniRef90_S5N7Z5 UniRef90_G3ARF6 UniRef90_C5G1A6 UniRef90_Q4PD88 UniRef90_L0PB90	NSA DPVGTLNLG QLMGASGAS	T S Q P T V Q P T E Q P T G H L S L E D G G Y W A Y [G P D L Q A S P A T S P S Y S P T S P R F S	SDEINELNQLLF	RNQNRSQ
UniRef90_A5ABU4 UniRef90_S8C4B6 UniRef90_B0Y786 UniRef90_F9X2S7 UniRef90_F9GGM0 UniRef90_UPI0004560555	P S R A T T P P F G M H P D Q	HVRDPDPYYLPS	_	
UniRef90_G3JTX1 UniRef90_G9N831 UniRef90_U7PL37 UniRef90_G4TJF5 UniRef90_X0KUU7	SVRLANPPH HQHNALPN	IVNIY PRMPRPQLN	N R Q A	
UniRef90_N4TWS3 UniRef90_D5GHU7 UniRef90_B7SBF8 UniRef90_R7SBF8 UniRef90_12G353 UniRef90_B0CVQ1	R L R S A T L P F	TPRPT PD RYF TSQTGPSSPGTTL HES	<u>. V</u> S A S S [S S L G T T M A P P T H D S
UniRef90_J9VK46 UniRef90_V5IRC7 UniRef90_E3RNM4	TGNGWSPNT	T D WK	A F	SSYEPAR

UniRef90_F9XJ13 UniRef90_Q5AXZ8 P Q V T T A T L V S S S P P Q V T S E T P A S S S P T Q V T S E T P A S S S P T N S E E L N P G G S L N G L S T P L T V S V K S T P L Y N V G S N S S M L L T A UniRef90_Q2EG98 UniRef90_G3AZ37 UniRef90_W9NCJ9 UniRef90_G2QSU3 UniRef90_E6ZKE5 UniRef90_UPI0001F2A492 QDTS UniRef90_A0A017SAS4 UniRef90_W3XJW2 UniRef90_Q5B4P4 UniRef90_A0A024J832 PKYSPTSPAYSPTSPQFGGGSDRRSPTSPAVGY SWLHVPSFDPNTASTEL UniRef90_K2R7Z7 UniRef90_W6XXI1 UniRef90_G3XSV0 $\begin{array}{c} \texttt{R}\,\texttt{G}\,\texttt{G}\,\texttt{E}\,\texttt{G}\,\texttt{P}\,\texttt{F}\,\texttt{S}\,\texttt{R}\,\texttt{G} \\ \texttt{R}\,\texttt{S}\,\texttt{T}\,\texttt{S}\,\texttt{G}\,\texttt{G}\,\texttt{P}\,\texttt{A}\,\texttt{N}\,\texttt{H}\,\texttt{H}\,\texttt{S}\,\texttt{G}\,\texttt{S}\,\texttt{A}\,\texttt{F}\,\texttt{N}\,\texttt{A}\,\texttt{D}\,\texttt{G}\,\texttt{T}\,\,\boxed{\hspace{-0.1cm} \begin{subarray}{c} \texttt{V}\\ \texttt{S}\,\texttt{S}\,\texttt{P}\,\texttt{G}\,\texttt{G}\,\texttt{Q}\,\texttt{D}\,\texttt{P}\,\texttt{S}\,\texttt{S} \end{array} } \end{array}$ UniRef90_A5DZ99 UniRef90_V5E5S0 UniRef90_B0CT77 UniRef90_G2Q3H0 AWSLLPGMMTSNS UniRef90 A0A017SES3 UniRef90_G7DWE6 SDPALAS UniRef90_S3C7F7 UniRef90 S7RQK0 UniRef90_C4R011 UniRef90_N1PZK0 A V D T Y A D A L S S S V N S L Q S R S S Y E S C P L S UniRef90_A0A024SI31 UniRef90_UPI00022563B0 UniRef90_E9EU40 P A S P A H P I Q P Q S A H P T N P S K Q P I Q P H P T S H S T C P A S Q P I Q UniRef90_I8U8B9 LHPTLPVLNRSS UniRef90_G7X913 UniRef90_S8AIQ1 P A F S L T S P E Y S P T S P A L G G G R H F S P S P A S P T S P K W S P T S P UniRef90_K3V3E6 QNGTPGRASRSNSTTQQGAG UniRef90_D4B4E1 UniRef90_S3BSR0 SASQ UniRef90_R9AIX7 UniRef90_W9YSS1 TVLPSSPPAESSTVLPSSPPAETPTVSPSPTESSTVLP UniRef90_I1GJM7 UniRef90_UPI000441852F S S N Q P P T S S N Q P P T S S N Q P P T S S N Q P P T S S N Q L Q Q T P T S S S N Q P P T S S N Q P P T S S N Q P P T S S N Q P P T S S N Q L Q Q T P T S S V L S S I S S C D S R G V R F Q D G S V S P R V N R N H I N N L Y H A A L A N I T R A N T S S Q E V H G S A S T P S L S UniRef90_UPI000359623A UniRef90_UPI000359623A UniRef90_S0DPN8 UniRef90_S8BT75 UniRef90_G0RVW4 GGSSL YSPTSPKYGSGVGASG ASPTSPTYSPTSPVYS RYPVLEPLVPH YANNLPQTDPNSSHTAAVLGQSALSVPSNDPMGNLTYNTH UniRef90_R9NZZ0 UniRef90_F9X8Y2 UniRef90_F0X8M3 UniRef90_Q6CWF0 UniRef90_A0A024JGM2 N N P A S N P K P N N P S S N P K P N N P A S N P K P N N P S S N P K P N N P S A I S N L P G I L P Q D V N Y L E L Q G C L R V P UniRef90_A7SXN4 UniRef90_S3CZ54 UniRef90_F9F5F4 UniRef90_J9VLZ9 R D S S E L L P A D L R R V S V K S L I N D M S G P E P H Q Y S P UniRef90 UPI00015C36A5 UniRef90 F3RXL2 UniRef90_UPI0003F0B822 UniRef90 S0ENB8 UniRef90_D4D1Y9 PQPSLPVSQPSPHVPNPLSLCPN PLPMSPTLSPCVPTLSGSPSLRQRSPSPANSSPVNKQAASPQPSLYGASAPPGVGNGVTT UniRef90 U3JE66 UniRef90_W5MCF5 UniRef90_U7PRI0 UniRef90 F9WYB9 UniRef90_F7VKD9 UniRef90_B8N5T4 UniRef90_Q1K521 SATQGTSMLPPSSDQTTAIGKPASTNLDN PANYSHALHSPQTPQNYSQLSPQQAPPSNYSQPSPQQKTV UniRef90_UPI000258DB64 UniRef90_S0DP32 UniRef90_G4N0R9 PTEQPTSQPTAQPTEQPTSQPTAQPTEQPTSQPTAQPTEQ UniRef90_S5N7Z5 UniRef90_G3ARF6 PPTVPQPALSDDGNDTLISPQQADDSDAQVQKWLATHDNN UniRef90_C5G1A6 UniRef90_Q4PD88 HRLHLLTLQRHQLILLTSPAYSPTSPAYSPTSPYSPTSPS UniRef90_L0PB90 UniRef90_A5ABU4 UniRef90_S8C4B6 UniRef90_B0Y786 UniRef90_F9X2S7 UniRef90_F9GGM0 UniRef90_UPI0004560555 DATSATSLTPDP P S Q G P H Q P W R P A M S Q R T S M P UniRef90_G3JTX1 UniRef90_G9N831 UniRef90_U7PL37 UniRef90_G4TJF5 UniRef90_X0KUU7 UniRef90_N4TWS3 UniRef90 D5GHU7 S S L V T P L A F T H P A
R V T S P R S L P S S P G T T L R I A S P T S Q P G P S S P G T T L G V T S P T
R K R R E P P I A Q A F R A P Q A F R P Q G A L P S T F S A Q S P S P L T N G A UniRef90 R7SBF8 UniRef90 UPI0002C5677B UniRef90_I2G353 UniRef90_B0CVQ1

F S G S T A H P G IN R V S L K L Q R R D P S F S P M A T A P Q P A N E S P S S P Q Y P P S S A T A T S P Q Y D Q S Y P P A N A Y Q Y Y G S Y P V N A S G M A

UniRef90_J9VK46 UniRef90_V5IRC7

330 340 350 360 UniRef90_F9XJ13 UniRef90_Q5AXZ8 QVTSDTPASNSPPQGTSDTPGFSSPTQVTTATLSSSPPQV EQEQLLGLYSQYT UniRef90_Q2EG98 UniRef90_G3AZ37 UniRef90_W9NCJ9 UniRef90_G2QSU3 UniRef90_E6ZKE5 UniRef90_UPI0001F2A492 UniRef90_A0A017SAS4 UniRef90_W3XJW2 UniRef90_Q5B4P4 UniRef90_A0A024J832 SPTSPILYSPTSPTAYPPTSPGT UniRef90_K2R7Z7 GQY S A UniRef90_W6XXI1 UniRef90_G3XSV0 UniRef90_A5DZ99 UniRef90_V5E5S0 UniRef90_B0CT77 UniRef90_G2Q3H0 UniRef90 A0A017SES3 UniRef90_G7DWE6 UniRef90 S3C7F7 UniRef90_S7RQK0 UniRef90_C4R011 UniRef90_N1PZK0 UniRef90_A0A024SI31 UniRef90_UPI00022563B0 UniRef90_E9EU40 PAHLARHPTSPSSQPIQPAHPTSQPNS PASQPASQSSQP UniRef90_I8U8B9 UniRef90_G7X913 UniRef90_S8AIQ1 SWS SAQPEAYSPTSPKFS GSP UniRef90_K3V3E6 UniRef90_D4B4E1 UniRef90_S3BSR0 UniRef90_R9AIX7 UniRef90_W9YSS1 SSPPAESSTVSPSPTESFVSST UniRef90_I1GJM7 UniRef90_UPI000441852F UniRef90_UPI000359623A UniRef90_UPI000359623A NQLQPVPARSNQAFPPP NQLQPVPARSNQAFPPP UniRef90_S0DPN8 UniRef90_S8BT75 UniRef90_G0RVW4 UniRef90_R9NZZ0 UniRef90_F9X8Y2 UniRef90_F0X8M3 PTSPAQNGYSPTSPGQKQSPT SPQYSP UniRef90_Q6CWF0 UniRef90_A0A024JGM2 A E T S H L R H L N Q A N S Q Q L N N G T G H T L K A L S P N L S S N N N Y L L UniRef90_A7SXN4 UniRef90_S3CZ54 SNPKPNNPSSNPKPNNPSSPNNPASNPKPNNPSSNPKPNN UniRef90_F9F5F4 UniRef90_J9VLZ9 UniRef90 UPI00015C36A5 UniRef90_E3RXL2 UniRef90_UPI0003F0B822 UniRef90 S0ENB8 UniRef90_D4D1Y9 UniRef90 U3JE66 P C P Q P S L P V S Q P S P H V P N P P M S P T L S P C V P T L S P C P Q P S L UniRef90_W5MCF5 UniRef90_U7PRI0 UniRef90_F9WYB9 UniRef90_F7VKD9 UniRef90_B8N5T4 UniRef90_Q1K521 UniRef90_UPI000258DB64 CASQPSQQPSNYSQPSPQQSSNYALQQQSSKNTEEYPUniRef90_S0DP32 UniRef90_G4N0R9 UniRef90_S5N7Z5 PTSQPTAQPTEQPTSQPTAQPTEQPTSQPTAQPTEQPTSQ UniRef90_G3ARF6 MHESILYPKGGTPTSNLKPIVAEMLNH V P T R H Q S UniRef90_C5G1A6 UniRef90_Q4PD88 Y S P T S P S Y S P T S P R F S P T S P AYSPTSPSYSP UniRef90_L0PB90 UniRef90_A5ABU4 UniRef90_S8C4B6 UniRef90_B0Y786 UniRef90_F9X2S7 UniRef90_F9GGM0 UniRef90_UPI0004560555 UniRef90_G3JTX1 UniRef90_G9N831 UniRef90_U7PL37 UniRef90_G4TJF5 UniRef90_X0KUU7 UniRef90_N4TWS3 UniRef90 D5GHU7 UniRef90 R7SBF8 UniRef90_UPI0002C5677B FQTGPSSPGTTLRVTSPTSQPGPS SPGTTLRVTS UniRef90 I2G353 UniRef90_B0CVQ1 UniRef90_J9VK46 UniRef90_V5IRC7 T D S S F L G L D L F D A T G M P Y S H Y N T M S Q A P Y P T A H A Q M P A G P S Y A S A D H A A F S G R N S R S D S Q

```
370
                                                                                             380
                                                                                                                            390
                                                                                                                                                          400
UniRef90_F9XJ13
UniRef90_Q5AXZ8
                                    T S D T P A S S S P P Q V T S D T P A S S S P P Q V T S E T P A S S S P P
UniRef90_Q2EG98
UniRef90_G3AZ37
UniRef90_W9NCJ9
UniRef90_G2QSU3
UniRef90_E6ZKE5
UniRef90_UPI0001F2A492
UniRef90_A0A017SAS4
UniRef90_W3XJW2
UniRef90_Q5B4P4
UniRef90_A0A024J832
UniRef90_K2R7Z7
                                    TSPKYSPTSP
UniRef90_W6XXI1
UniRef90_G3XSV0
UniRef90_A5DZ99
UniRef90_V5E5S0
UniRef90_B0CT77
UniRef90_G2Q3H0
UniRef90_A0A017SES3
UniRef90_G7DWE6
UniRef90_S3C7F7
UniRef90_S7RQK0
UniRef90_C4R011
UniRef90_N1PZK0
UniRef90_N1PZK0
UniRef90_A0A024SI31
UniRef90_UPI00022563B0
UniRef90_E9EU40
UniRef90_I8U8B9
UniRef90_G7X913
UniRef90_S8AIQ1
UniRef90_K3V3F6
                                   A H P A L H P N S P S S Q H L Q S A H P T S Q L
                                    TSPAYSPSSPEFHSPTSPRQK
UniRef90_K3V3E6
UniRef90_D4B4E1
UniRef90_S3BSR0
UniRef90_R9AIX7
UniRef90_W9YSS1
UniRef90_I1GJM7
UniRef90_UPI000441852F
UniRef90_UPI000359623A
UniRef90_UPI000359623A
UniRef90_S0DPN8
UniRef90_S8BT75
UniRef90_G0RVW4
UniRef90_R9NZZ0
UniRef90_F9X8Y2
UniRef90_F0X8M3
                                    TSPQYSPNSPQDNSGS
UniRef90_Q6CWF0
UniRef90_A0A024JGM2
                                    NSHNSKLNG
UniRef90_A7SXN4
UniRef90_S3CZ54
                                    P S S N P K P N N P S S N P K S N S N P K S N N P A S N P
UniRef90_F9F5F4
UniRef90_J9VLZ9
UniRef90 UPI00015C36A5
UniRef90_E3RXL2
UniRef90_UPI0003F0B822
UniRef90_S0ENB8
UniRef90_D4D1Y9
UniRef90_U3JE66
                                    PVS Q P S P HVP N P N P L P M S P T L S P C V P T L S P C P Q P S L P V S
UniRef90_U3JE66
UniRef90_W5MCF5
UniRef90_U7PRI0
UniRef90_F9WYB9
UniRef90_F7VKD9
UniRef90_B8N5T4
UniRef90_Q1K521
UniRef90_UPI000258DB64
UniRef90_S0DP32
UniRef90_G4N0R9
UniRef90_G5N7Z5
UniRef90_G3ARF6
                                                QNPSTPSNYS
                                    PTVQPTEQPTSQPTAQPTEQPTSQPTAQP
UniRef90_G3ARF6
                                                               NILYKAFMSGVQAISPVLHPPNV
UniRef90_C5G1A6
UniRef90_Q4PD88
UniRef90_L0PB90
UniRef90_A5ABU4
UniRef90_S8C4B6
UniRef90_B0Y786
UniRef90_F9X2S7
                                    T S P A Y S P T S P S P R Y S P T S P R Y S P T S P T Y S P S S P N Y S P \squareS
UniRef90_F9GGM0
UniRef90_UPI0004560555
UniRef90_G3JTX1
UniRef90_G9N831
UniRef90_U7PL37
UniRef90_G4TJF5
UniRef90_X0KUU7
UniRef90_N4TWS3
UniRef90_D5GHU7
UniRef90 R7SBF8
UniRef90_UPI0002C5677B PSSQTGPSSP
                                                                              GTTLGVTSPTSQTGPSS
UniRef90_I2G353
UniRef90_B0CVQ1
UniRef90_J9VK46
UniRef90_V5IRC7
```

VS APSPQAPGGLTRHPTNAPLPSRPM

UniRef90_F9XJ13 UniRef90_Q5AXZ8 UniRef90_Q2EG98 UniRef90_G3AZ37 UniRef90_G3AZ37
UniRef90_W9NCJ9
UniRef90_G2QSU3
UniRef90_E6ZKE5
UniRef90_UPl0001F2A492
UniRef90_A0A017SAS4
UniRef90_W3XJW2
UniRef90_Q5B4P4
UniRef90_A0A024J832
UniRef90_K2R7Z7
UniRef90_WXXI1 UniRef90_W6XXI1 UniRef90_G3XSV0 UniRef90_A5DZ99 UniRef90_V5E5S0 UniRef90_B0CT77 UniRef90_G2Q3H0 UniRef90_G2Q3H0
UniRef90_G2Q3H0
UniRef90_G2Q3H0
UniRef90_G7DWE6
UniRef90_S3C7F7
UniRef90_S7RQK0
UniRef90_C4R011
UniRef90_N1PZK0
UniRef90_N1PZK0
UniRef90_UP100022563B0
UniRef90_E9EU40
UniRef90_E9EU40
UniRef90_G7X913
UniRef90_G7X913
UniRef90_S8AIQ1
UniRef90_S8AIQ1
UniRef90_S8AIQ1
UniRef90_D4B4E1
UniRef90_D4B4E1
UniRef90_S3BSR0
UniRef90_W9YSS1
UniRef90_W9YSS1
UniRef90_UP1000441852F UniRef90_UPI000441852F UniRef90_UPI000359623A UniRef90_UPI000359623A UniRef90_S0DPN8 UniRef90_S8BT75 UniRef90_G0RVW4 UniRef90_R9NZZ0 UniRef90_F9X8Y2 UniRef90_F0X8M3 UniRef90_Q6CWF0 UniRef90_A0A024JGM2 UniRef90_A7SXN4 UniRef90_S3CZ54 UniRef90_F9F5F4 UniRef90_J9VLZ9 UniRef90_UPI00015C36A5 UniRef90_E3RXL2 UniRef90_UPI0003F0B822 UniRef90_UPI0003F0B822 UniRef90_S0ENB8 UniRef90_U3JE66 UniRef90_U3JE66 UniRef90_U3JE66 UniRef90_W5MCF5 UniRef90_U7PRI0 UniRef90_F7VKD9 UniRef90_B8N5T4 UniRef90_UF1000258DB64 UniRef90_UP1000258DB64 UniRef90_G4N0R9 UniRef90_G5N7Z5 UniRef90_G3ARF6 UniRef90_C5G1A6 UniRef90_Q4PD88 UniRef90_C5G1A6
UniRef90_Q4PD88
UniRef90_L0PB90
UniRef90_A5ABU4
UniRef90_S8C4B6
UniRef90_B0Y786
UniRef90_F9X2S7
UniRef90_F9GGM0
UniRef90_UPl0004560555
UniRef90_G3JTX1
UniRef90_G3JRX1
UniRef90_G9N831 UniRef90_G9N831 UniRef90_U7PL37 UniRef90_G4TJF5 UniRef90_X0KUU7 UniRef90_N4TWS3 UniRef90_D5GHU7 UniRef90_R7SBF8 UniRef90_UPI0002C5677B UniRef90 I2G353 UniRef90_B0CVQ1 UniRef90_J9VK46 UniRef90_V5IRC7

```
10
UniRef90_UPI00034F9E12
                                                             PKQPPPSSTTAPRKKR
NGSVNGMTTTTPSNGGSNQKSAGPSP
FQSEASGASDATPTSGPPPASYMPPGPPVASGTPRKA
PAQSANEGGSDNEEGTYRPRKRQ
UniRef90_B8MRH1
UniRef90_B6QNI6
UniRef90_S8AST1
UniRef90_L2GFJ8
UniRef90_T2BQR5
UniRef90_E4UX16
                                                                                                                                     TSDPVSDTSVRVMPEPSQKR
UniRef90_A2R6H6
UniRef90_K5WK28
UniRef90_UPI0003F12BD6
                                                                  HPSPTERSHRSPSQRSHRSPSQRDHPSSSERSHRSP
SNQHRPSDSSRSLERER
UniRef90_J4KQ01
UniRef90_R9NX97
UniRef90_V5E3W2
                                                 PRPPVASTSAPPATSAGPSTTVSGSNATSSPKESNPDKMDPNHPPNTSHVKKQEDQDGPNDTSKAAEKRDPKPVVKTL
DAQQSSSHARR
UniRef90_F8NLL7
UniRef90_Q0U0H0
UniRef90_UPI0003AFE000
UniRef90_G8YDB0
                                                          DVKLESNTPEEAQRSANEDSKEGDFSDTVKNKPSKRRMQSMGRSNSESSNPVSAVTTSFRARA
UniRef90_S3CKX6
UniRef90_S3C8F4
                                                                                                                                                                               R S K
A S Q S P C R R P R
R S G
UniRef90_G7XQ90
UniRef90_G9NG65
UniRef90_G1X201
UniRef90_E4UPU8
UniRef90_W2RRT3
UniRef90_Q4PCF4
                                                                  D S P P Q S A E E K P S K D A A Q K A K G P R
T D P K V D A T T K P S P S K T S S K M H
S A N A A P P A S M T S N P D D T S L S S N T A E A T R T N P P P K K A
UniRef90_Q4PCF4
UniRef90_UPI0003EC563C
UniRef90_S0EDN1
UniRef90_G4T7Z5
UniRef90_L8X1G3
UniRef90_W3XLV5
UniRef90_B0XWK6
UniRef90_A0AQ1F8
UniRef90_A0A024SNH5
UniRef90_A0A017SQW1
UniRef90_M9LTH7
UniRef90_M7WW97
UniRef90_UPI00020391EF
UniRef90_UPI00020391EF
UniRef90_UPI000203D26AB4
UniRef90_UPI0003D26AB4
UniRef90_N1QEP6
UniRef90_M4FVF6
UniRef90_M4FVF6
UniRef90_A0A010S3T2
                                                                                                    M S S S T Q D Q P R P R K R R P A Q S T A L P T N S W S D Q P P T Q A G N A R D R P T D P S D Q S G L E G G K K S A A T T T K G Q K R
                                                PQSGPSAGIQKGR
PQSGPSAGIQKGR
STLESVSPAKEAAPKP

MADHNVSSPHHPSNQTTGPDAHYGPVMAPGDAGTPLLNPR
MDSELPRTRALHRR

MSASTSHSTSQPPQLHPSTSASTSNAPSSPDKSNEDDADK
DRTQTTTGTAQRFSDALASGQPLSSVGPGHAPSLER
UniRef90_A0A010S3T2
UniRef90_U3KF34
UniRef90_U3KF34
UniRef90_U3KF34
UniRef90_U3KF34
UniRef90_M2SBP3
                                                                                   PPAGNSGSAPNPKMR
SKSKKPRKPTAKPSPSSSTQGNTGVKKSEKLH
UniRef90_C5FIM0
UniRef90_R9P7P9
UniRef90_UPI0003AB8F3B
UniRef90_I8TUM0
UniRef90_A0A010RWA5
UniRef90_F0UFM7
                                                      T S T T P T E P G R D C S G V K Q Q D V E Q T A L D D V P A Q K V P K S P E Q T I S S P P A S Y P R K L L Y S S L P A Q L T M G P K S G N G T R P R H A S D D A A G G H G S S R A A S S S H D Q P A E S S H R K R
UniRef90_U3KJE8
UniRef90_UPI000440FD9E
UniRef90_A0A024JHF4
                                                 P P A P S P A T N V L
MS S P D S V D N A P G T P L T P G A A L S S G G R V L K P R S D T G G L R K N
UniRef90_G8JR31
UniRef90_UPI000359744B
UniRef90_UPI00034CBEA5
UniRef90_UPI00034CBEA5
UniRef90_W9MEI0
UniRef90_Q2H7B8
UniRef90_UPI00046C14AC
UniRef90_M2SYJ1
UniRef90_B6QE70
UniRef90_C5M7V9
UniRef90_L2GBZ3
UniRef90_L2GBZ3
UniRef90_S3CYG2
UniRef90_A0A026WDN4
UniRef90_A1DJX4
UniRef90_F0XAR5
UniRef90_F0XAR5
UniRef90_E6ZV73
UniRef90_W9XKM4
                                                 MSPHDSSTSHLGGGAGADANKRSADEANVDAQNAAKRKR
DRPRSKR
                                                                                                                                                          P R P K K P G V E P K
P K R P G A P A P K
P Q S S S P S K S A A G V V K
S N Q S Q P R
                                                              MDSPEFSPEPFEEDDVDSKKPGESSTAKKPRTKALGR
                                                              MSIAPSSVERSPRAKPRPAAMTVAASAASTPAADIPGPASSHVPRHIHYDAPPSMRPVSDVESPETNTPIKR
UniRef90_W9XKM4
UniRef90_I2H7K7
                                                                                  T S K G K R K F H
A G A G S A P K K
P D G S G K G T P A G R K R S Q K N S D S K K K L
G S G P D A Q R S W D P S P S S N G E A A T V G S K R K R N F S
P G A S A Q T K P R G E R Q P S V S R R
P T T V R K R K
T G H G S H T S Q W A A Q G L P P G H L P
S V P P P R Q L R F V N N Q G H P P S K R
Q P P K P V K
T R R L
P T P H G G D A S
M D M D D A P S P S Q P L A G P S A F K K
UniRef90_M9LSZ6
UniRef90_UPI0003F4987E
UniRef90_W9Z4H3
UniRef90_A1CGA9
UniRef90_A5E0Y9
UniRef90_M5G621
UniRef90_M1WE86
UniRef90_S9Q4V4
UniRef90_UPI0004412B67
UniRef90_W9YE37
UniRef90_Q5KN06
UniRef90_E6ZMJ9
                                                 MDGGDQHSPIQAQSSPASSPIPAPEPTPKNVPPLKVKGPR
HASSHVPYHRRYDAPPHIRPAPLAESVTTSTPIKR
MPEEKGLTATHDDGQPAKRKR
UniRef90_C0RZ82
UniRef90_R9PBA1
UniRef90 I2G3N4
UniRef90_F9XC94
                                                                                                                                                                                                         RHKR
UniRef90_Q6CK33
UniRef90_M9PCJ6
```

NRSNSSANSPQFVPSSGTNGAPSPNVSVRTQ

	50 60 70 80
UniRef90_UPI00034F9E12 UniRef90_B8MRH1	ACLAHSPTSQLVSHTRPPPSLSRTLAHLPACLAHS KRKATGCFTCSSAGLSCDRRRPY CSQCLDHGRDCAGYK
UniRef90_B6QNI6	L A <mark>C</mark> L A <mark>C</mark> R Q K H L K <mark>C</mark> D G R Q P I
UniRef90_S8AST1 UniRef90_L2GFJ8	A V S K A C E H C K V K K A R C D S S R P Q C G M C Q R K G V V C E Y K E
UniRef90_T2BQR5 UniRef90_E4UX16	KRPŘEA <mark>CLNCRSL</mark> KTR <mark>CLPÝGDŘPTČÁRC</mark> TKYĞL <mark>EC</mark> QYIR KRVGKACDRCRLKKSKCDGDLP CARCSA <u>D</u> NVVCVYGE
UniRef90_A2R6H6	KRAKTGCLTCRARKVKCDETRP RCNHCRNLGVECRWPE
UniRef90_K5WK28 UniRef90_UPI0003F12BD6	S E R S H G S P S Q R S H R S P S Q R D H P S P T E R S H R S
UniRef90_J4KQ01	KRAARACD CRRQKERCD G G VP CRRCFRLGRRCEFS G
UniRef90_R9NX97 UniRef90_V5E3W2	PKRTQTCFRCRQSKVKCVFEDNASSCRRCLRLGVSCELQG
UniRef90_F8NLL7 UniRef90_Q0U0H0	NR NACRKQKMRCEGAD SPPCRRCRHAGLECLFEK HKTSMACNYCRVKKLKCDGAHP CANCKDHGMSCAFAA
UniRef90_UPI0003AFE000	
UniRef90_G8YDB0 UniRef90_S3CKX6	RKVELACVYCRRSHMLCDDSRP KRTAHACDACRMRKSRCDGQQP CAWCTENDVDCLYGR
UniRef90_S3C8F4 UniRef90_G7XQ90	LRISKACQECRARKIRCDGGEP CQRCQFRDVPCEYRK TRKSRGCITCRKRHLKCD EVKPICGPCVKKDKTCEYPA
UniRef90_G9NG65	PRSKNGCSTCRERRVRCD ERRPTCGHCDREKEECEYQP KRAPKACGNCHRRKVRCDAHLDGQPCSYCRSTGHECVLLP
UniRef90_G1X201 UniRef90_E4UPU8	KRTKTGCIITCRKRRIIKC GFFKPRCNNCIIKSKRFCFGYG
UniRef90_W2RRT3 UniRef90_Q4PCF4	KRTKTGCLTCRKRRIKC GEEKPRCNNCIIKSKRECEGYG RRSRSGCFTCRLRRKKCD EGRPKCKACRHLGLTCEYKR TKKAVSCESCRRRKLKCDRGWPCGACRDRGESSKCEWAEG
UniRef90_UPI0003EC563C	
UniRef90_S0EDN1 UniRef90_G4T7Z5	HRIAES <mark>CKLC</mark> RSKKTR <mark>C</mark> DGRRP T <mark>C</mark> SS <mark>C</mark> QSKNTA <mark>C</mark> EYNE ARVYVACAACRSRKTK <mark>C</mark> DGLKPEPESEKY <u>KL</u> AN <u>GIC</u> LYDS
UniRef90_L8X1G3	RKVNHA <mark>CLYC</mark> RRSHMT <mark>C</mark> DEGRP CQRCIKRDIGHL <mark>C</mark> HD
UniRef90_W3XLV5 UniRef90_B0XWK6	ARSSAA <mark>CDTCRLRKTKCVLRPGEERCILC</mark> AFHELECVFDPQRTLTACLTCRRRKVKCDHAQPVCTPCQRGGRVCTYVT
UniRef90_A9Q1F8 UniRef90_A0A024SNH5	RKFRSACDNCHRSKTRCSGGNP CSRCQFFIVITKCTYSY
UniRef90_A0A017SQW1	PRASRACET CRIVIRKTK CDQAQP CSYCAYHCL IDCIVIYRT
UniRef90_M9LTH7 UniRef90_M7WW97	PKRTQTCFRCRQSKVKC GKACQTCRRRRVKCDGVKPVCGRCAKSARSFTCVYDA
UniRef90_UPI00020391EF UniRef90_UPI0003D26AB4	
UniRef90_N1QEP6	KRTKTG <mark>C</mark> LTCRKRRIKC GEQRPICSNCIKSKRHCEYSQ
UniRef90_M4FVF6 UniRef90_A0A010S3T2	KKPRACESCRGLKVRCDPDPPEGSCRRCAKAGRSCVVTQ RVRTGCLTCRGRKKKCDETKP RCRGCERNRLECRWP
UniRef90_U3KF34	NENT OF THE WAY TO A CONTROL OF THE
UniRef90_U3KF34 UniRef90_U3KF34	
UniRef90_U3KF34 UniRef90_M2SBP3	KRTKTG <mark>CL</mark> TCR <u>K</u> RRIKC GEERPTCANCIK <u>S</u> K <u>R</u> QCEGYN
UniRef90_C5FIM0	RRSRSG <mark>CFTC</mark> RIL RRKK <mark>C</mark> D EGHPA <mark>C</mark> RACKNIL K L RCEYER
UniRef90_R9P7P9 UniRef90_UPI0003AB8F3B	VKŠA <mark>C</mark> TF <mark>C</mark> RŠRKSR <mark>C</mark> DGNKP <mark>C</mark> SA <mark>C</mark> VG RGRPDE <mark>C</mark> LYT
UniRef90_I8TUM0 UniRef90_A0A010RWA5	RRTKTGCLTCRQRRIKC GEEKPVCKNCVKSKRECKGYA
UniRef90_F0UFM7	RRAVEACSFCRRRKIKCNNEQPTCANCKTYGKDCVYEPRRRTIACAPCRNRKVKCDFGYPACNRCMKGPGPEACMYES
UniRef90_U3KJE8 UniRef90_UPI000440FD9E	LPKGEACNPCRK <u>K</u> KK <u>K</u> CTGERPVCTT <u>C</u> ANGKGNEE <u>CK</u> YP <u>E</u>
UniRef90_A0A024JHF4 UniRef90_G8JR31	PRRAKA <mark>C</mark> NHCRMLKVRCNPNDPSQPCVRCSKGKRECVFHV
UniRef90_UPI000359744B	
UniRef90_UPI00034CBEA5 UniRef90_M9MEI0	PQSCDTCRSRKIKCVRLHVDGRCVQCRALDAKCTFDY
UniRef90_Q2H7B8 UniRef90_UPI00046C14AC	GKRAKA <mark>C</mark> DA <mark>C</mark> FRSKLA <mark>C</mark> DGSSP CARCHSRGMTCVYTR
UniRef90_M2SYJ1	RRSRNGCWPCKARKVKC GEEKPSCTNCERQGEACDYS
UniRef90_B6QE70 UniRef90_A0A010R685	PRSRHGCWPCKRRKIKC TEEKPSCANCLRQGDTCDYSE HR ACDECRSRKLACTKEPEG CSRCRREGURCVYSA
UniRef90_C5M7V9 UniRef90_L2GBZ3	RVARRACLSCREKKIKCDGEPMITTCSNCRFLDIECVFVQ YNP
UniRef90_S3CYG2	TRTKSG <mark>CLTC</mark> RKRRIK <mark>C</mark> GEERPT <mark>C</mark> HNCTKSKRK <mark>CV</mark> FKD
UniRef90_A0A026WDN4 UniRef90_A1DJX4	KLRTACDNCQLSKVRCSRGKP SCWRCSQSGVQCVYSP
UniRef90_F0XAR5 UniRef90_E6ZV73	R F R P R A C A R C S T S K L K C N W V S E P G P C E R C A K S K T Q C V L P P R V S L A C L A C R N R K S R C D G V R P T C K T C A T M K L D C K W P E
UniRef90_W9XKM4	
UniRef90_I2H7K7 UniRef90_M9LSZ6	NKSKNGCANCKRRRVKCD EGKPTCQKCLNMKLQCVYLP VSCQPCREAKVKCIPSPTGASCTRCVKLDRECVYRT
UniRef90_UPI0003F4987E UniRef90_W9Z4H3	TRGSRACII A CRKIK MRCVPDEPNGPCRRCKVGGHECVFEE NRTKTGCLTCRARKKKCDEQHPTCANCIIRGGFEC
UniRef90_A1CGA9	V TT L RACTSCRHRK KCDGEKPCEACRWYKKAD QCHYSD
UniRef90_A5E0Y9 UniRef90_M5G621	K K L E L A C V Y C R R S H M L C D E S R P C C R C C N G T V C V F E K C C R C C C C C C C
UniRef90_M1WE86	RRII NAA <mark>C</mark> LIT <mark>C</mark> RRRKTR <mark>C</mark> AGERP VI <mark>CSTC</mark> TKNGHHCTRTD
UniRef90_S9Q4V4 UniRef90_UPI0004412B67	RRSHEA <mark>C</mark> AR <mark>C</mark> RSKK K <mark>C</mark> DSKHP
UniRef90_W9YE37 UniRef90_Q5KN06	LRTRTGCMTCRKRHLKCN EEKPVCGPCARSNHDCVYAD APAKVSCLQCRAAKRKCNTPDANTTCRRCQGHGLVCQYTK
UniRef90_E6ZMJ9	
UniRef90_C0RZ82 UniRef90_R9PBA1	RRTKTGCLTCRKRRLKC GEEKPTCNNCKKSKRECEGYA PRVSLACLACRNRKSRCDGVRP TCKTCATMKLACKWPE
UniRef90_I2G3N4 UniRef90_F9XC94	LRIPKSCIPCLKGKRACDRGRPACGRCARSGQSNDCSYDLKVMRACDGCRKRKIRCDGQNGPWPCGACVRLKLKCVPPT
UniRef90_Q6CK33	KPIPTACVFCHEKHLQCDLGRP CQNCSKRGIGDTCER
UniRef90_M9PCJ6 UniRef90_Q6CMR8	NTLTKPCDHCRRRRTKCLVPPESDSCVPCDTKGLKCTFSE
~ ~ ~	

```
100

LAHLPACLAHSPTSQLVSHTRP

VSDGIQPTSPPSPGTKQRKQS

PSTEQQIVNIDPQIFNLDGRPP

MNERFDSLNKIRQSQDSAYKEQ

RLSLLEDNMDNMSRTVQEQTQP

TDDLSNLESEGSGPSK

QQTNKWPGKPLNNSHNGHPLTHD

PRLSACFPCRYARSKCSKDRPTC

QPD

ERSHRSPSQRSHRSPSQRDHPSP

ERSHRSPSQRSHRSPSQRDHPSP

ERSHRSPSQRSHRSPSQRDHPSP
                                                                                                                                                                                                                                                                                                                    90
RPPPSLSRTL
GKFRGLSLP
PSKKRRANPPARLELEDKM
GYGKAVEQR
                                                                                                                                                                                                            SQLVSH
LTWGVS
SRRGYK
PHKQEK
QPGLR
RGKP
RTKTYP
UniRef90_UPI00034F9E12
UniRef90_B8MRH1
UniRef90_B6QNI6
                                                                                                                                                                              PTTPPGKPKAPA
                                                                                                                                                                                                                                                                                                       TRGPAG GS
UniRef90_S8AST1
UniRef90_L2GFJ8
UniRef90_T2BQR5
UniRef90_T2BQR5
UniRef90_A2R6H6
UniRef90_A2R6H6
UniRef90_UDIO0031
                                                                                                                                                                                                                                                                                                                                      YVELLEHQQTNKWPTPPSTGGPRLSA<mark>C</mark>F
UniRef90_K5WK28
UniRef90_UPI0003F12BD6
UniRef90_J4KQ01
UniRef90_R9NX97
UniRef90_V5E3W2
UniRef90_F8NLL7
UniRef90_Q0U0H0
UniRef90_UPI0003AFE000
UniRef90_G8YDB0
UniRef90_S3CKX6
UniRef90_S3C8F4
UniRef90_G7XO90
                                                                                                                                                                                  S Q R S H R S P
P S R R R R P P
                                                                                                                                                                                                                                                                                                                     QRDHPSPTE
SVSPTHATS
                                                                                                                                                                       S R S H R S P S Q R D H P S P T E R S H R S P S Q R D H P S P T E R S H R S P S Q R D H P S P T E R S H R S P S Q R D H P S P T E R S H R S P S Q R D H P S P T E R S H R S P S Q R D H P S P T E R S H R S P S Q R D H P S P T E R S H R S P S Q R D H P S P T E R S H R S P S Q R D H P S P T E R S H R S P S Q R D H P S P T E R S H R S P S Q R D H P S P T E R S H R S P S Q R D H P S P T E R S H R S P S Q R D H P S P S D D T T S S S Q R S H R S P S Q R D H P S P S D D T T S S S Q R S D S T T E R S D R R R R P P S S V S P T H A T S S S Q R S D S T T E R S D R R R R P P S S V S D D T T S S S Q R S D S T S R S D S T S R S D S T S R S D S T P S S S D S T P S S D S S D S T P S S D S R T T T S S D R R R R R P S S S D S R T E R S D R S D S T P S D D S T N S D S T T T D S S D S R T E R S D R S D S R T E R S D R S D S R T E R S D R S D S R T E R S D R S D S R T E R S D R S D S R T E R S D R S D S T P S D D S T N S D S D S T T T D S S D S S D S T P S D D S T N S D S D S T T T D S S D S R T T T D S S D S S D S T P S D D S S D S T T T D S S D S R T T T D S S D S S D S T P S D D S D S D S T T T D S S D S D S T T T D S S D S T T T D S S D S T T T D S S D S S D S T T T D S S D S T T T D S S D S T T T D S S D S T T T D S D D S D T T T D S D D D T T T D S D D D T T T D S D D D T T T D S D D D T T T D S D D D T T T D S D D D T T T D S D D D T T D S D D D T T D D S D D D T T D D S D D D T T D D S D D D T T D D S D D D T T D D S D D D T T D D S D D D T T D D S D D D T T D D S D D D T T D D S D D D T T D D S D D D T T D D S D D D T T D D S D D D T T D D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D D T T D S D D T D S D D T D S D D T D S D D S D D S D D T D S D D S D D S D D S D D S D D D T D S D D S D D S D D S D D S D 
                                                                                                                                                                                                                                                                                                         S
S
 UniRef90_G7XQ90
UniRef90_G9NG65
UniRef90_G7XQ90
UniRef90_G9NG65
UniRef90_G9NG65
UniRef90_E4UPU8
UniRef90_W2RRT3
UniRef90_Q4PCF4
UniRef90_UP10003EC563C
UniRef90_S0EDN1
UniRef90_G4T7Z5
UniRef90_L8X1G3
UniRef90_W3XLV5
UniRef90_B0XWK6
UniRef90_A0A017SQW1
UniRef90_A0A017SQW1
UniRef90_M9LTH7
UniRef90_MPLTH7
UniRef90_UP100020391EF
UniRef90_UP100020391EF
UniRef90_UP10003D26AB4
UniRef90_UP1003D26AB4
UniRef90_UP10003D26AB4
UniRef90_UP10003D26AB4
UniRef90_UP10003D26AB4
UniRef90_UP10003D26AB4
UniRef90_UP10003D26AB4
UniRef90_UP10003D26AB4
UniRef90_UP10003D26AB4
UniRef90_UP10003D26AB4
 UniRef90_UPI0003AB8F3B
UniRef90_I8TUM0_
 UniRef90_A0A010RWA5
UniRef90_F0UFM7
 UniRef90_U3KJE8
UniRef90_UPI000440FD9E
UniRef90_U3KJE8
UniRef90_UPI000440FD9E
UniRef90_A0A024JHF4
UniRef90_G8JR31
UniRef90_UPI000359744B
UniRef90_UPI000359744B
UniRef90_UPI00034CBEA5
UniRef90_M9MEI0
UniRef90_M2EYTB8
UniRef90_UPI00046C14AC
UniRef90_M2SYJ1
UniRef90_B6QE70
UniRef90_A0A010R685
UniRef90_C5M7V9
UniRef90_L2GBZ3
UniRef90_L2GBZ3
UniRef90_A0A026WDN4
UniRef90_A1DJX4
UniRef90_A1DJX4
UniRef90_F0XAR5
UniRef90_F0XAR5
UniRef90_W9XKM4
UniRef90_W9XKM4
UniRef90_W9XKM4
UniRef90_UPI0003F4987E
UniRef90_W9Z4H3
UniRef90_W7Z4H3
UniRef90_M5G621
UniRef90_M5G621
UniRef90_M5G621
UniRef90_M1WE86
IniRef90_S904V4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q P M S S
L Q S I
T P H G L
T P A S P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S D
D S
A R
                                                                                                                                                                                                                                                                                                                                                                                    S S S D S T P L Q M S S S D S T P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
S
P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N T
T H
                                                                                                                                                                                 V P K R P G P Q S S F A K T A R K E A E A H A Q A H H K P T
V H G A [] T N A T T D P P A A A P S T S T V L K
                                                                                                                                                                                                         RLT WGGRARRDKIDT CLDPSSATEGSPRTKRKSSSGFVSFATKPRLSGLVSGPEKQMGRPRKR RHVEDAEGQSRKKRDPDSPDLKKSKSLHLNQYDHEQSAFARTPSTASTTSLPYLPHPSHRFQSANTYKPPVSSAATLAAKAHQSAARRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A C F Q V D D S P V D L D E D K P E N Q D S P P A Q Q Q P T S Y T P P Q E L T I I Q
                                                                                                                                                                                 I R
G R
Q K
S R
Q A
P I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      T S R
WS T
Q Q T
Q N N
A A S
T P L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EAPASP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YSSQTQ
                                                                                                                                                                          PINTYKPPVSSAATLAAKAHQSAARRNAQPQELTILIQTPL

LRRTGRPPKNSDNNAAAQREKATSNRSSTTNSSQNRSPRD
SLKPRGPRRG
NPTRVGQLEQKIDGIMSLLT

VDFRRAKTGDAARA
PPPPRYNQSPAIPPPSQDRSMSNWNDIPEGFVKPP

VTARNKPKISQVETLPNPSIMTSNSTINSNEKIKSESDIKK
HKRGRKPGKIKLQQLRRL
SN RGKRSTKKNEALAAKVGKMEALQRIGATLSNLDQT
KGYTRTSRRNIWPANGGPARPVMPLQSKDAPS
PRPSRRHVEKLSTTLDEYRSILERLFPSTSPEVLVSLSRE
PSNPRQRKKAASLRKSTSDDSSISPPAQLQQQQQQQDD
VAAETRNAKGAADEENTPPGDTGNHDDAAQTEGKFSDVIS
NPSTTPQTGESLSPVNVNINAALLPQQQSSPIFNMNAAPA
RHRQTLTPRGHQEQI EAQLSVCEAMBRACHISQPASPDFYYP
PSSIQAAATPYNPTSHPAPSLAEQPQSEHHLSQPASPDFYYP
HRRGRK
RAPIGRPKKRKGEQEAGPSSKSPVITSGKSKANRKHSASSS
QRVIFRNPVGPMSHLSHGQVESFQNTTFPATGPIDTKQRSQN
KPRKRGPKKKKRKEEVSASTKSEISNTINQQLIPVINTATPPSP
PSGKVAADVLQKQMNKRDRVDENINVHELLKRTKFSNNNQ
 UniRef90_M1WE86
UniRef90_S9Q4V4
 UniRef90_UPI0004412B67
UniRef90_W9YE37
 UniRef90_Q5KN06
UniRef90_E6ZMJ9
  UniRef90_C0RZ82
UniRef90_R9PBA1
UniRef90_I2G3N4
UniRef90_F9XC94
UniRef90_Q6CK33
UniRef90_M9PCJ6
```

P S G K VA A D V L Q K Q M N K R D R V D E N L N V H E L L K R T K F S N N N Q

160

R

LFGE

```
| SEPTIMENT | SEPT
UniRef90_UPI00034F9E12
UniRef90_B8MRH1
UniRef90_B6QNI6
UniRef90_S8AST1
UniRef90_L2GFJ8
UniRef90_T2BQR5
UniRef90_E4UX16
UniRef90_A2R6H6
UniRef90_K5WK28
UniRef90_UPI0003F12BD6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LSRTAL PTAL V QSVTTPDSEEDLSPPEARPPARPAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        I
R
S
G
E
UniRef90_UPI0003F12BD6
UniRef90_J4KQ01
UniRef90_R9NX97
UniRef90_V5E3W2
UniRef90_V5E3W2
UniRef90_F8NLL7
UniRef90_Q0U0H0
UniRef90_UPl0003AFE000
UniRef90_G8YDB0
UniRef90_S3CKX6
UniRef90_S3C8F4
UniRef90_C3V000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q Q P A F L R P C R P A S P P D G A M H P C R N S S N M F T S L P C R D P C R L D P
    UniRef90_G7XQ90
UniRef90_G9NG65
UniRef90_G1X201
UniRef90_E4UPU8
UniRef90_W2RRT3
UniRef90_Q4PCF4
UniRef90_W2RK13
UniRef90_Q4PCF4
UniRef90_UPI0003EC563C
UniRef90_S0EDN1
UniRef90_G4T7Z5
UniRef90_BX1G3
UniRef90_BXUK6
UniRef90_BOXWK6
UniRef90_A0A024SNH5
UniRef90_A0A017SQW1
UniRef90_M9LTH7
UniRef90_M9LTH7
UniRef90_UPI00020391EF
UniRef90_UPI00020391EF
UniRef90_UPI0003D26AB4
UniRef90_N1QEP6
UniRef90_N1QEP6
UniRef90_N4FVF6
UniRef90_U3KF34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                P V
G L
R G
L L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WEDDPLSQAQPPPPSZMSSEHAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                T A G T S P Q A E Q Q Q Q Q T Q T A Q R A P R
  UniRef90_C5FIM0
UniRef90_R9P7P9
  UniRef90_UPI0003AB8F3B
UniRef90_I8TUM0
  UniRef90_A0A010RWA5
UniRef90_F0UFM7
  UniRef90_U3KJE8
UniRef90_UPI000440FD9E
UniRef90_A0A024JHF4
UniRef90_G8JR31
UniRef90_UPI000359744B
UniRef90_UPI00034CBEA5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             D D
T Y
Q P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
Q
A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R M
P M
N S
UniRef90_UP100034CBEA5
UniRef90_UP100034CBEA5
UniRef90_UP100034CBEA5
UniRef90_UP100034CBEA5
UniRef90_UP100046C14AC
UniRef90_W2SYJ1
UniRef90_B6QE70
UniRef90_A0A010R685
UniRef90_C5M7V9
UniRef90_L2GBZ3
UniRef90_L2GBZ3
UniRef90_A0A026WDN4
UniRef90_A1DJX4
UniRef90_A1DJX4
UniRef90_F0XAR5
UniRef90_F0XAR5
UniRef90_E6ZV73
UniRef90_E6ZV73
UniRef90_W9XKM4
UniRef90_UP10003F4987E
UniRef90_UP10003F4987E
UniRef90_W9Z4H3
UniRef90_W724H3
UniRef90_A1CGA9
UniRef90_A5E0Y9
UniRef90_M5G621
UniRef90_M5G621
UniRef90_M1WE86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYTFINYEYMT N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SHASFLQGRNSGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NQSNDNSYLLMDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SST AAMPHAATHLDPRNPN SSCHUNGLASPRNPN RSSCHUNGLASPRNPN RSSCHUNGLASPRNN RSSCHUNGLASPRNN RSSCHUNGLASPRNN RSSCHUNGLASPRNN RSSCHUNGLASPRN RSSCHUNG RSSCHUNG RSSCHUNG RSSCHUNG RSS
  UniRef90_M1WE86
UniRef90_S9Q4V4
UniRef90_UPI0004412B67
UniRef90_W9YE37
UniRef90_Q5KN06
UniRef90_E6ZMJ9
    UniRef90_C0RZ82
UniRef90_R9PBA1
  UniRef90_F9XC94
  UniRef90_M9PCJ6
```

	210 220 230 240
UniRef90_UPI00034F9E12 UniRef90_B8MRH1	PSHSLFRTHSPSHSLSRT HSPSHSLSRTHSPGSLGALQYPTDGSLYTSNAPLVPPRTSTAATRAWAVPSTA
UniRef90_B6QNI6 UniRef90_S8AST1 UniRef90_L2GFJ8	D G V D V F Y S N F H P A H P F L P P P G M F Y K Y S P P P Y P Q M P T V T T A D S S L P P E P
UniRef90_L2GF36 UniRef90_T2BQR5 UniRef90_E4UX16	PHGTSFTDSFARAIPPALQPQPYQRPPSHSLPSYPTPPTA ESMDSTSDGTSPLSHTPDSSSPSSLSSPVLEDTSFVMDSF
UniRef90_A2R6H6 UniRef90_K5WK28	DRILIDDIV VIS AILI <mark>C</mark> ESQSSPTQAAAGAIV VITILISPRRSEILIPSQDS
UniRef90_UPI0003F12BD6 UniRef90_J4KQ01	R G G G S S R W S N A A A T A P P P T A R S H P P E A G S P L N S P P L A S R K R S H R S P S Q R S H R S P S Q R D H P S P T E R S H R S P S Q R S H R S P S Q G Q N E T T K P S L V P L S S L P P R S
UniRef90_R9NX97 UniRef90_V5E3W2	F NA Q S G H H H S H H P N N H N T Q P E L L S H Q Q Y G Y P A A S A A F A P N G L L S L V A S T N G A Y G S P S R S R I T D M E P P G S L S L P S P V Q P H T A S E F H P P Q L P P S Y V N S T S P G Q Q Y G F S G
UniRef90_F8NLL7 UniRef90_Q0U0H0	ILIHIVIE A E E AILISILIP N A S D S WP LILL ILIS PILIC N N N Y D A G S
UniRef90_UPI0003AFE000 UniRef90_G8YDB0	PPSTGLAGPPEVAGYTAMHS PPSAMAHPQRTPQTPLPAP YSFGLNNNNMGSLGVGNTTSTNQNVMPGSSNSNNLNGVFS
UniRef90_S3CKX6 UniRef90_S3C8F4	RLIASFQSTLNF PGAASTASNNARSGLHN PSVAATHRASPSVFLQLYYGP
UniRef90_G7XQ90 UniRef90_G9NG65 UniRef90_G1X201	S V N N S G T Q N Q S V D H L E I D G L S Q P Y S L Q Y A T Q V L D S T L D S S P L P D S A F S F T S L G F T S A L S P N F F T S D Q S S G W H M D G N A T L A G L E Q Q L T A Q N T P S S F R P R A D D H Q Q T R E N S T D R E Q E G K
UniRef90_G1X201 UniRef90_E4UPU8 UniRef90_W2RRT3	SAAAGTAHHYATST <mark>C</mark> SASYPSSEAPYPHQEYAYEDTNTGW GSMTQ <u>T</u> PVQYSQHPYEVDVRTERQMFVNDVPTRRDSSIST
UniRef90_Q4PCF4 UniRef90_UPI0003EC563C	YSSEELTR GTGPAAGQQGQRYPPGPPHQAHQTHSAPMQQQQQQAGQQS
UniRef90_S0EDN1 UniRef90_G4T7Z5	LHMPSFARYLRVWESPSNDQALDTTFAAS SPPISHQRLSNQPYILLSKSSTSNPTAQHGDDIHHPHNPY
UniRef90_L8X1G3 UniRef90_W3XLV5	FQPFAPGSIVQDSPQAPSQTPGPQPTMDIIDPDQSQPSPEY
UniRef90_B0XWK6 UniRef90_A9Q1F8	Y AL LA DEI H DVK ML LG D Q S S G A P A D S P P S D Q P T P P F P F T L P D AL DL N S S T N A L S C G E Q M D G T N W F N F E S L S D H D L C L D
UniRef90_A0A024SNH5 UniRef90_A0A017SQW1 UniRef90_M9LTH7	ETQKLTDEDAEDSDFEESPPIDSPFTATSSSVYDH DGLSGLNLHTNGTEFYGNSSNLAFLGNLYARARKHAGNRA
UniRef90_M9L1H7 UniRef90_M7WW97 UniRef90_UPI00020391EF	S S Y P S T H F S P R D S D R A N Q N S G D N G L L G S A V T Q N G H A S S P R N A A T S A A P T S S F A M P S L A T Q A H D V P V A S T P Q Y W A A A T T P T Q T V P S P T L N N S G Q Y S R Y P Y S N L N Q G L V N N T G
UniRef90_UPI0003D26AB4 UniRef90_N1QEP6	PAAPS SRPPS GPAAPS SRPPS GPAAPS SRPPS GPAAPS SR
UniRef90_M4FVF6 UniRef90_A0A010S3T2	A D L H S A Q K L A P S G A L D S A I P V A R P F L D E H S A Y G G S Q L I S G S A A A A A A A A V A P V A S A V E P P N H P A S T S D W R P V L S G N P I H T T T T A L G F Q D P S A F S V F N T E D P D H S P V Q P M S I F R D H H V P R S M
UniRef90_U3KF34 UniRef90_U3KF34	P V P P S P S Q S I S V P P S P S Q S I P V H L S P S Q S L P V H P S P S Q S P V P P S P S Q S I S V P P S P S Q S I P V H L S P S Q S L P V H P S P S Q S
UniRef90_U3KF34 UniRef90_U3KF34	PVPPSPSQSISVPPSPSQSIPVHLSPSQSLPVHPSPSQS PVPPSPSQSISVPPSPSQSIPVHLSPSQSLPVHPSPSQS PVPPSPSQSISVPPSPSQSIPVHLSPSQSLPVHPSPSQS PVPPSPSQSISVPPSPSQSIPVHLSPSQSLPVHPSPSQS PVPPSPSQSISVPPSPSQSIPVHLSPSQSLPVHPSPSQS LISPHHQAHAHPSTVSYFPQQSPVHISPSEQLSQRPNTSS DSSTSTFNTFQPPLAHAMLPSFA
UniRef90_M2SBP3 UniRef90_C5FIM0	DSSTSTFNTFQPPLAHAMDPSFA
UniRef90_R9P7P9 UniRef90_UPI0003AB8F3B UniRef90_I8TUM0	PPAQQSAAAFSINDPMHDPFASMPGFQAGGFLPYQLPDAA PFRPSIPTSLPSHSNPFRPSIPTSLPSHSNPFRPSIPTSL NYIHHGARDLSIQGYYPDIQGSNRPSHSSAAPQTLSNNTM
UniRef90_A0A010RWA5 UniRef90_F0UFM7	F S V A D L G P A D A S A R D
UniRef90_U3KJE8 UniRef90_UPI000440FD9E	T A P K S Q H S P K S Q H S P Q [P A Q P P N H S T A P N P S T A P K S Q H S P
UniRef90_A0A024JHF4 UniRef90_G8JR31	SPTRS LPLAYN LHPPPQTYD APQPMQAPHPKYD QAPQHKY
UniRef90_UPI000359744B UniRef90_UPI00034CBEA5	S S D S T P L Q M S S S D S T P L Q V S S S D S T Y Q P M S S S D S T S Q P M Q P Q P S T A T Q P A N S Q P Q P S T A T Q
UniRef90_M9MEI0 UniRef90_Q2H7B8 UniRef90_UPI00046C14AC	S G A T N F D A Y L N G S M L A M T P S H F A G M P A A S P F D F S P H N V G A F P F P P S P R P H N P P P H R A H P P E L T P P S N R S S P R S E P C T M E V P T P P S Q M G H A Q T L A G H P S S H N V P T S G H L P Q G P H S H P S
UniRef90_M2SYJ1 UniRef90_B6QE70	APTNTTTPPQQMPADVMFTHQKYRAFSRSP GPTYSDSY SQPVSFLRDTSTGDGLATEQGVYNA
UniRef90_A0A010R685 UniRef90_C5M7V9	DSADEELPQDINKSLTELLSAQVPETVPSLSPPTASETSS
UniRef90_L2GBZ3 UniRef90_S3CYG2	D N Y G A Y G T N G T G S T Y A A S D T S S A P Y P M Q S F K K D P T G L R Q S A S P [K P G G R S T R N P [] Q T S P E H Q H S V F G A S
UniRef90_A0A026WDN4 UniRef90_A1DJX4	QPPPTNYSQSSPQPPNAYPQSSPQPPNFSPQSSPQTRSAN GV SASDFSALDMDLDLDMGMWAVPAMSDLAMDYSQGAL
UniRef90_F0XAR5 UniRef90_E6ZV73 UniRef90_W9XKM4	GV SASDFSALDMDLDLDMGMWAVPAMSDLAMDYSQGALDSMSALTAGGPQSTPSCSHQQH ARLAETSFRASRSPTERHLPPLYAQDSRSARVDSHPRPYS
UniRef90_W9XKM4 UniRef90_I2H7K7 UniRef90_M9LSZ6	T L T S P I G Q N L M S P P L P R G P S P Y N A P P S H A P T A P N R Y A P A T P I I S N S S N G S N K S N N S N G L T T T T N V T S T A T A N T H Q L D F N M L V D M F D Q A S V S R V P D F F P T L S N P L K L L A Q A S
UniRef90_UPI0003F4987E UniRef90_W9Z4H3	DNVLSPNTDPGGRKHHRSLSGSKPAHRPSPLSFNETSGYR HLPPLSELGRSEQSFGGQPRDIPRPPTQGSVHSQHSAPPL
UniRef90_A1CGA9 UniRef90_A5E0Y9	DF NML VD ME DQA SVS RVPDEFPTLS NPLKL LAQAS DNV LSPNTDPGGRKHHRSLSGSKPAHRPSPLSFNETSGYR HLPPLSELGRSEQSFGGQPRDIPRPPTQGSVHSQHSAPPL LSARQPSSYLGVSSIHAVPKVIVWLDPGSLSYFSRTPPVA E FSSLNDFLSMIDDPELVNGALNDDPNGILNFGLGN
UniRef90_M5G621 UniRef90_M1WE86	GTDDTPSSPFFRRNYSHRVPYFFGPTALVPVVSVSDRRRS
UniRef90_S9Q4V4 UniRef90_UPI0004412B67	A P M C S T T S N P Y N Y A S V N S A P S T V T G S S Q H P L S S L R S S G S L D P E S S P F A P A S A Q A I K L H P T L V H Y N N G A G P S A P Q H P D S P G
UniRef90_W9YE37 UniRef90_Q5KN06 UniRef90_E6ZMJ9	ISKSGPLADAALAKWFGLLAGDAEFEGEPAPVSFNGRPHV RTNTIGRFGLHYSHVIPNEGDSSPFVGQPAPSS GLYDSPMHAPSAPESSSSSARLVSTPQHPAAFSMTPSDTT PSSQQSLDNTFLGDYEPSVIISKQMAHQSYMSSGQPQPEP
UniRef90_E6ZMJ9 UniRef90_C0RZ82 UniRef90_R9PBA1	PSSQSLDNTFLGDYEPSVIISKQMAHQSYMSSGQPQPEPHALHSQRSPSEQHLPPPRFPDRGSATRSYADIIYAHPRSSL
UniRef90_I2G3N4 UniRef90_F9XC94	QDADSNAVKSRI LHWPGPASHASPSSQLSPIHRHASASSR
UniRef90_Q6CK33 UniRef90_M9PCJ6	ANLPSLADKTPLEEFK NKPLSERAPQQGPHNLPSVPQPTYPHRNPPLQDVTYPAPQPSPPVPGLVNLPSEFNNGAAQKASPSSLYAFNQFNYGMNSGQPQQQPLTSGQ
UniRef90_Q6CMR8	E F N N G A A Q K A S P S S L Y A F N Q F N Y G M N S G Q P Q Q Q P L T S G Q

```
250
S H S L S R T H S P S H S L S R T H S P
A S T Y P V V S R H N A D Y H G R
                                                                                                                                                                                                                                                                                                                    UniRef90_UPI00034F9E12
UniRef90_B8MRH1
UniRef90_B6QNI6
UniRef90_S8AST1
UniRef90_L2GFJ8
UniRef90_T2BQR5
UniRef90_E4UX16
                                                                                                                               Y T S H M P P P D H R H T G Q H Y T Q H S S T Q L L P P L L M H S S S T Q S D R P Q T L S A S E P N Q A H S Q
UniRef90_A2R6H6
UniRef90_K5WK28
RKHPDESPGGNLSVSIPSPTMQQPSPKRRPTMQSPMTSMQUniRef90_UPI0003F12BD6
RDHPSPTERSHRSPSQRSHRSPSQRDHPSPTERSHRSPSQ
UniRef90_J4KQ01
UniRef90_R9NX97
UniRef90_V5E3W2
                                                                                                                                FANFAPDLNAVGAHLSGNPSFPRPTSSSTDHLQPGHWHQQ
UniRef90_V5E3W2
UniRef90_F8NLL7
UniRef90_Q0U0H0
UniRef90_UPl0003AFE000
UniRef90_G8YDB0
UniRef90_S3CKX6
UniRef90_S3C8F4
UniRef90_S3C8F4
                                                                                                                              S A S G P V L P P F S T I Q A M G S G N Q Q Q G N M A Q R Y N T V D A V Q Q H Q N V P N E M N P I L T P S A T L N T E P H E D D G S C I C P P E E E P T F E Y H H P Q H Q Q P H S M A P S A G Q M Y P G M G P Q R G A Q M G P N R P Q L Q Q Q Q L T P N I N T F P P N F A G D N G
                                                                                                                              S S N F S L L N S I Y H Q I E G T Q P G Q R R R P R A R G P S T A A S R R A S N G P T S
A S N V D T S P K I Q S I T Q N T N D G Q L V S I N S Q E G T G Q I S T G Y K P R Q V L I F N G E T A L D G A P T I A G L Q R M P N A N T A T L D P R L D S S L D D A G Q Q L Q P Y E A A A A Y Q A Q L S L Q G L H P H S S I V T P T P E Y V R F S T W V P P P P H A M L P S
 UniRef90_G7XQ90
 UniRef90_G9NG65
 UniRef90_G1X201
UniRef90_E4UPU8
UniRef90_W2RRT3
UniRef90_Q4PCF4
UniRef90_Q4PCF4
UniRef90_UP10003EC563C
UniRef90_S0EDN1
UniRef90_G4T7Z5
UniRef90_L8X1G3
UniRef90_W3XLV5
UniRef90_B0XWK6
UniRef90_B0XWK6
UniRef90_A0A024SNH5
UniRef90_A0A024SNH5
UniRef90_A0A017SQW1
UniRef90_M9LTH7

UniRef90_M9LTH7

Q P M H P L N H P Q N M P Q P Q N Q A Q S H L A P P A Q G T Y S S P S S M S P M P L Q P H G D L T R L V S A S D D P N S S V T H R P H T A N E Y P A A P G L T E P L L P S A T D A L E A V V H P H G P N L V N L Y F R F V H P S F P L L H K D V F L A K H R V S G S T V E S L T P W S P K S A E L E L F Y S N V D P M T R L V H K P T L Q R R F P G L H P S V E E H T P V F Q P L P S R P K H A UniRef90_A0A017SQW1
UniRef90_M9LTH7

UniRef90_M9LTH7

Q P M H P L N H P Q N M P Q P Q N Q A Q S H L A P P A Q G T Y S S P S M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M S P M
                                                                                                                             S H G P G D F Q S T A G P S Q P H V E D R H K E D S A K T T D R H R L T S E N P S T S T H L A A P L A S S N L A A A A S S S L D N D H A L P A D Q S S S T S A P Q P A A S T F A A A F D F S Q L D G L G S L S W D G P V D L T N Q N L G L T N N T P M N Q S V P R Y P N A V G F P S N S G Q G L M H Q Q P L H P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G P A A P S S R P P S G S R P P S G S G P M P V H L S P S G S L P V H P S P S G S G L P V H L S P S G S L P V H L S P S G S L P V H P S P S G S L P V H L S P S G S L P V H L S P S G S L P V H L S P S G S L P V H L S P S G S L P V H L S P S G S L P V H L S P S G S L P V H L S P S G S L P V H L S P S G S L P V H L S P S G S L P V H L S P S G S L P V H L S P S G S L P V H L S P S G S L P V H L S 
UniRef90_M9LTH7
UniRef90_M7WW97
UniRef90_UPl00020391EF
UniRef90_UPl0003D26AB4
UniRef90_N1QEP6
UniRef90_M4FVF6
                                                                                                                                                                                                                                                                                                                                                                                                                                                            T A D N P F S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S S Q S L P V H P S 
UniRef90_A0A010S3T2
UniRef90_U3KF34
UniRef90_U3KF34
UniRef90_U3KF34
UniRef90_U3KF34
UniRef90_M2SBP3
UniRef90_C5FIM0
UniRef90_R9P7P9
                                                                                                                              HQPHQLLMQPQLTQPNEAAAFSLNDPMHDPFARPLPQGSPSHSNPFHPSIPTSLPSHSNPFRPHSQVSSGLQSPQASYSAAPHQEQQTHQFTPAHPSISPS
 UniRef90_UPI0003AB8F3B
UniRef90_I8TUM0
UniRef90_A0A010RWA5
UniRef90_F0UFM7
                                                                                                                                QITAQPQIPAQPPNPSTAPKSQHSPKSQHSPQIPAQPPNHQPLGSSSSLAHALSPPSHTSAPSTSTFVPSAYIEPVPQYA
UniRef90_U3KJE8
UniRef90_UPI000440FD9E
UniRef90_A0A024JHF4
                                                                                                                              UniRef90_G8JR31
UniRef90_UPI000359744B
UniRef90_UPI00034CBEA5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         F D M Q A R
P Q Q M S S
T A T Q P A
UniRef90_UPI00034CBEA5
UniRef90_W9MEI0
UniRef90_Q2H7B8
UniRef90_UPI00046C14AC
UniRef90_M2SYJ1
UniRef90_B6QE70
UniRef90_A0A010R685
UniRef90_L2GBZ3
UniRef90_L2GBZ3
UniRef90_S3CYG2
UniRef90_A0A026WDN4
UniRef90_A1DJX4
UniRef90_F0XAR5
UniRef90_E6ZV73
UniRef90_E6ZV73
UniRef90_W9XKM4
UniRef90_U2H7K7
UniRef90_M9LSZ6
                                                                                                                                H T A A A N T P E S S T S G N P
                                                                                                                              QMPVGPNYSADPTSFYNRSTRSDSAASPLSSPQLPQHSLTGQQSFQDHNDRFPASSLSNFYPPYQST
YSQPSPQPLTSYPTPPQHGRNYSQSSLQQLQTFPQHSPQAGPTAMTGSETDEMGHLTLGSVLSSPSTAFDPHEPRGCAHR
                                                                                                                              SAGLPDAWRTSWTRDERVHPFPQDRRL ASEQQFGAPAGTQHTTASTTRPSIAPPPQSSSYQAPPPLTNPYAPTHQSQNYNQDNLLPSKINLTTSIGSYFNNNSNLTTQNNSSNNPKTSDESARRKGSVGRSGLHRQASLGAGHAPSSDEADGTTRMATSSVRGGNSQPPSHMSPQRTTTQAGPANLPHPQPPPHPHPPPPPPPPPPRRDSVRDYPAGSEDQNWHIQSSQQHPITPPSFNVGGGNSNTNLNNVLAFSPNTNMFGPTFPSNDDYQHDNNSSHAPS
UniRef90_IZH/K/
UniRef90_M9LSZ6
UniRef90_UPI0003F4987E
UniRef90_W9Z4H3
UniRef90_A1CGA9
UniRef90_A5E0Y9
UniRef90_M5G621
                                                                                                                               NSSHAPS
TAGSQSAASPMSSLSGGYHGSSNTTGSDGALEDLPFYDPS
PPNLLTMPFQPLEVSPFYFHYIIPSLRVFEFEDATALHFW
TIHSISTPHSVTTPHTAAAATPSSYAG PDQPGSHAW
QPDTRTSSLSELANAQSHLRAEFPSSLSGPAARTASHRIP
UniRef90_M1WE86
UniRef90_S9Q4V4
 UniRef90_UPI0004412B67
UniRef90_W9YE37
UniRef90_Q5KN06
UniRef90_E6ZMJ9
                                                                                                                             TPHSIISPALASTSYADAQHAQQQPAPHANPSASAARRFHLEQ SNSSSFQQASYEGQPSTNKFEPASVENDVPLAKTPWVRDDRPQPASQDCRTTSVARPLRPLPESRFSDSMRPINEAASSPAPDNRYAHISATPSIYN SHFQDAPAMEEAEVVLPASVLADPVARIPPEMMPSEEQQPAQQLLPIPEKLNSDHTSSNSSTGEFGSWTTEEYTKLNLPQPVSTPTNIPSQASPPISVPTPGIVNIPSIPQPTPQRPQSIQRQINYAQSSIQYPRSSYFVGPTSIFDINLINHM
 UniRef90 C0RZ82
 UniRef90_R9PBA1
 UniRef90_I2G3N4
 UniRef90_F9XC94
UniRef90_Q6CK33
UniRef90_M9PCJ6
```

```
290 310 310 310 A S P S H S L S R T H L L T A C L T L T H L L P A C S T H A F P V S H S P H P A S S L E D D D L E Q Q E Y V L S P V Y S D P V Y M D Q F P V F A Y Q P
UniRef90_UPI00034F9E12
UniRef90_B8MRH1
UniRef90_B6QNI6
UniRef90_S8AST1
UniRef90_L2GFJ8
UniRef90_T2BQR5
UniRef90_E4UX16
                                                    NILSMPGNLSTPSNDNSYRSHRQMPSPNQMVRLPPMDVGP
UniRef90_A2R6H6
UniRef90_K5WK28 A PVS H G T T Q S PVT H T P T H P P Q P I H P P I M H S S G S S H I P P UniRef90_UPI0003F12BD6 R S H R S P S Q R D H P S P T E R S H R S P S Q R D H P S P T E R S H R S
UniRef90_J4KQ01
UniRef90_R9NX97
UniRef90_V5E3W2
                                                     QGLSPASFDGSFRSPAHSHSPQPVSHPY
                                                                                                                                                                                        ENQPGLTLDQ
                                                    R QVLRTFSVPIPSSS
GPGSF
GHEAPASRLLQTQQQASRSGQHMQPAPMSFQGPPVGQHGI
UniRef90_F8NLL7
UniRef90_Q0U0H0
UniRef90_UPI0003AFE000
UniRef90_G8YDB0
UniRef90_S3CKX6
UniRef90 S3C8F4
                                                    TAGATPRTDR
UniRef90 G7XQ90
                                                    A F A F S P P L L S D S Q Q E L L L R S L S H V P S F T P P P S
UniRef90_G9NG65
UniRef90 G1X201
UniRef90_E4UPU8
UniRef90_W2RRT3
UniRef90_Q4PCF4
UniRef90_UPI0003EC563C RAPTPPPAQQGRPPSTGLAGPPEVAGYTAMHSPPSA MAH
UniRef90_S0EDN1
UniRef90_G417Z5 SVQAI SYEYVPSSGAYIQLIDENDQTTNDEHTLTLTDGL
UniRef90_L8X1G3
UniRef90_B0XWK6 FTQYI
UniRef90_B0XWK6 FTQYI
                                                     SVQAI SYEYVPSSGAYIQLIDENDQTTNDEHTLTLTDGL
UniRef90_A9Q1F8
UniRef90_A0A024SNH5
UniRef90_A0A0217SQW1
                                                   T QLS I VNLLYNPSYQSHSPLQSPNVGADTQRSAFQTDDELDQASRPLSAIQKLSGYPSDLPSPSPSGSLNQMNTQTMHPSQPQGTYVSPPPMSPLKAMSNPAGTPSSRPPSGPAAPSSRPPSGDSFEPPNGMPTVQTPGSSASSRTLAHSQQNSYATPQSQWQ
UniRef90_M9LTH7
UniRef90_M7WW97
UniRef90_UPI00020391EF
UniRef90_UPI0003D26AB4
UniRef90_N1QEP6
UniRef90_M4FVF6
                                                    T A QL I PLA F S S DL V L QL L L T Q S A V H R A A K S L V P T D H I A T K S Q S L P V P P S P S Q S I S V P P S P S Q S I P V H L S P S Q S L P V H P S P S Q S L P V P P S P S Q S I S V P P S P S Q S I P V H L S P S Q S L P V H P S P S Q S L P V P P S P S Q S I S V P P S P S Q S I P V H L S P S Q S L P V H P S P S Q S L P V P P S P S Q S I S V P P S P S Q S I P V H L S P S Q S L P V H P S P S Q S L P V P P S P S Q S I S V P P S P S Q S I P V H L S P S Q S L P V H P S P S Q S L P V P S P S Q S L P V H L S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V P S P S Q S L P V H L S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P S P S Q S L P V H P
UniRef90_A0A010S3T2
UniRef90_U3KF34
UniRef90_U3KF34
UniRef90_U3KF34
UniRef90_U3KF34
UniRef90_M2SBP3
UniRef90_C5FIM0
UniRef90_R9P7P9
                                                                                       LNSFSNTTLQHTPLQQAAPVSSAAHLSNATSPHSNPFHPSVPTSLPSHS
                                                   QQQAQ
TPTSIPS
UniRef90_UPI0003AB8F3B
UniRef90_I8TUM0
UniRef90_A0A010RWA5
UniRef90_F0UFM7
                                                    STAPNPSTAPKSQHSPQITAQPQIPAQPPNPSTAPKSQHS
AGPS SSQPTNFLTSWRDSQQPQTSDPSQQPS
UniRef90 U3KJE8
UniRef90_UPI000440FD9E
UniRef90_A0A024JHF4
                                                    PQLPHHQRLMQNRMSHHLPSDFDLQHPPYNPDPPYRQHHHTDSTPEQMSSSYSTPQPMSSSDSTPQPMSSSDSTYQPMSSSTSQPQPSTATQPANSQPQPPATSQPQPSTATQPANSQPQPPATSQPQPSTATQPANSQPQPPATSQPQPRSNAPLAALSHMANQQHVHSQSFRLHAPATCRSFSSKHSNTLGNASPQYRPQLSPQMSPPQMSPRPPAPQMSPPALSPPNPCRVSVQSLVHDLQNTNQGKSGTQYPIADSAST
UniRef90_G8JR31
UniRef90_UPI000359744B
UniRef90_UPI00034CBEA5
UniRef90_UPI00034CBEA5
UniRef90_M9MEI0
UniRef90_Q2H7B8
UniRef90_UPI00046C14AC
UniRef90_M2SYJ1
UniRef90_B6QE70
UniRef90_A0A010R685
UniRef90_C5M7V9
UniRef90_L2GBZ3
UniRef90_S3CYG2
UniRef90_A0A026WDN4
UniRef90_A1DJX4
                                                                          P G L Q R H P T N A P L P S R P M E E P T W D P S A A T P T D E D Q A
                                                    QSPFSEPSPQNSPYSQTSPQSLTNYSQPSPQQPPTYSHPL
AQNKPQTTLLSGLGALSTAMSTAMP
UniRef90_A1DJX4
UniRef90_F0XAR5
                                                   RTVPPQSRSRPSPTAIRCRDRAAQ
STRQTSYGPPQPTQTPQSATAPPIPTPQQQFISSGPPPAA
ISTTIPT
UniRef90_E6ZV73
UniRef90_W9XKM4
UniRef90_I2H7K7
UniRef90_M9LSZ6
                                                     ARSQP
UniRef90_UPI0003F4987E
UniRef90_W9Z4H3
UniRef90_A1CGA9
                                                    HHPPSAGAPQQTTH
                                                                                                                          WLPPQPPEYRPAYVSAPVEHHDSS
UniRef90_A5E0Y9
UniRef90_M5G621
                                                     N S G S T G T N T N G S T T G L L L L L L P Q P Q L Q L Q L Q L Q Q H F Q H H
                                                    N S M P V H P L I L N
S N T V P
S E S P H P R R K P A P S D
Y S H P V P P D S H L W Q S T A A L T L R P H
UniRef90_M1WE86
UniRef90_S9Q4V4
UniRef90_UPI0004412B67
UniRef90_W9YE37
UniRef90_Q5KN06
UniRef90_E6ZMJ9
UniRef90 C0RZ82
                                                    RSSSV
RRSSKPP
UniRef90_R9PBA1
UniRef90 I2G3N4
UniRef90 F9XC94
UniRef90_Q6CK33
UniRef90_M9PCJ6
                                                    D M L S T P N L S R N N S K T Y L N S N I A W S P S N M M K M D P E S Q R P I N S P G I I N P S V P Q P L P T A P S P G I I N I P S P Q P L P S P T P G V I N I
```

320

```
370
                                                                          380
                                                                                                 390
                                                                                                                         400
UniRef90_UPI00034F9E12
UniRef90_B8MRH1
UniRef90_B6QNI6
UniRef90_S8AST1
UniRef90_L2GFJ8
UniRef90_T2BQR5
UniRef90_E4UX16
UniRef90_A2R6H6
                            PIPA PLHQAIHNGAMHSPVQPMQTPPMQSSRPTSEKQSPSERSHRRISEKSHRSPSQRSH
UniRef90_K5WK28
UniRef90_UPI0003F12BD6
UniRef90_J4KQ01
UniRef90_R9NX97
UniRef90_V5E3W2
                            DSASSPQKPA
UniRef90_F8NLL7
UniRef90_Q0U0H0
UniRef90_UPI0003AFE000
                                 WAPPPSASHPLSSPPLTPQKVPHIQHSP
UniRef90_G8YDB0
UniRef90_S3CKX6
UniRef90_S3C8F4
UniRef90 G7XQ90
UniRef90_G9NG65
UniRef90_G1X201
UniRef90_E4UPU8
UniRef90_W2RRT3
UniRef90_Q4PCF4
UniRef90_U4PCF4
UniRef90_UPI0003EC563C
UniRef90_S0EDN1
UniRef90_G4T7Z5
UniRef90_L8X1G3
UniRef90_W3XLV5
UniRef90_B0XWK6
UniRef90_B0XWK6
                              GAQMGPNRPQLQQQGHAPASQGGDQRLLQTQQQASRS
                            Т
UniRef90_A9Q1F8
UniRef90_A0A024SNH5
UniRef90_A0A017SQW1
UniRef90_M9LTH7
UniRef90_M7WW97
UniRef90_UPI00020391EF
UniRef90_UPI0003D26AB4
UniRef90_N1QEP6
UniRef90_M4FVF6
UniRef90_A0A010S3T2
                            UniRef90_U3KF34
UniRef90_U3KF34
UniRef90_U3KF34
UniRef90_U3KF34
UniRef90_M2SBP3
UniRef90_C5FIM0
UniRef90_R9P7P9
UniRef90_UPI0003AB8F3B
UniRef90_I8TUM0
UniRef90_A0A010RWA5
UniRef90_F0UFM7
UniRef90 U3KJE8
                            QHSPKSPSTAPHPSTAPTSQHSPTSQ
UniRef90_UPI000440FD9E
UniRef90_A0A024JHF4
UniRef90_G8JR31
UniRef90_UPI000359744B
UniRef90_UPI00034CBEA5
                            K S T L M S N G S T P T M T S S G S T P T T L A Q P E P N S A VA E S Q L N S A L A Q P A A E S Q Q N N T Q A Q P
P S P Q Q S R N Y P Q S S P Q Q K S T C P A Q P P Q Q S P N Y S Q P S P Q Q T A
UniRef90_A1DJX4
UniRef90_F0XAR5
UniRef90_E6ZV73
UniRef90_W9XKM4
UniRef90_I2H7K7
UniRef90_M9LSZ6
UniRef90_UPI0003F4987E
UniRef90_W9Z4H3
UniRef90_A1CGA9
UniRef90_A5E0Y9
UniRef90_M5G621
UniRef90_M1WE86
UniRef90_S9Q4V4
UniRef90_UPI0004412B67
UniRef90_W9YE37
UniRef90_Q5KN06
UniRef90_E6ZMJ9
UniRef90 C0RZ82
UniRef90_R9PBA1
UniRef90 I2G3N4
UniRef90 F9XC94
UniRef90_Q6CK33
UniRef90_M9PCJ6
                            T VE N L S P
P G V I N I P S V S Q P T Y P T Q K P S Y Q D T S Y P T V Q P K P P V S
```

```
UniRef90_UPI00034F9E12
UniRef90_B8MRH1
UniRef90_B6QNI6
UniRef90_B8AST1
UniRef90_L2GFJ8
UniRef90_T2BQR5
UniRef90_E4UX16
UniRef90_A2R6H6
UniRef90_K5WK28
UniRef90_UPI0003F12BD6
UniRef90_UPI0003F12BD6
UniRef90_J4KQ01
UniRef90_R9NX97
UniRef90_V5E3W2
UniRef90_F8NLL7
UniRef90_Q0U0H0
UniRef90_UPI0003AFE000
UniRef90_G8YDB0
UniRef90_S3CKX6
UniRef90_S3C8F4
UniRef90_G7X090
UniRef90_G7XQ90
UniRef90_G9NG65
UniRef90_G1X201
UniRef90_E4UPU8
UniRef90_W2RRT3
UniRef90_Q4PCF4
UniRef90_W2RR13
UniRef90_Q4PCF4
UniRef90_Q4PCF4
UniRef90_UPI0003EC563C
UniRef90_S0EDN1
UniRef90_G4T7Z5
UniRef90_BX1G3
UniRef90_W3XLV5
UniRef90_BOXWK6
UniRef90_A9Q1F8
UniRef90_A0A024SNH5
UniRef90_A0A017SQW1
UniRef90_M9LTH7
UniRef90_M7WW97
UniRef90_UPI00020391EF
UniRef90_UPI0003D26AB4
UniRef90_UPI0003D26AB4
UniRef90_N1QEP6
UniRef90_UPI003D26AB4
UniRef90_U3KF34
UniRef90_C5FIM0
UniRef90_R9P7P9
UniRef90_UPI0003AB8F3B
UniRef90_R9P7P9
UniRef90_UPI0003AB8F3B
UniRef90_UPI0003AB8F3B
UniRef90_F0UFM7
UniRef90_F0UFM7
UniRef90_UPI000440FD9E
UniRef90_UPI000440FD9E
UniRef90_UPI000359744B
UniRef90_UPI000359744B
UniRef90_UPI00034CBEA5
UniRef90_UPI00034CBEA5
UniRef90_UPI00034CBEA5
UniRef90_UPI00046C14AC
UniRef90_Q2H7B8
UniRef90_Q2H7B8
UniRef90_M2SYJ1
UniRef90_M2SYJ1
UniRef90_M2SYJ1
UniRef90_E5Z70
UniRef90_L2GBZ3
UniRef90_L2GBZ3
UniRef90_L2GBZ3
UniRef90_A1DJX4
UniRef90_A1DJX4
UniRef90_F0XAR5
UniRef90_F0XAR5
UniRef90_UPI0003F4987F
UniRef90_IZH/K/
UniRef90_M9LSZ6
UniRef90_UPI0003F4987E
UniRef90_W9Z4H3
UniRef90_A1CGA9
UniRef90_A5E0Y9
UniRef90_M5G621
UniRef90_M1WE86
UniRef90_S9Q4V4
UniRef90_UPI0004412B67
UniRef90_W9YE37
UniRef90_Q5KN06
UniRef90_E6ZMJ9
UniRef90_C0RZ82
UniRef90_R9PBA1
UniRef90_I2G3N4
UniRef90_F9XC94
UniRef90_Q6CK33
UniRef90_M9PCJ6
```

```
UniRef90_M2ZAX0
UniRef90_UPI0003ADCD6F
                                                                  P A A T A S K P E T T Q T S P K R R A S D V N G T S T G D N N G E G K K K R
                                                       A P P H R T A S T D S A S E G L R K R
D Q L H T K Q Q K R K R P D D S D S P A S N T A S G S T A S R K P R D G P K K
M R P E E L A S S I S S R S V M T D P G S S S E D T K K S K T T K K R K K K
M N P Y V S Y P E I H M K R N R T G S I N S N P L Y I P N P N V E P T P K P T K
G S Q E N A T E M H D V H A T D R M G R P N
Q P Y A T S P D R P D S M S P D K K G K G R P P G Q P L R R
UniRef90_M3CY63
UniRef90_V2XBJ5
UniRef90_B5RUZ5
UniRef90_Q9UT46
UniRef90_M2TWA3
                                                                                                                                                                                                                 UniRef90_R7S9F3
                                                                                                                                                                                                        QSDDG
UniRef90_K2S1Y9
                                                            S A S

D P G L S S S S N V S P G P G P Q S N

MP S Q P K Q R G

MV A S G A S S N R S T P G R K S S A Q S H D G G S G S P K

D D G T A N E D G T P S R P P T K Q R

P F S T V Y S S F A Q S P S N P L S P T S P S A V D S P P Q Q T P

H E Y D R R T L S G D D R Y A D P H S A Y S Q E R R E S S A Q S D L
UniRef90_L7HXD5
UniRef90_N4TPP1
UniRef90_U7Q4K9
UniRef90_Q4PGC2
                                                                                                                                                                                                                               D G
R S
UniRef90_UPI0004407F82
UniRef90_U6GRR7
UniRef90_W9CA46
                                                                                                                                                                                                  SAQSDLKKRKR
UniRef90_U3JVT1
UniRef90_UPI000467657D
UniRef90_U9TDT8
                                                                                                                                                                                                                                                   R
UniRef90 A2FEM8
UniRef90_A7T1V7
UniRef90_Q2GZB3
                                                                                                                           S S H G K Q V A Q P R Q I R F V S T D G Q P Q T K R A D A S N T T A S N R P V K R R P T W S R A S S R R E F
UniRef90 F2TRT9
UniRef90_L8FN25
UniRef90_F2PRC7
UniRef90_W9Y2L6
UniRef90_F1A1N3
UniRef90_F1A1N3
UniRef90_Q06852
UniRef90_J3NXN0
UniRef90_A0A017SNX5
UniRef90_V5EYE0
UniRef90_UPl000328C609
UniRef90_F8P3Q9
UniRef90_K9HIV1
UniRef90_M7WPY3
                                                                                    T P S D E P T P S D E P T P S D E P T P S D E P T P S D E P T P S E A S \( \textstyle A \textstyle B \textstyle C \textstyle S \textstyle C \textstyle C \textstyle S \textstyle C \textstyle C \textstyle C \textstyle S \textstyle C \textsty
                                                           SHSPDEKMLPNDSKDGADLHNNSKDTEPEAKKR
TTLGPTATLGSTATRPTVTQATTRPPGSHPTT
SHTHSPADPRFPQSASDSSPDQDKPETTTMKGPKR
SPHTKKNGSDPAPSLKRKRTDTPEDTATDPSGHQSRKKK
UniRef90_M7WPY3
UniRef90_J9VXX0
UniRef90_K1X3H8
                                                             R S G S P L S P S K S Q N S Q L Q I A P L T L N D P K D E S P K P S A K G T L S R
UniRef90_G9N5A5
UniRef90_A7EEE0
UniRef90_A9WC61
UniRef90_K2RWR7
UniRef90_F6R446
                                                             S G L P P A S Q H Q S S P A D A G A T A S K D S S K S K S A A D T S N T K A R
UniRef90_O94421
UniRef90_P38968
                                                        PGQPPTARGNDR
PISPALTGQSPTAVAAGANISTSVAASVAPASASSPKV
ATGPDGFPGALGDMPKARI
SNNPSSGDASASGAAVSSSRTVNSSGQTNAQKP
MSTERMQSSDEEKSRRGRKKSSAKDGKTVSKTATGKRKFH
UniRef90_UPI0004623F54
UniRef90_A0A010R5E3
UniRef90_G3J4W1
UniRef90_C0SAX7
UniRef90_W0TF88
UniRef90_F7A9B0
UniRef90_UPI000443F438
UniRef90_C4Y7Y4
UniRef90_W9X274
UniRef90_U7PV48
                                                                                                                      MAQNQPASPSATGADAKDDQPRSGLKK
UniRef90 M9ME11
UniRef90 M7BZW4
UniRef90_G2QVF0
UniRef90 B9T474
UniRef90_B914/4
UniRef90_COSE75
UniRef90_G1X9G5
UniRef90_S8G397
UniRef90_W4YL87
UniRef90_R9P7C2
UniRef90_UPl0004560AE2
UniRef90_S7RVK7
UniRef90_UPl00045601A8
UniRef90_B8M3S6
                                                                                         MSEPANVETQPPPDQPEKPGAGGEPSKPTRVSK
MAEKRASTSSTPGPNTTLQR
                                                       DKGSPTDSQDGKGKTR
NTPASADTTPS RGPPRKR
PDDGGTPSLSSASRSRDGPKK
STSSEGREHESDAVPLAANHNPPLAKRRRTVKEEQ
MDEQDRTRLGGDNPVEQEDSKRSPEGQSEATANKSAPPAR
MNSNSKSISDQADPSKAKSPEELSSEADGDEKKKTR
UniRef90_B8M3S6
UniRef90_J9VHV6
UniRef90_D8PLU0
                                                                                                                                                                                                  A S Q P A K R R
S V R K R
T S P S H R S I A A N
G N P P R K R R
UniRef90_E6ZSJ6
UniRef90_N4V8L4
UniRef90_E6ZPG6
                                                                                               MSAPQVEAQRGSATSPPNADVGNP
UniRef90_V9D255
                                                                                                                                                                                                                  SPDNKQHK
UniRef90_K0KSB0
UniRef90_UPI0003C16AC9
UniRef90_J3NPX6
UniRef90_D1NHZ1
                                                                  E H G S A Q A S P A R S A D A A S G A P S L T S V P A G A S N P S D T P D D
UniRef90_UPI000455F598
UniRef90_UPI0004622926
                                                                                               GTSPDESGDSSAPPSGTHSATHPRKNRDG<u>P</u>KK
UniRef90_T1D213
UniRef90_E6ZWQ6
                                                            T T E S A S S S P T Q P L A A L S S Q L F A S V P E A L T A E G S T R S G S S R L S P V A S T S S A N F D S N N A L T D T Y D R S F D N N E S G K R
UniRef90_Q4P2R2
UniRef90_F4WUU8
UniRef90_I2FWM5
                                                                                    A P T L A A K P S R P L E S S N S S L S S A K K D A P A A H K R R F
UniRef90_W3VNK6
UniRef90 W2S3L3
UniRef90_Q4P5F6
UniRef90 Q4PIJ4
                                                                                                                                                             SDDTKADTHDDGQPAKRKR
```

UniRef90_H2ZT56 UniRef90_V4LG88 UniRef90_C5M405 UniRef90_H2RTU3

JARABOO DEPOSADCOPE JARABOO DEPOSADCOPE JARABOO DEPOSADCOPE K VE TA CO K R LEK S K O C S N P C T R C K K C C S N P C C R C K K C C S N P C C C R C K K C C S N P C C C R C K K C C S N P C C C R C K K C C S N P C C C R C K K C C S N P C C C R C K K C C C S N P C C C R C K K C C C C C C C C C C C C C			50	60		70 80
JARRESON LYZEAD. K K A A R A S N O O O K A H. IT O D S R P O O R G T K C T T E MARKED MATTWAS A THE MARKED MATT	UniRef90_M2ZAX0 UniRef90_UPI0003ADCD6F					
JARRESO GOUTAGE JARRESO JARRE	UniRef90_V2XBJ5	KKAARAC	NOCOKAI	H	P CDRC	I K R G I A A <mark>N C</mark> T E
1988 1988	UniRef90_Q9UT46	RRTK <u>T</u> G	V Y <mark>C</mark> R R S I L T <mark>C</mark> R R R I	H MI	P CQRC PF CLNC	T K T N R E <mark>C</mark> E G Y P
1988 1988	UniRef90_M2TWA3 UniRef90_R7S9F3	NTSHVAC GDAC	NSCRKKI LMCRAKI	K	VG CRRC PE CDQC	QQRGTR <mark>C</mark> V YDT
JURISSION Juriss	UniRef90_K2S1Y9	PRQQLSC PRLRASC	VQCRRRI DGCFLAI	K V K <mark>C</mark> D H E R K V K C S K A R	PC KRCRI PI CSRC	R G W D R Q <mark>C S Y P D</mark>
JURISSION Juriss	UniRef90_N4TPP1	ALAAQAC	ETCRNRI	K Q R C D E Q R	PK CGTC	QRFK L E <mark>C</mark> RY R
JURIAGEO, USCARA JURIAGEO, US	UniRef90_Q4PGC2	LS C	EECQKRI	K S K C D K R D	P CSMC	Q S R G I A <mark>C</mark> T P T F
JURNAGO USAYTI JURNAGO USAYTI JURNAGO AZEMBA JURNAGO AZEMBA	UniRef90_U6GRR7	PVSPLSC	FSPREQ	Q NP	MSPIAGGC	FS
Junkage 0_47518 Junka	UniRef90_U3JVT1	NKIKIG	, IVI I <mark>U</mark> K K K I		PIVIP P S C H H	TSSQSIIIPIVIHPS
JURIAGE DO CA7TILY DE TIMES DE CATE D	UniRef90_U9TDT8	T K V T V A C	QA <mark>C</mark> QKKI	URHD KVK <mark>C</mark> TGSA	P CTTC	S R S G H K C I F S N
Jinkelego P2TRT9	UniRef90_A7T1V7					
JANKEND JERNSCH JANKEN JAN	UniRef90_Q2GZB3 UniRef90_F2TRT9	RRIVIAAAC	KTCRKRI	K	P VCKTC	S D Y G H N C T R K T
Junkel90 (1941) Junke	UniRef90_L8FN25 UniRef90_F2PRC7	L R T Y K A C	Q	KVRCNVVE KAKCEGIP	HGAPCTNC PGPPCLRC	RLDEVPCIVTE RREQRNCQFSE
Julinarierio 0.008852	UniRef90_W9Y2L6 UniRef90_F1A1N3					
Junkel90 A0A017SNX5 R S R T S C L T C R A R K L K C D E Q K P Q	UniRef90_Q06852		DECRTRI	P E E	P I P T D T P	S D E P T P S D
JURIAGES DE SHANY JURIAGES DE	UniRef90_A0A017SNX5	RSRTGC	LTCRARI	K L K C D E Q K	P C S Q C	RKGSRECRPSE
JURINER90 MYNYPY3 JURINER90 MYNXO JURINER90 MY	UniRef90_UPI000328C609	VTRSTAK	STSRTS	A G T P S G E P	I P S H R P P A	PIRGRR TAQL
JAIRS JOS SASS JOS SA	UniRef90_K9HIV1	KKANRAC	FHCQKAI	HLT CDDS R	P C Q R C	
JAIRS JOS SASS JOS SA	UniRef90_J9VXX0	KRGMAC	K F C R R R I	K L R C S A E R	PK CSSC	I K Y K Q E C E Y R T
Jurinelso (20 km/s) Jurinelso	UniRef90_G9N5A5	PRSKNG	ATCRLRI	RVR <mark>C</mark> DE	RRPTCSHC	D R L K L E C T Y Q P
Junker90 P884421 Junker90 P38968 Junker90 J09004623F54 Junker90 J09004623F54 Junker90 J09004623F54 Junker90 J09004623F54 Junker90 J09004623F54 Junker90 J0900456784 Junker90 J09004623F54 Junker90 J09004628F54 Junker90 J0900456704 JUNKER90 J0	UniRef90_A9WC61					
Junice90 D38968 Junice90 J010004623F54 Junice90 J010004623F54 Junice90 J01000445F83 Junice90 S05AV7 Junice90 J01000445F438 Junice90 J01000445F698 Junice90 J01000456F698 Junice90 J01000456F698 Junice90 J01000456F598 Junice90 J01000455F598 Junice90 J0100045F598 Junice90 J01000455F598 Junice90 J0100045F598 Junice90 J01000455F598 Junice90 J010004	UniRef90_K2RWR7 UniRef90_F6R446	KRTKTGC	<u>L</u> TCRKRI	R <u>II</u> K <mark>C</mark> GE	E R P L C N N C	I K S K R H C E G Y N
Junike90_A04010R5E3 Junike90_C0SAX7 Junike90_C0SAX7 Junike90_C0SAX7 Junike90_C0SAX7 Junike90_C0SAX7 Junike90_C0SAX7 K K W R T G C L T C R E R H L K C D E A L P R C Q N C Q K S D R L C V R L R R K K K C D E T R P H Junike90_C0SAX7 K K W R T G C L T C R E R H L K C D E A L P R C Q N C Q K S D R L C V R L R R R K W R C D E T R P H Junike90_C0X9X74 Junike90_C0X9X74 Junike90_C0X9X74 Junike90_C0X9X74 Junike90_UPV48 Junike90_UPV48 Junike90_W7BZV44 Jun	UniRef90_O94421 UniRef90_P38968			_		
Junikef90_CSAX7 Junikef90_CSAX7 Junikef90_WOTF88 Junikef90_WOTF88 Junikef90_WOTF88 Junikef90_WOTF88 Junikef90_WOTF88 Junikef90_WOTF88 Junikef90_WOX274 Junikef90_WOX2	UniRef90_UPI0004623F54 UniRef90_A0A010R5E3	ARDII IPAC	DRCRSFI	KKK <mark>C</mark> SRTF	PII CTILIC	A N A G H K C S F S T
Junke190 _ 1-74980 Junke190 _ 1-0191000443F438 Junke190 _ 1-0191000443F438 Junke190 _ 1-0191000443F438 Junke190 _ 1-019100045F5198	UniRef90_G3J4W1	R R V Q T G C	L M C K R R I	K K K <mark>C</mark> D E T K H L K C D E	P R C G D C	R R L C L D C A W P V Q K S D R L C
Junke190	UniRef90_W0TF88	KKSKNGC	AHCKRRI	RVKCDETR	PH CLNC	Ř K M N L D C V Y T
Jurikerjo W9X274 Jurikerjo W9X274 Jurikerjo W9M274 Jurikerjo W7BZW4 Jurikerjo M7BZW4 Jurike	UniRef90_UPI000443F438					
Jurike190	UniRef90_W9X274					
Jurike190_G2QVF0 Jurike190_G1905 Jurike190	UniRef90_M9ME11	RRIQQA	RPCGIK	RVK <mark>C</mark> DGSH	P CITC	I R S G E V C E Y G
Juire190_C0SE75	UniRef90_G2QVF0	GRRLVAC	VSCHERI	K L K <mark>C</mark> D	EDTPCRSC	VRSRID <mark>C</mark> V
Juirkef90	UniRef90_C0SE75	V D T V T O 6				WK OK DWO
JAIRE490_R9P7C2	UniRef90_S8G397	GKAC	L R C R K R I	K M R <mark>C</mark> D G A K	PACQQCVR	A K K A E G C E Y D D
DIRIRE190_J9VHV6 JUNIRE190_D8PLU0 JUNIRE190_E6ZSJ6 RYARRSKKIRCDIRGT DGSPLU0 JUNIRE190_E6ZSJ6 RYARRSKKIRCDIRGT DGSPLU0 JUNIRE190_N4V8L4 RRAPACFTCSKRNVIKCDRRRPY	UniRef90_R9P7C2	A R I N M A C	UHCRHRI	KIK <mark>C</mark> DG <u>AQ</u>	P ACATC	VRLRRE <mark>C</mark> EYEA
DIRIRE190_J9VHV6 JUNIRE190_D8PLU0 JUNIRE190_E6ZSJ6 RYARRSKKIRCDIRGT DGSPLU0 JUNIRE190_E6ZSJ6 RYARRSKKIRCDIRGT DGSPLU0 JUNIRE190_N4V8L4 RRAPACFTCSKRNVIKCDRRRPY	UniRef90_S7RVK7	N R Q A L S C K K A N R A C	S A <mark>C</mark> R E R I L <u>L C Q K</u> A I	K	P CSQC	V K R G D Q <mark>C H L E Q</mark> <u>V R R G M A A N <mark>C T</mark> E</u>
DIRIRE190_J9VHV6 JUNIRE190_D8PLU0 JUNIRE190_E6ZSJ6 RYARRSKKIRCDIRGT DGSPLU0 JUNIRE190_E6ZSJ6 RYARRSKKIRCDIRGT DGSPLU0 JUNIRE190_N4V8L4 RRAPACFTCSKRNVIKCDRRRPY	UniRef90_UPI00045601A8 UniRef90_B8M3S6	RRSSRAC RRTKTG	LECRLAI LTCRKRI	K T K <mark>C</mark> L V Q E R I K <mark>C</mark> G E	DRKI CERCEKPRCNNC	ERFNFS <mark>C</mark> KF <u>V</u> R IKAK <u>R</u> E <mark>C</mark> EGY <u>T</u>
Jniref90	UniRef90_J9VHV6 UniRef90_D8PLU0	PKIGRAC	DACKSKI	KIIKUDIIQI	DQSPCAHC	RANDLE CIFFL
Jniref90_E6ZPG6	UniRef90_E6ZSJ6 UniRef90_N4V8L4	RRRAPAC	FTCSKRI	NIVIK <mark>C</mark> D R R R	PY CSOC	I FVGNF <mark>C</mark> SGYK
Julikef90_UP10003C16AC9	UniRef90_E6ZPG6	GRVARAC KRAPAAC	SRCSKAI	KAR <mark>C</mark> DGHL SVKCDRRR	PACGRCTR PY CTOC	L N N A S M C A Y Q A L D D G K D C A G Y K
JniRef90_J3NPX6	UniRef90_K0KSB0					LQDNK CTYMT
UniRef90_UPI000455F598 UniRef90_UPI0004622926 UniRef90_UPI0004622926 UniRef90_UPI0004622926 UniRef90_UPI0004622926 UniRef90_E6ZWQ6 UniRef90_Q4P2R2 UniRef90_G4P2R2 UniRef90_I2FWM5 UniRef90_UPI000462894 UniRef90_W3VNK6 UniRef90_W3VNK6 UniRef90_W2S3L3 UniRef90_Q4P5F6 UniRef90_Q4PJ4 UniRef90_Q4PJ4 UniRef90_H2ZT56 UniRef90_UPI0004622926 UNIREF90_UPI00046292926 UNIREF90_UPI00046292926 UNIREF90_UPI00046292926 UNIREF9	UniRef90_J3NPX6	SLNPRSC	VT CRRRI	KVK <mark>C</mark> DKLQ		D F
JniRef90_T1D213	UniRef90_UPI000455F598	KKANRAC	AHCQKAI	H L T C D D T R	P C Q R C	I K R G I A D N C I E
JniRef90_Q4P2R2 NRYQYSCLQCQRRKQRCSRTFP CEKCVQRGLAHLCSP JniRef90_F4WUU8 TRSRYGCSTCRARKVKCD EARPRCRRCLEDGQTCEQQA JniRef90_W3VNK6 JniRef90_W2S3L3 YAP JniRef90_Q4P5F6 LRIPKSCLPCLKGKRACDRGRPACGRCVRSGQSNDCSYD JniRef90_H2ZT56 LRIPKSCLPCLKGKRACDRGRPACGRCVRSGQSNDCSYD JniRef90_V4LG88 MTCD PGRPCKRCIQKGLQATCED	UniRef90_T1D213			GRR	RNPSAIIKM	ARRPYSCRRRS
UniRef90_I2FWM5 JniRef90_W3VNK6 JniRef90_W2S3L3 JniRef90_Q4PIJ4 JniRef90_Q4PIJ4 JniRef90_H2ZT56 JniRef90_V4LG88 JniRef90_C5M405 TRSRYGCSTCRARKVKCD EARPRCRRCLEDGQTCEQQA YAP YAP YAP URLPKSCLPCLKGKRACDRGRPACGRCVRSGQSNDCSYD MTCD PGRPCKRCLQKGLQATCED	UniRef90_Q4P2R2	NRYQYS	LQCQRRI	KQRCSRTF	P CEKC	VQRGLAHLCSP
JniRef90_W2S3L3 YAP JniRef90_Q4P5F6 JniRef90_Q4PIJ4 LRIPKSCLPCLKGKRACDRGRPACGRCVRSGQSNDCSYD LRIPKSCLPCLKGKRACDRGRPACGRCVRSGQSNDCSYD JniRef90_V4LG88 JniRef90_C5M405 MTCD PGRPCKRCIQKGLQATCED	UniRef90_I2FWM5	TRSRYG	ST <mark>C</mark> RARI	KVK <mark>C</mark> D E	ARPRCRRC	L E D G Q T <mark>C</mark> E Q Q A
JniRef90_Q4PJJ4	UniRef90_W2S3L3					YAP
UniRef90_V4LG88 UniRef90_C5M405	UniRef90_Q4PIJ4	LRIPKS C	LPCLKGI	K R A <mark>C</mark> D R G R	PACGRCVR	S G Q S N D <mark>C</mark> S Y D
UniRef90_C5M405	UniRef90_H2ZT56 UniRef90_V4LG88					
OTHITOTOU TIZETTOU	UniRef90_C5M405 UniRef90_H2RTU3			M T <mark>C</mark> D	P G R P C K R C	∐QKGŪQAT <mark>C</mark> ED

```
E P R D P P K R Q K S D V L N V A E I A P A P G Q Q D G M V G V E N G Q A Q R E R T P Y N S S V R S H R S P S E R R C R S P S E R S H R S T S Q K S H H R K K S K V Y P K G Y V E M L E Q Q Q T Q L V S G L V L L Y G H R K K A K Y L L D D E E L E Q L K R N K A Q S T T T T N A P N T R P P T P P E P S N S R Q R K K A E A M V K Q P E P N E P H S Q P L Q S Q S M A Q N S A A Q M Q A M G S V S P P E L S V H S A Q Q P L I P T S L A S S S A Q T G D Q K S R G G S N N K R H E V T S A E A E R P E I T G G D N G S D Q Q P E T V A Q V R P A S R V E K L E R K L A E L E E A E L R A V L A A R R H S S E L G L A H P P P G P G D T N S V V S S P R R A S A A R S F A A S S P S L V N R P R P S N S S T R A G K P K S G H N L N Q H Q N S S A N D L S G L S P V G D D K T M M F N T E P Q P T K K D K T L V E I L D R L K T V E S K I D N L G Q R E N T T P P L F T E G K T L C L H D R R R G A G P L K R R R F T N W R P Q K L V P K T P V A M A A L D P L K P R K R R F P E R E L L D R L R K Y E T L L T L A G L D K D A S H P T G H R K K A K Y L L D D A E L E A L K K G K P L S Q T T P E G S Q P P P S A P P P A S P L I T S C L D T V S P S Y S P S S P L Q S P Y Y Q P N T R D Q R G P W P K S E T K Q T P V P L Q S K T E Y D S P S S Y T Q P S P Y G N Q P G P S Q S L P A H P S S S Q F L P V P P S S S Q P L Q V H P S P S Q F F P A H P S P D P R T P H V D H D G A P R P D H S S T P R S D P D R A P A S R P D S D T T N A K K R G P R N G N V E V I R T S A H R L N C V L Q K H P D L R D Q L S Q N E
UniRef90_M2ZAX0
UniRef90_UPI0003ADCD6F
UniRef90_M3CY63
UniRef90_V2XBJ5
UniRef90_BSRUZ5
UniRef90_BSRUZ5
 UniRef90_Q9UT46
UniRef90_M2TWA3
 UniRef90_R7S9F3
UniRef90_K2S1Y9
UniRef90_L7HXD5
 UniRef90_N4TPP1
UniRef90_U7Q4K9
UniRef90_Q4PGC2
UniRef90_UPI0004407F82
UniRef90_U6GRR7
UniRef90_W9CA46
UniRef90_U3JVT1
S Q P E S Q P G N Q P G S Q P N G Q A A R R P K P R L W R L S P A P A A G H H H P E L S P T S A D E R A G A N T K S D T A P T R R D D A T S A S P Q T S K S G L R P N A P V T A A R S D P S S R R R K K H P Y H N L K P T A E E S L G S P T H T H M Q H P H H H P F S T A D R A W A R K K K K A P F S T T T A A T T T N T T N A G A G Q L A G A D A D T
                                                                                                                                                               EPTPSDEPTPSDEPTPSDEPTPSETPEEPIPTDTPSDEQKRPRKRPRAEVPSDSGDRATQSQPPPQQDLPTIGDDTGVIFRHQQNASMNKDAEEASSSGRGNLKYSYKNTFDKDFSEATSGTPNSNRAHPDDREGKPNSGSFSSSGSTRPQSSPGRRGTAGTRPPSTTPEVHTSTGTLQPGPPPLTTTISASGRPVPAPRFKTERPDIPSETRPTSYINYSESFQSGGHRKKAKYLLDDDELEALKRNKATRSSPDSKSETAALTASRKGRPRRLLRDEAGNVIDARSSSASRQPVQLPSEERPFSKVHPAQSQTGRMPPFSHQNLSHGFRPFLNTTSAKRQPRNGVSERAPRPISTVFHDKLKRNSQFIRDEAPRPRRSQRRLPSPDDSSASSRQDADVDVDVDESRRFSVVDTENKRRASCNVNTKSQEEISPALEMELDSESLDMEEKAPSPAASTTPEPTQRVIFKPPIGDWPGSAPANTLPFHSGVIPGGRPVFQQP
                                                                                                                                                                                                                                                                                K V Y A N Q L S Q Q N T S N P T Y H N A Y D M A S M M K N G S R
                                                                                                                                                               A P N R K G R G K G T S R S A P G P S A A K R R R T G A G L A P S D H A D Q S R P A A S T A A Q T H H L R A R I E W L S R F I N E N L P V A G A P D R P K D K S P S L S S S R K D V S S P S D K P S S G G D P A L I E I P L R K R G V R L N F I D T H V A A P P Y A A P F A H D W Q V N F H D E S R E P V Q P R S R K N S T T T V T K A S A K V E K P T V A S S P A D A L S M N Q V D
                                                                                                                                                               PPSPLKSPAHTRSHSHDFFHRRKHSDTNWTSLIRSRKRSALSPKPLKKTSFVSGQVHLRRCSKVKPLSEDPGLADHSTFDPASLTILNRLDDLERQPKKRGPPKGSTRGTSKAAKRNANAHPHAAPSAPRKNAHDPALGSPSPALPEPPNPDLQPPATPALGSPSPALPERNAGPSPPDTASNHGATSTDADWPAGLDIVGTADGGLV
 UniRef90_W9X274
UniRef90_U7PV48
UniRef90_U7PV48
UniRef90_M9ME11
UniRef90_M7BZW4
UniRef90_G2QVF0
UniRef90_B9T474
UniRef90_C0SE75
UniRef90_G1X9G5
UniRef90_S8G397
UniRef90_W4YL87
UniRef90_W4YL87
UniRef90_W9P7C2
UniRef90_UPI0004560AE2
UniRef90_UPI00045601A8
UniRef90_UPI00045601A8
UniRef90_B8M3S6
UniRef90_UPI00045601A8
UniRef90_B8M3S6
UniRef90_BPLU0
UniRef90_BPLU0
UniRef90_BPLU0
UniRef90_BOBPLU0
UniRef90_BOBPLU0
UniRef90_UPI0003C16AC9
UniRef90_W9D255
UniRef90_W9D255
UniRef90_UPI0003C16AC9
UniRef90_UPI0003C16AC9
UniRef90_UPI000455F598
UniRef90_UPI000455F598
UniRef90_UPI000452926
UniRef90_UPI0004502926
  UniRef90_M9ME11
                                                                                                                                                                 GYSQRVVFKLGGFGNEDGQLDGMGYYGYPEQMPYIPGKGKRTQLMREHIARLELRVKELEGLEHSSPSVTLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GSD
DPH
                                                                                                                                                                VTEYENLS RERKRRNKEKKAARVASLGIFAGQSPLSMLHPKPKLEHPKPSRTKQQQAASSTASGQAASASSSYAFDDNANGIRKKAKYLLEDDELEAVKRRKSTPPPAPPKEAEPAPLTTHHRGRKPVSKLASLASSSSLAAEHLDGSASEDSSDNQRVVFKNALGTLGAAYDPRVPANLQTPVTFPQLPHQVQLQPLTETRFKKKTIQPDINPDFRHSPAMVQRRISSSHSPNYE
                                                                                                                                                              GNRKRKPRIDSASTTSVPSRIHHPNHDLHHDTSYSDNALPTQLTWGVVSRGKLRGLSLPIAKAPPVAGAAKKSPTARPRANPAGDSVLPMQVADASGDASSQPSTSHLQHAESGRLEASTVTQLTWGASRGKLRGLSLPIAGTQKLPPPTFSSANKKKKTYSSTYVDLLETRVLIQSMTQLLQKAKSPMEISQFPSKGLVPPTSDSPPSVTPNTLGPLRASHSTGAPSPSKGLVPPTSDSPPSVTPNTLGPLRASHSTGAPSPRPRDPNAPPTSKHHSSEREVELMKRLRKLEGIVEELSGQPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPS
                                                                                                                                                               P Q R E Q H H S S L N P S S S S K K Q A L S Q S Y S S P F L R N V Q E
A P S Q A A A S N A S G S P S P S N A A P A S
P P Q F R G P P R Q Y N Q S P S L P P P S Q A K S M A S W N D V P E D F
 UniRef90_I2FWM5
UniRef90_W3VNK6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S Y D P
T A P S
A K P T
UniRef90_W3VNK6
UniRef90_Q4PS56
UniRef90_Q4PJ4
UniRef90_H2ZT56
UniRef90_V4LG88
UniRef90_C5M405
                                                                                                                                                                S R L P Q P P A S R L S R Q T G A F D Y S D D D D D D D K S F Q D L R P L D A P H P S G G P A L S Q Q M M R P P G P S Q M M
                                                                                                                                                                                                                                                                         K K Y L E D V P N S S L L T S R S M N S V N S S Y V S L G Q P T
P Q L S A Q T T L P G Y Q P P A P Q P R P A A
```

APRKR

```
UniRef90_M2ZAX0
UniRef90_UPl0003ADCD6F
UP S E R S
UniRef90_M3CY63
UniRef90_V2XBJ5
UniRef90_OSTRU5
UniRef90_M2TWA3
UniRef90_UniRef90_UniRef90_UniRef90
UniRef90_UniRef90_UniRef90
UniRef90_UniRef90_UniRef90
UniRef90_UniRef90
UniRef90

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RRHLEKSEPEPDAASNSRQQQKTGGAQHTLSQSHRRSSRSANSSCOTSGRMAQPSYSLHVSAATNHLPESTRQGHSEAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SPLLIGA MRSG MT APDD CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GSYSHPSTSATHDLYRQTDTP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QQLSLVEA
                                                                                                                                                                                                                                                                                                                                                                                                                     PHYNNOGO WO PHYNNN
UniRef90_F2TRT9
UniRef90_E2TRT9
UniRef90_L8FN25
UniRef90_F2PRC7
UniRef90_W9Y2L6
UniRef90_G06852
UniRef90_J3NXN0
UniRef90_A0A017SNX5
UniRef90_V5EYE0
UniRef90_UP1000328C609
UniRef90_F8P3Q9
UniRef90_K9HIV1
UniRef90_M7WPY3
UniRef90_J9VXX0
UniRef90_J9VXX0
UniRef90_K1X3H8
UniRef90_G9N5A5
UniRef90_A7EEE0
UniRef90_A7EEE0
UniRef90_A9WC61
UniRef90_K2RWR7
UniRef90_F6R446
UniRef90_F6R446
UniRef90_O94421
UniRef90_P38968
UniRef90_UPl0004623F54
UniRef90_A0A010R5E3
UniRef90_G3J4W1
UniRef90_COSAX7
UniRef90_W0TF88
UniRef90_F7A9B0
UniRef90_UPl000443F438
UniRef90_C4Y7Y4
UniRef90_W2774
  UniRef90_W9X274
UniRef90_U7PV48
UniRef90_W9X274
UniRef90_U7PV48
UniRef90_U7PV48
UniRef90_M9ME11
UniRef90_M9ME11
UniRef90_G2QVF0
UniRef90_B9T474
UniRef90_G0SE75
UniRef90_G1X9G5
UniRef90_W4YL87
UniRef90_W4YL87
UniRef90_W4YL87
UniRef90_UPI0004560AE2
UniRef90_UPI00045601A8
UniRef90_UPI00045601A8
UniRef90_UPI00045601A8
UniRef90_UPI00045601A8
UniRef90_UPI00045601A8
UniRef90_UPI00045601A9
UniRef90_UPI00045601A9
UniRef90_UPI00045601A9
UniRef90_UPI00045601A9
UniRef90_UPI00045601A9
UniRef90_UPI000455F08
UniRef90_UPI000455F598
UniRef90_UPI0004622926
UniRef90_UPI0004622926
UniRef90_UPI0004622926
UniRef90_UPI004622926
UniRef90_UPI0004622926
  UniRef90_I2FWM5
UniRef90_W3VNK6
     UniRef90_W2S3L3
UniRef90_Q4P5F6
UniRef90_Q4F3F6
UniRef90_Q4PIJ4
UniRef90_H2ZT56
UniRef90_V4LG88
UniRef90_C5M405
```

UniRef90_M2ZAX0	170 180 190 200 A G S V L Q N L D W N S S H V P N Q F Q D M H H L H
UniRef90_UPI0003ADCD6F UniRef90_M3CY63 UniRef90_V2XBJ5 UniRef90_B5RUZ5	ALDLLETKADGSTEDFEDDPVKLQDKLFADARHSSQHHRT
UniRef90_Q9UT46 UniRef90_M2TWA3 UniRef90_R7S9F3	EFSSINDFLSMIDDPDLVHGNINDETVNNDPLYAFGMGNS QGFPSAYQQHQYLQSNHNVPTNNSSSATSSTKPSVQSVGQ GSRNDSGTTTTTKGSSSDRSNREIARQSGPQIQQDSFQQV SSPHQNTLADPNSWSSSNPFDPLSQDPSGVQLDQLP PPQRTTSEPEALATPLSASPQALARPQSVAPTLSTEKDHD AAASATDIYTASMPWTPPNDLNPTTHFGDTPAMVAPIPQS
UniRef90_K2S1Y9 UniRef90_L7HXD5 UniRef90_N4TPP1 UniRef90_U7Q4K9	A A S A T DI Y T A S M P WT P P N DL N P T T H F G D T P A MVA P I P Q S D T G G Y R Y D S S V S K M S E W P V V R Q M F E S L G Q K A P S A L G E L P A I R P A S E Y T E Y P P Y D S P V P Q I T R N D I P S V P M N T Y R T V R Q A T
UniRef90_Q4PGC2 UniRef90_UPI0004407F82 UniRef90_U6GRA7	DTGGYRYDSSVSKMSEWPVVRQMFESLGQKAPSALGEIPA IRPASEYTEYPPYDSPVPQITRNDIPSVPMNTYRTVRQAT LPAVSTGEAPPSPRAALIDSNIGDLESILETVPDLSTQPS NNFSPDQPFLTSETPPSTSVAYGSQFANAAPAEPSPQQTN SPAYSAAGLNPSSPSPNANAATSPSYSPTSPVYSATSPSY SGYGPQQTPTPVSANSAHPDRHKTDYLRAGPYHDLSRHEP
UniRef90_W9CA46 UniRef90_U3JVT1 UniRef90_UPI000467657D UniRef90_U9TDT8	RASGPDSDTDPANTSQDPAFSTRPGPDHAPTTHDPGPSRT HQSPFFCKPMPVYPSNMRRDLPSKRSDLNGYTPLTSHNIS
UniRef90_A2FEM8 UniRef90_A7T1V7 UniRef90_Q2GZB3	PFFAAPSYNPPPQQILLQQVPPPMSQQP PGSQPNANQPGSQPGSQPGSQPGQAGANQPGSQPG TPFPRPAASPRSIIPOMHHAFPGAGTSGPIIGNTTAIIAFRV
UniRef90_F2TRT9 UniRef90_L8FN25 UniRef90_F2PRC7 UniRef90_W9Y2L6	<u></u>
UniRef90_F1A1N3 UniRef90_Q06852 UniRef90_J3NXN0 UniRef90_A0A017SNX5	HQLQPPTSATNYQQPYNPNINKLPSSYETDPISEFSNARI EPTPSDEPTPSDEPTPSDEPTPSETPEEPIPTDT GGFIGLGSEGESAGAVAADGSDVWAQQPPQAKSHPPPQR NWNGNBDIRDGEVOGUEAUSTAAAHDRESEPISDOTHUSM
UniRef90_V5EYE0 UniRef90_UPl000328C609 UniRef90_F8P3Q9	PHGLYHNQMSNFDQSATPSVFSLEPPTFTNLVSGFASEL SNTSTASGHTSMHFDPVGRAAPAT PANMSSTGSLSP SGASPPVNRTHTANVQASTSLPFRANTQHTALGGYQHQHQ HQLQPPTSATNYQQPYNPNINKLPSSYETDPISEFSNARI EPTPSDEPTPSDEPTPSDEPTPSDEPTPSETPEEPIPTDT GGFIGLGSEGESAGAVAADGSDVWAQQPPQAKSHPPPQRQ NWNGNRDIRDGEVQGLEALSTAAAHDRFSFPLSDQTHLSM FSQRPPSDRFGYSLPDAVRRIDNLERTVSRLVDKVEGQSS STGTHGPTASAHSSPGVPPTGTGPTPSTSTSVSGPPHSPG PRSIGVVDRSSGLNPSLTRELVNLFFTHRHPHRMIIHKPS GNPSPPDM TMSPPPPPPPSSYPSWSSASDTDLLSS SGLPTP
UniRef90_K9HIV1 UniRef90_M7WPY3 UniRef90_J9VXX0 UniRef90_K1X3H8	EN Y PWOTPNYSEPTPOMMPOVESPPEPSI PEPTYPOOPY
UniRef90_G9N5A5 UniRef90_A7EEE0 UniRef90_A9WC61	VISPENPNPSGPTTATALDILIGPTSILPSILSQSPWSPSWFDRL RTKSTSSFTKEESSILTTQARFDSSILSNSLRRESSLRSTLQ PSATASTTPSPSATASVITPSPSATASMTPSPSATASATPF
UniRef90_K2RWR7 UniRef90_F6R446 UniRef90_O94421 UniRef90_P38968	S G L VQ D S S T H A T Q Y G Q T L E P T Y Q Q R S Y S V G A M Q P E F G Q Q L F H H H P P A A L H G E S V A H S P R F S P N P P Q Q G A V P Q T L N F S S R S P S V D T T S S S H S F S A R N I P A N V S M Q Q Q M G R I P V N P S T F S A S S T P T P L N G I P A N A A S T M P P P P L S R A P S S V S M V S P P P L H K N
UniRef90_UPI0004623F54 UniRef90_A0A010R5E3 UniRef90_G3J4W1 UniRef90_C0SAX7	STPTPLNGIPANAASTMPPPPLSRAPSSVSMVSPPPLHKNNIDDAWEYDPFPLDPDNPNLFELPQFPPLSPHSHHSQEDNGATPGSIISAESNRAEPRDTFVHQQPLGTSGSVLFDQRSVIKRDSSASDGEAISDKISWDLSTSPPSWV EAFTPVSNPSLSHQSLSLPSVTPLLSNYPEPPQPEMTEAIFQHASQ SEN LAAKNSSAAMSGLPKQGSTGAAGVTAPVGTP
UniRef90_W0TF88 UniRef90_F7A9B0 UniRef90_UPl000443F438	
UniRef90_C4Y7Y4 UniRef90_W9X274 UniRef90_U7PV48 UniRef90_M9ME11	HGHGHGHGRSLDATSPASQISQAQSDLS YAVDVWSR
UniRef90_M7BZW4 UniRef90_G2QVF0 UniRef90_B9T474	PPPPPYPDSSDWARSGLPAPTASNSALASSSRFPPPPSSA PSPALPEPPNPDLQPPATPA LGSPSPALPEPPNPDLQP LQDQPQFWSMSPFPSLASPMSASLDAHAQGRRVSTPWAMS TVGPFQRFPTPQYSSTPQAPPSGAPPVGQPPFQPPAGQVS PDSAFSPLRQAGSETP AGFTEYQAPGFSGGFSPHGARSP TLPPHLQYYMGAQQGQNPLQSPEDIPPG FPQDPNYLRHR TQWDNMADFAVPVNEPYNPSEEPPLELAQMLLELFPHRHQ SSSLTPLFSSTMVPERSESTTLSSSAFKTTDFPSADSTTV SQFGPRRRRGLSDTRAATLQHSVGSLTSTLP DPAFQQAS MGKTSPASSASWLPRPLTPTTADSPTQYTTSTSLGGGPAD
UniRef90_C0SE75 UniRef90_G1X9G5 UniRef90_S8G397 UniRef90_W4YL87	T L P P H L Q Y Y M G A Q Q G Q N P L Q S P E D I P P G F P Q D P N Y L R H R T Q W D N M A D F A V P V N E P Y N P S E E P P L E L A Q M L L E I F P H R H Q S S S I T P L F S S T M V P E R S E S T T L S S S A F K T T D F P S A D S T T V
UniRef90_R9P7C2 UniRef90_UPI0004560AE2 UniRef90_S7RVK7 UniRef90_UPI00045601A8	S Q F G P R R R R G I S D T R A A T L Q H S V G S L T S T L P D P A F Q Q A S M G K T S P A S M S N L A L A A L D P A S A S S P D S S H H A S S A S W L P R S D T S P P F S S A S W P N E P L T P T F T A D S P T Q Y T T S T S L G G P A D T S K A G A A D A P S R P S A A T S S G R R K A R H T P V E L D V A A R R R E G T A Q S M H Q Q Q Q A F H Y P P L Q S P L Q P E Q L L A H P E S L H V H G
UniRef90_B8M3S6 UniRef90_J9VHV6 UniRef90_D8PLU0	H H N S W E V L E D G N G F
UniRef90_E6ZSJ6 UniRef90_N4V8L4 UniRef90_E6ZPG6 UniRef90_V9D255	RSHHASDLARSGSASRPPRDLAIVGAASAVSSASAGHAA SLTTAHWGSVPYSNNMPPDGPNYRKLGAHLGPLPISQGLS QHHFRPSDASDLDAWRQSQVNPASASSWDASFSPLPVDWL TGSNHAFOYFOPRPPPIVTSPYPTNTAWVAPTTAATAOLF
UniRef90_K0KSB0 UniRef90_UPI0003C16AC9 UniRef90_J3NPX6	D E T N V Q P Q S T Q S N D N S D S S N S N T P T Q N P S K K H H H S T A P P A S Q P P Y Q Q F T D P T S A H Q T
UniRef90_D1NHZ1 UniRef90_UPI000455F598 UniRef90_UPI0004622926 UniRef90_T1D213	PTPSDEPTPSETPEEPIPTDTPSDEPTPSDEPTP PPQLPSSISAPPSQNSGPTAPQNATQNPNPPASTSDDAPS AYSSAPGYSTNSLASALGTPAIMIEGRPLVSSSSNMRLQA SDSPHSTGNSSQSSSPSSSVPNSPASSTHLPHFPRPSSLH
UniRef90_E6ZWQ6 UniRef90_Q4P2R2 UniRef90_F4WUU8	SDSPHSTGNSSQSSSPSSVPNSPASSTHLPHFPRPSSLH AEGIQSLL SLEHSIDLSPLSATYLIEQANAALHRQGH FGQPEPTDAASSLYSLHRRMHEHSYCTGPPGQDPRNQRYH PQQLSANNQSPIYPQHSPQALQPVYPQPSPQTPPSNYS
UniRef90_I2FWM5 UniRef90_W3VNK6 UniRef90_W2S3L3 UniRef90_Q4P5F6	PQQLSANNQNQSPIYPQHSPQAIQPVYPQPSPQTPPSNYS DMPQPPSTVVATFQKASTKYTTMQHKQVQ HPEPTSAS RSPSAHQAQGSRIASQAPPHQQFHGHPQGAPQQPRSPHMA PLPPPKASAPQRVASPLSGQQNQASFDRPP SAFSQSSNQHDASYPSFSPTSPNQSPSVYPQHPGAYPHHPH SIATDDHYSHISPNDMNAARGLQMLVEIAGPQHQDAHSNA
UniRef90_Q4PIJ4 UniRef90_H2ZT56 UniRef90_V4LG88	S I A T D D H Y S H I S P N D M N A A R G L Q M L V E I A G P Q H Q D A H S N A P N V S Y G V S H Q L P S S V T V P G L H P A Q F S G P V P G G N D L P Q Q S Q Y S S N P Y A S L P P R T T V Q S F G Y N Q A G A G T T E Q Q Q S G S T G S H I G M Q S T A D S S A T P A M T G T D Y S S N H K T Y Q A T M F Q H S
UniRef90_C5M405 UniRef90_H2RTU3	MAAYPHF MPQPGYQPGPRPPLQTQQPGHMPPQHGAPPQYQ

```
UniRef90_M2ZAX0
UniRef90_UPI0003ADCD6F
UniRef90_M3CY63
UniRef90_V2XBJ5
UniRef90_B5RUZ5
UniRef90_Q9UT46
UniRef90_M2TWA3
UniRef90_R7S9F3
UniRef90_K2S1Y9
UniRef90_L7HXD5
UniRef90_L7HXD5
UniRef90_UTQ4K9
UniRef90_UTQ4K9
UniRef90_UPI0004407F82
 UniRef90_UPI0004407F82
UniRef90_U6GRR7
 UniRef90_U3JVT1
UniRef90_UP1000467657D
UniRef90_UP1000467657D
UniRef90_UP1DT8
UniRef90_A2FEM8
UniRef90_A7T1V7
UniRef90_Q2GZB3
UniRef90_F2TRT9
UniRef90_F2PRC7
UniRef90_F2PRC7
UniRef90_W9Y2L6
UniRef90_W9Y2L6
UniRef90_J3NXN0
UniRef90_J3NXN0
UniRef90_J40A017SNX5
UniRef90_UP1000328C609
UniRef90_UP1000328C609
UniRef90_UP1000328C609
UniRef90_W9HV1
UniRef90_M7WPY3
UniRef90_M7WPY3
UniRef90_M7WPY3
UniRef90_G9N5A5
UniRef90_A7EE0
UniRef90_A7EE0
UniRef90_A7EE0
UniRef90_BYAE
UniRef90_UP10004623F54
UniRef90_UP10004623F54
UniRef90_UP1000443F438
UniRef90_UP1000443F438
UniRef90_UP1000443F438
UniRef90_UP10048
 UniRef90_UPI000467657D
UniRef90_U9TDT8
 UniRef90_W9X274
UniRef90_U7PV48
UniRef90_W9X274
UniRef90_U7PV48
UniRef90_U7PV48
UniRef90_M9ME11
UniRef90_M9ME11
UniRef90_G2QVF0
UniRef90_B9T474
UniRef90_G0SE75
UniRef90_G1X9G5
UniRef90_W4YL87
UniRef90_W4YL87
UniRef90_W4YL87
UniRef90_UPI0004560AE2
UniRef90_UPI00045601A8
UniRef90_UPI00045601A8
UniRef90_UPI00045601A8
UniRef90_UPI00045601A8
UniRef90_UPI00045601A8
UniRef90_UPI00045601A9
UniRef90_UPI00045601A9
UniRef90_UPI00045601A9
UniRef90_UPI00045601A9
UniRef90_UPI00045601A9
UniRef90_UPI000455F08
UniRef90_UPI000455F598
UniRef90_UPI0004622926
UniRef90_UPI0004622926
UniRef90_UPI0004622926
UniRef90_UPI004622926
UniRef90_UPI0004622926
                                                                                                                                                                                                                                                                                     TPSDEPTPSETPE
GTANSQPPPPPWSAA
RSRSRSNSRAKRPP
PFAARSDAVQMQIQQ
QLQQQHQGPQSTSAQ
QQQPSTPNYSQPSPQ
SSHHDISSSNSSRS
PVGQPSTPNYSQPSPQ
SSHHDISSSNSSRS
PVGQQPSTPNYSQPSPQ
SSHHDISSSNSSRS
TTTVDSIQAPIPS
PHSTIDNHFASAQ
LLHWSTPASHASSS
STTTTVDSIQAPIPS
PQSGSLSVSGTGMS
PQGGSLSVSGTGMS
PNLMHSVSEYFPELY
PAPQAYLPHPR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EPIPT DTPS DEPTPS
ESGSYALAPNSPPFI
AAASRPTPSHSANDI
QAPTSSSFPPYPSDI
QQYQSSELHSHSLHQI
QQYQSSELHSHSLHQI
QQNAVANYSQSSPQALI
QQPMAYAPPQYGYPPSI
QQPBSTSTSNSFPPYPSI
QQPBSTSTSNSFPPYPSI
QQPBSTSTSNSFPPYPSI
QQPBSTSTSNSFPPIGRVASPYPSI
QQPBSTSTSNSFPPIGRVASPYPSI
QQPBSTSTSNSFPPIGRVASPYPSI
QQPBSTSTSNSFPPIGRVASPYPSI
QQPBSTSTSNSFPPIGRVASPYSSPPSI
QQPPPSLMQFSRPSI
NQQFQPPEHPATLSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DDPLPHPRASTKLATA
                                                                                                                                                                                                                                                EQATFQSLVNNSRHAF
                                                                                                                                                                                                                                                                         PTPQPQPPPARPDPP
  UniRef90_I2FWM5
UniRef90_W3VNK6
UniRef90_W3VNK6
UniRef90_Q4PSF6
UniRef90_Q4PJ4
UniRef90_H2ZT56
UniRef90_V4LG88
UniRef90_C5M405
```

```
250 260 270 280 LF N D PL I S P S S M N A L A T S N L A Q Q N P A L Q A V Q A Q A G N E I S R S H H S P S E R S L R S P Q K S H H S P S E R S L R S P Q K S H H S P S E R S H K S E P S S P P A H S V A G R S N R N S F Q V L P A Q L T P T Q A E K P A D P D A P L H P L Q P R Y P L D N R P K S P P L P I F L D E G G T N N N G N N L T N I L S F S P N V N M F S P S F S N D P E S V D Q T Q N Q S H
UniRef90_M2ZAX0
UniRef90_UPI0003ADCD6F
UniRef90_M3CY63
UniRef90_V2XBJ5
UniRef90_BSRUZ5
UniRef90_BSRUZ5
 UniRef90_Q9UT46
UniRef90_M2TWA3
                                                                                                                                                                                                                                                                                                                      D P D G L S H N H M P V E N S S N P T L T Q V G N F S I N M N P V Q A V L H T P V N H S S Y I Q N Q F H P
UniRef90_MZTWAS
UniRef90_R7S9F3
UniRef90_K2S1Y9
UniRef90_L7HXD5
UniRef90_N4TPP1
UniRef90_U7Q4K9
UniRef90_Q4PGC2
                                                                                                                                                                                      S M A N Y F P S P S S T P T L R P Q V R A K A A S T N S I N T S L S P P S V D WE T M Q R L S K A Y F D V I N M L H P V F G D L S T P L S P L Q P P S A V S S T L Q R G R Y A N Q G M F D N A G A S N S I Q Q N G R E Q Q Q P A Y S P T S P V Y S P Q A G G Y A N V A S P A Y S V Q S P R Q L A L S H P A P L P V H P S S S Q S T P V P P S C H H T S S Q S I P V H P S P P R S P S E A P P Q R P H S D G A P S S R I S D R T P A S P T R
UniRef90_UPI0004407F82
UniRef90_U6GRR7
UniRef90_W9CA46
UniRef90_U3JVT1
                                                                                                                                                                                                                                                                                                       N Q G M F D N A G A S N S I Q Q N G R E Q Q Q L P V Q N L T S S P V Y S P Q A G G Y A N V A S P A Y S V Q S P R Y S P T S P L Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SQSLPAH
ADPVSPR
 UniRef90_UPI000467657D
UniRef90_U9TDT8
UniRef90_U91D18
UniRef90_A2FEM8
UniRef90_A7T1V7
UniRef90_Q2GZB3
UniRef90_F2TRT9
UniRef90_L8FN25
UniRef90_F2PRC7
                                                                                                                                                                                           QPDPYQNNQNAFSPPQSQDPMFSAQPPTNPYGQPPGANQPGSQPGSQPGSQPGSQPGSQPGSQPGSQKVNSMMNGEKLFPLAVNLAARLESDKSSEAYFSLQRC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STPPRDVPEPTOARS
UniRef90_L8FN25
UniRef90_F2PRC7
UniRef90_F2PRC7
UniRef90_F2PRC7
UniRef90_J9Y2L6
UniRef90_J3NXN0
UniRef90_J3NXN0
UniRef90_J3NXN0
UniRef90_V5EYE0
UniRef90_UPl000328C609
UniRef90_UPl000328C609
UniRef90_K9HIV1
UniRef90_K9HIV1
UniRef90_K9HIV1
UniRef90_M7WPY3
UniRef90_J9VXX0
UniRef90_J9VXX0
UniRef90_J9VXX0
UniRef90_G9N5A5
UniRef90_A9WC61
UniRef90_A9WC61
UniRef90_A9WC61
UniRef90_P38968
UniRef90_P38968
UniRef90_P38968
UniRef90_UPl0004623F54
UniRef90_G3J4W1
UniRef90_G3J4W1
UniRef90_G3J4W1
UniRef90_COSAX7
UniRef90_W0TF88
UniRef90_W0TF88
UniRef90_W1Pl000443F438
UniRef90_UPl000443F438
UniRef90_UPl000443F438
UniRef90_UPl000443F438
UniRef90_UPl000443F438
UniRef90_UPl000443F438
UniRef90_UPl000443F438
                                                                                                                                                                                        LHTSVMRTVVSSGNDALNLLFQAAAQEQDNEMQPDPGVNRRPSVYNSYGYYDVNAQMSSSANQPPLFSPPSSNPLSGSF GVPNFSSSASNRAGFSTEPTPSETPEPIPTDTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPSDEPTPS
                                                                                                                                                                                      HPLQPRYPLDSRPKSPIFGAFGYDSLSSSTNPCMSPHSIS
IDLASRVRPLALSTLQA
NLSREVPAPVISTDSQFTVQSTYAVPSVPALPPINASSTA
ISTGSYAPANYPPPPPGPPPNVHNRAASNTPSDSNPNSRP
SGTMLSTSNVDSSPSMHTVVQSNTEDQFANIDRQEDS
RLRADSLPSQPQLTQESSSLSERSSRRNTPAFELPNSKLS
ATASATPSPSATASVTPEPTASTTPSPSATASATP
EPT
YGQQRPQAPHQTQYSQGFQYPATTTAADTYRQPPTLMQCPT
TAHFPYPQPSNLDAINAKTYFQSSSNSPAPYVYRNNLPPS
SSQQFPIGTISTANQTSNTAQVASSNPYAPPPQQRVATPL
HAISLTSDQRNRSMRYIISDLRAVFQSSASWMSFLNLPRF
EGFTSSSLPRDAIARRFVDAYFRNVNRAYP
SSILSRRNSTSNPYNHYLLPMAQ
                                                                                                                                                                                      LMTLT NSEKFAAQFEVPNSPSTGTLQSQPMNISNSIASLAMHVNSYGPGMAPPSQGPPGPLSAPSFQGPPRPPQPSVLAMHINSYGSGMTPPNQGSPGPLPAASLQGPPRPPQPSVLAMHINSYGSGMTPPNQGSPGPLPAASLQGPPRPPQPSVLAMHINSYGSGMTPPNQGSPGPLPAASLQGPPRPPQPSVLAMHINSYGSGMTPPNQGSPGPLPAASLQGPPRPPQPSVLOMPAGPPKTPDSKIAAQRSFVSPHTPMGNASHSSHPSAFPLLASPPKSGDESSPSLPRLKQPFSPSPMLDNGALSNGNGSNPAADAVLRSFFDNVHVFNPLLEEEDVQDMHADPSGHASPEGSHRTESHRTAAGGIHDGSIGSPSYANPDLQPPATPALGSPSSGSEAASSSSPATDHGFSAAPSRSTASSATPASPGRSPFQPSFPVDSSYPPTRATLQPPLPGYIKQSTAVGMSITSPRFMSSPGFSPASPVFAPTSPAYSPTSPGYQQSSATSATHPNIDSEYAPRQSYSHEITPPSATSSASF
 UniRef90_W9X274
UniRef90_U7PV48
UniRef90_W9X274
UniRef90_U7PV48
UniRef90_U7PV48
UniRef90_M9ME11
UniRef90_M9ME11
UniRef90_G2QVF0
UniRef90_B9T474
UniRef90_G0SE75
UniRef90_G1X9G5
UniRef90_W4YL87
UniRef90_W4YL87
UniRef90_W4YL87
UniRef90_UPI0004560AE2
UniRef90_UPI00045601A8
UniRef90_UPI00045601A8
UniRef90_UPI00045601A8
UniRef90_UPI00045601A8
UniRef90_UPI00045601A8
UniRef90_UPI00045601A9
UniRef90_UPI00045601A9
UniRef90_UPI00045601A9
UniRef90_UPI00045601A9
UniRef90_UPI00045601A9
UniRef90_UPI000455F08
UniRef90_UPI000455F598
UniRef90_UPI0004622926
UniRef90_UPI0004622926
UniRef90_UPI0004622926
UniRef90_UPI004622926
UniRef90_UPI0004622926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SYAP
SSPSP
SRSPS
TAVS
QQSP
                                                                                                                                                                                        S P S S S M G G I A S T L F T H S V Q T T L L H S P T D Y V G P L S A P L M P L P G S A P F F G L A D S E E E P D W M S L R S S D A H R D S S K E S Q G Q V S E E Q P S Q T A Q N A Y P L Q S F E R T P P V G P S V Q H H S S T F R Q L L Q P L D K S G S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              T T L V P
T P G A S
G V A F G
S L Q E Y
S A P Y P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TVMSSVLL
PSEHEQMM
YHDS
RFTLQERS
EAQAVRFP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DTDPRYSRSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
T
P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q
E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TS PR
PDMDRSFDGQ
TSHMDNFESQ
QP
SNV
SDDNHSITSS
FSGPPPQ
R
                                                                                                                                                                                        S PT S P A L N L T S P S Y S P T S P R Y S P T S P S F S P T I L S S Q Y M H S P L V T L N R F I T K I P P F S R L L R P P I S A I L I D Q R A A P T S C P S L V Y A P S E Q S S S L T H L D P T Q I L H H G Q D G S Q I Y A T Q A G S S N S P S N Q F G G T D R L T P T P Y T A P S P E S A Y F G R V L S H S T S S F D L S N Q S N I N S L L Y N D T T P S I S L N T D L T N S S A S S S H F P A N N L P G P P P T S L S Q G S S L T Q P P F
                                                                                                                                                                                      E P T P S D E P T P S D E P T P S E T P E E P P T D T P S D E P T P D E P MS T S S Q P E G V Q Q G R F S P V Y E Q Q Q A T S P S D Q D V D T A T S Q S T MS MQ Q S D M P P A S P S P T F P V G H H P S T S Q V T Q T F Q T L K S S A V L P L S A T I C S S S N S I T P S L P A E A D F L A L L E S Y S Q R V Y P F F S I V V P S D A H P P A S S S A L T R K R P T A H N S S P T R M P P A H S P S D M S S S S M P Q Q Q H S P Y S Q S S P Q T P P Q P S P Q Q H S P Y P Q S S P Q Q P A G Y D S P P Q H W A G Q Q P G Y E M P G T P R S P R H A N L G A S P M G P N G L P G T P S N R Y A P A P G S Q S T P Q A P P P G S R P A R P S P Y A A A P P H Q Q P A S S S A F N T H S T S F A P P L D T A F L Q P N S A S T S H L L P A Q W V P S S S T S S P A D R F T N T T S S S P V P H F P L T G P P S H M Y Q P P A Q V Q V S K D L Q P Q F L P Q S R L Q M Q N P M H Q G G D K P Q S M L P V P S I P Q S H N P Q S I P Q L P P M Q L S Q H H S T S N E G T P N S H N F S P A L S P Q N M A T N G V P P S S Q A G E H
 UniRef90_I2FWM5
UniRef90_W3VNK6
                                                                                                                                                                                        DSPP
QHWAGQ
PSNRSAA
PASSST
PHFPLT
NPMHGG
HHSTSN
NAQQIP
                                                                                                                                                                                                                                                                                      QPGYEMPGTPRSPRHANLGASPMGPNGLPGTPSMPAPGSQSTPQAPPPGSRPARPSPYAAAPPHQQQPFNTHSTSFAPPLDTAFLQPNSASTSHLLPAQWNQSSPADRFTNTTSSSPVGPPSHMYQPPAQVQVSKDLQPQFIPQSRLQMQPQGDKPQSMLPVPSIPQSHNPQSIPQLPPMQLSQLQGDKPQSMLPVPSIPQSHNPQSIPQLPPMQLSQLQGDKPQSMLPNFSPALSPQNMATNGVPPSSQAQEHSNPHPHMQIPGGPRAPMPPTSQPMPPVSQNYPTPT
UniRef90_W3VNK6
UniRef90_Q4PS56
UniRef90_Q4PJ4
UniRef90_H2ZT56
UniRef90_V4LG88
UniRef90_C5M405
```

	200 200 240 26	20
UniRef90_M2ZAX0 UniRef90_UPI0003ADCD6F UniRef90_M3CY63 UniRef90_V2XBJ5 UniRef90_B5RUZ5	PTSTLPVDSR	20 I
UniRef90_Q9UT46 UniRef90_M2TWA3 UniRef90_R7S9F3 UniRef90_K2S1Y9 UniRef90_L7HXD5 UniRef90_N4TPP1	G S G G S S R A F S Y D S S Q Y Q A L A P L D Q P F S S S V P P	
UniRef90_U7Q4K9 UniRef90_Q4PGC2 UniRef90_UPI0004407F82 UniRef90_U6GRR7 UniRef90_W9CA46 UniRef90_U3JVT1	DTAYPQSDLSFASQQSYLQPSPPVVAPLQQQQQQRLPTSQGASSPTAQEYSPTSPAYEPADPFSPNPYATELTQDLEGEDSSSQFLPVPPSSSQFFPAHP	
UniRef90_UPI000467657D UniRef90_U9TDT8 UniRef90_AZFEM8 UniRef90_AZT1V7 UniRef90_Q2GZB3 UniRef90_F2TRT9	S S P F R P N P D S S P S A Y P G T R S S P M R T D P H S G S S R P H S D S P N A V L S Q P N A P Q F D P F G V K S P Q S T P L S P Q P G S Q P	
UniRef90_L8FN25 UniRef90_F2PRC7 UniRef90_W9Y2L6 UniRef90_F1A1N3 UniRef90_Q06852 UniRef90_J3NXN0	RRPSI GQAPYPPLQAYGAYQHDAVQQARRPSASSPGQPQSTYSPP SSGMPPSFFSTSASSRAPPGCDAIPLSTSSSSSNNVGIQI SDEPTPSDEPTPSDEPTPSETPEEPIPTDTPSDEPTPSDE GS]
UniRef90_A0A017SNX5 UniRef90_VSEYE0 UniRef90_UPI000328C609 UniRef90_F8P3Q9 UniRef90_K9HIV1	PAESITS SNDTIAPLSASSVVTGHSFS ISGPTPSRPETTTHASGPPPSASTSAPPSHGQTLSSTGTH VPSTTADLLRPPSRNSQLQG	
UniRef90_M7WPY3 UniRef90_J9VXX0 UniRef90_K1X3H8 UniRef90_G9N5A5 UniRef90_A7EEE0 UniRef90_A9WC61	Y P Q T D P L L L P T Q S Y N M P S E P E P P P P Q S A F A P P P L R S E P S A A S V T P S P S A T A S V T P S P S A T A S T T P S P S V T	
UniRef90_K2RWR7 UniRef90_F6R446 UniRef90_O94421 UniRef90_P38968 UniRef90_UP10004623F54 UniRef90_A0A010R5E3	PSGPLNQMNTQTMHPSQPQGTYASPPPMSPMKAMSNPAGTATSFQPSSSRSPSVDPNTVKSAQHIPRMSPSPSASATQSHSGGVPPAPLPKASNPYAPTATTQ PNGSSYPPTGPYTNFATVLDPLRRTEMQPSLLMSMLALGVLSQSS	
UniRef90_G3J4W1 UniRef90_C0SAX7 UniRef90_W0TF88 UniRef90_F7A9B0 UniRef90_UPl000443F438 UniRef90_C4Y7Y4	A G S K I P S N L S S N P L A L F Q Q L T Q S P Q R P N A K M N N A G N P P G S Q V L P P P P T A L N G P G A S P L P P S T H R Q D G L P G P A P P P G S Q V L P P P P T T L N G P G A S P L P P P T H R Q D G P P G P P P R N R Q L Q M P G D S P S H R R L P T G P G G E P Q P Y T S P L P Q R Q F Q M	
UniRef90_W9X274 UniRef90_U7PV48 UniRef90_M9ME11 UniRef90_M7BZW4 UniRef90_G2QVF0 UniRef90_B9T474	RASSPIHYRYDPAGSSYPH ALPEPPPDLQPPATPALGSPSPALPEPPNPDLQP PATP R QSPPLQSPFQAQQGSYAPPAATPSPPFPSQQASFAQ <u>P</u> PPV	
UniRef90_C0SE75 UniRef90_G1X9G5 UniRef90_S8G397 UniRef90_W4YL87 UniRef90_R9P7C2 UniRef90_UP10004560AE2	TSPSYSPTSPGPSFSPASPAFSPTSPSYSPTSP ALGGS LAS PSTHQAPTTSAPSRSSNASEVSTLNSYGYNAPYGT STRVIQSSTLTPSTRPLSSPSSSFPMLSSSPQATRTLATP ASHQLLDLMGLSTSVSMP	
UniRef90_S7RVK7 UniRef90_UPI00045601A8 UniRef90_B8M3S6 UniRef90_J9VHV6 UniRef90_D8PLU0 UniRef90_E6ZSJ6	S S T P T VS D S T Y A G T S K D T E D S H T S P P T S V D S R Y S P Q S P S F S P S P A S P R S P Q M A S P T S P K Y S P T S P M A S P A S P L S S L T D E N M H E L Q Q H L P R L R M W H P H	
UniRef90_N4V8L4 UniRef90_E6ZPG6 UniRef90_V9D255 UniRef90_K0KSB0 UniRef90_UP10003C16AC9 UniRef90_J3NPX6	LSQSVPEMDAYSTSCNSSGHVWTSPPPEDMSPHHSDHQPS SATLPAYPVSPQ HSPFDLVFPDHGQFPPYHRQDS IMSPNYSINENFDPLSNLQIQDSQPA FSAPPTSTFMTPQTTSYVPSNFPPPAGASRPPTMQGPP	
UniRef90_D1NHZ1 UniRef90_UPI000455F598 UniRef90_UPI0004622926 UniRef90_T1D213 UniRef90_E6ZWQ6	S D E P T P S D E P T P S D E P T P S E T P E E P I P T D T P S D E P T P S D E N G S H A P D G R H T K E V P S S R A G A G G N K G P E T Q T Q T L Q S L S R T K S F M R P K S A E P S S P L R R A L S P D R L H P K S A E V K A K R E S F S W S T G H S L S V Q S S S B P S S D M V S S S T P T H V H L N N P E V A O S C A L A O L A A V A O W	
UniRef90_Q4P2R2 UniRef90_F4WUU8 UniRef90_12FWM5 UniRef90_W3VNK6 UniRef90_W2S3L3 UniRef90_Q4P5F6	PDSFRPSDMVRISTRTHVHLNNPEVAQSGALAQLAAVAQWLSPQPPPANYSQSSPQPPQPSPQPPNFSSQSSPQTHPANYAPSTPLSARGANVPPSPSTAHSNVSSPAHQPMTLGQQQASSAAIPPPPQQQFSAGPPPSQQFSSGPPSAGGPPQQHQQPLPPSLLGTSHSHSHSPSPQPEAKAYQSHPSSSRDQ	
UniRef90_Q4PIJ4 UniRef90_H2ZT56 UniRef90_V4LG88 UniRef90_C5M405 UniRef90_H2RTU3	A Q H S Q H P H F Q T P S P V P P Q S Q L P P Q A P A Q V P S Q P T V P S Q L P R P M Q P P Q H V R P P II Q I S T P A E Q G V S L Q N Q Y Q I P L H Q M Q M L S T A D P T T S L N S T N H L Q L P G K V S F P H N G N N N N N N N I S T N H G Q H I H P T L H P Q M P P A S Q P H M L P P Q P H L Q R A P L P Q M P P N V L	l

330 340 350 360 UniRef90_B5RUZ5 UniRef90_Q9UT46 UniRef90 M2TWA3 UniRef90_R7S9F3 UniRef90_K2S1Y9 UniRef90_L7HXD5 UniRef90_N4TPP1 UniRef90_U7Q4K9 UniRef90_Q4PGC2 GPSTSAPPIAQ RSMTQQTSTSTVSPPDTDSPMSTEGQT SEAAVEASPPSSPQTQQENPET UniRef90_UPI0004407F82 UniRef90_U6GRR7 UniRef90_W9CA46 S P S Q F I P V H P S S S Q I P S N F I P V H P S P S Q S I P V P P S S S Q S I T E P A S S H P R S E S P T R T R P D S R P G H G P D D G P N S R P P R H D S D UniRef90_U3JVT1 UniRef90_UPI000467657D UniRef90_U9TDT8 SFTPKSTPGQPVFLNFGQQSQQSFLSGQRQTPGSQPGNQPESQPN GQAGANQPGSQPGSQ UniRef90 A2FEM8 UniRef90_A7T1V7 UniRef90_Q2GZB3 UniRef90 F2TRT9 UniRef90_L8FN25 UniRef90_F2PRC7 UniRef90_W9Y2L6 UniRef90_F1A1N3 A P A P P P H D A A L S G R P Y S R S T S I P E E G Y P Y N A G I T T Y Q G S T P G S Q Q Q N I Q T G F E I S P S P S D E P T P S D E P T P S D E P T P S D E P T T S D E P T PSNQPYL UniRef90_F1A1N3
UniRef90_Q06852
UniRef90_J3NXN0
UniRef90_A0A017SNX5
UniRef90_V5EYE0
UniRef90_UPl000328C609
UniRef90_F8P3Q9
UniRef90_K9HIV1
UniRef90 M7WPY3 GPTASAHSSAGVPPTGTGPAPTTSAPRTPTGGPSQPHSTL UniRef90_M7WPY3 UniRef90_J9VXX0 T P P A A A H T R P H P S D L H L Q L P T S H S Q C Q S Q T A S UniRef90_K1X3H8 UniRef90_G9N5A5 UniRef90_A7EEE0 UniRef90_A9WC61 A S T T P S P S A T A S T T P S P S A T A S T T P S P S A T A S T T P S P S A T A UniRef90_K2RWR7 UniRef90_F6R446 PPPQVRPGSAGMPMDVGSYPNIPHIGQ VPSAKVPPTSKLNHAQLAM LKSQIVAY NHTMTS PPPVFNKPPTGPPPLS RNMGPRNMQQSR N C L N S P N G Q V M K K R S N K L UniRef90_O94421 UniRef90_P38968 UniRef90_UPI0004623F54 UniRef90_A0A010R5E3 UniRef90_G3J4W1 UniRef90_C0SAX7 UniRef90_W0TF88 N A Q Y Q P P P L P G Q N L G A G Y P P Q Q A N Y G P N A Q Y Q P P P L P G Q N L G S G Y P P Q Q G N Y G P Q S Q S V Q P Q N Q P Y S Q D R S S D S L V S T P UniRef90_F7A9B0 UniRef90_UPI000443F438 UniRef90_C4Y7Y4 NKPPSLQRNP UniRef90_W9X274 UniRef90_U7PV48 UniRef90 M9ME11 UniRef90 M7BZW4 ALGSPSPALPEPPNPDLQPPATPALGSPSPALPEPPNPDL UniRef90_G2QVF0 A A P F GL H P R D QL Q Q A S S I P P T T G R H L S P T S P K Y T P T S P G W S T S P E T Y S P T S P N F S G S P G Y E G Q P A G Y A N A T Y P P G T Y S G T N UniRef90 B9T474 UniRef90_B914/4
UniRef90_C0SE75
UniRef90_G1X9G5
UniRef90_S8G397
UniRef90_W4YL87
UniRef90_R9P7C2
UniRef90_UPl0004560AE2 S Q S Q I M M T S S Q S A T M S P V P P S T I T S Q Q S Q T T E F S S R T Q L Q UniRef90_S7RVK7 UniRef90_UPI00045601A8 UniRef90_B8M3S6 UniRef90_J9VHV6 UniRef90_D8PLU0 UniRef90_E6ZSJ6 R Y S P T S P A Y S P A S P Y S P T S P A Y S P S S P T W S P S S P S Q N A N G UniRef90_N4V8L4 A Q WP T M F E P Q T V H M S S D L V A K M P F F M D Y Y E N L M C S UniRef90_E6ZPG6 UniRef90_V9D255 YVRNEAYAHPRTPQQV UniRef90_K0KSB0 UniRef90_UPI0003C16AC9 LP G Q QFTGPPVSQPN UniRef90_J3NPX6 PTPSDEPTPSDEPTPSETPEEP[[PTDTPSDEP SSAGPTPSPGGYTGEYVPSAMHVTAAYDYTEGYH UniRef90_D1NHZ1 UniRef90_UPI000455F598 UniRef90_UPI0004622926 UniRef90_T1D213 UniRef90_E6ZWQ6 GQASPLALASSPSSRTQYSHSASS PSLQQLHPDPDPSDDRRDVSVSS ANPGIPSVSSSQPSPQPPNSYPTPQHDRSYSQSSHQQLQTFPQHSPQASS UniRef90_Q4P2R2 A N P G [P S V S S S Q UniRef90_F4WUU8 UniRef90_I2FWM5 R P P T F S P A A S Y H S P S H S F S N P M S P A A R Q F E P T Q K R Q S A A \square UniRef90 W2S3L3 UniRef90_Q4P5F6 Y Y Q H Q Q S S F V A S S Q T P P A A Q F L V R A G A D L E S P S N P S F S N I UniRef90 Q4PIJ4 PQAIGQAQIPTQHGQHYQLPSHNALPQQGLPQQPSPPASAMQQTQVQPYYHPPQQQEISHVQQHTVQGQQGAGTSQQTTPSPLNPTTSIYEDSRYPKCDETINQYFLGETESGQVATPPQHTQHSGAVYPGGAPMIPQQPLVPQPAASQPSAMYPSA

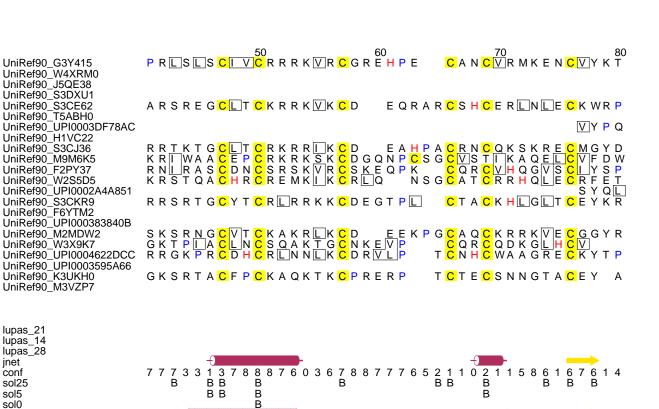
UniRef90 H2ZT56 UniRef90_V4LG88 UniRef90_C5M405 UniRef90_H2RTU3

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

AIIAMKNHDP LPANVPPSAP

```
UniRef90_M2ZAX0
UniRef90_UPI0003ADCD6F
UniRef90_M3CY63
UniRef90_V2XBJ5
UniRef90_B5RUZ5
UniRef90_Q9UT46
UniRef90_M2TWA3
UniRef90_R7S9F3
UniRef90_R7S9F3
UniRef90_K2S1Y9
UniRef90_L7HXD5
UniRef90_N4TPP1
UniRef90_U7Q4K9
UniRef90_Q4PGC2
UniRef90_UPI0004407F82
UniRef90_UPI0004407F82
UniRef90_U6GRR7
UniRef90_W9CA46
UniRef90_U3JVT1
UniRef90_U9IDT8
UniRef90_U9TDT8
UniRef90_A2FEM8
UniRef90_A7T1V7
UniRef90_Q2GZB3
UniRef90_F2TRT9
UniRef90_L8FN25
UniRef90_F2PRC7
UniRef90_F2PRC7
UniRef90_W9Y2L6
UniRef90_W9Y2L6
UniRef90_Q06852
UniRef90_J3NXN0
UniRef90_A0A017SNX5
UniRef90_V5EYE0
UniRef90_UPl000328C609
UniRef90_F8P3Q9
UniRef90_K9HIV1
UniRef90_M7WPY3
UniRef90_J9VXX0
UniRef90_J9VXX0
UniRef90_K1X3H8
UniRef90_G9N5A5
UniRef90_A7EEE0
UniRef90_A9WC61
UniRef90_A9WC61
UniRef90_K2RWR7
UniRef90_F6R446
UniRef90_O94421
UniRef90_P38968
UniRef90_UP10004623F54
UniRef90_A0A010R5E3
UniRef90_G3J4W1
UniRef90_C0SAX7
UniRef90_W0TF88
UniRef90_F7A9B0
UniRef90_UPl000443F438
UniRef90_C4Y7Y4
UniRef90_W9X274
UniRef90_U7PV48
UniRef90_M9ME11
UniRef90_M7BZW4
UniRef90_G2QVF0
UniRef90_B9T474
UniRef90_G1X9G5
UniRef90_G1X9G5
UniRef90_W4YL87
UniRef90_W9P7C2
UniRef90_W9P7C2
UniRef90_UP10004560AE2
UniRef90_UP100045601A8
UniRef90_B8M3S6
UniRef90_B8M3S6
UniRef90_J9VHV6
UniRef90_D8PLU0
UniRef90_D8PLU0
UniRef90_BCZSJ6
UniRef90_N4V8L4
UniRef90_M9ME11
UniRef90_E6ZSJ6
UniRef90_N4V8L4
UniRef90_E6ZPG6
UniRef90_V9D255
UniRef90_UP10003C16AC9
UniRef90_UP10003C16AC9
UniRef90_UNINZ1
UniRef90_UNINZ1
UniRef90_UP1000455F598
UniRef90_UP10004622926
UniRef90_UP10004622926
UniRef90_CP100046
UniRef90_T1D213
UniRef90_E6ZWQ6
UniRef90_Q4P2R2
UniRef90_F4WUU8
UniRef90_I2FWM5
UniRef90_W3VNK6
UniRef90_W2S3L3
UniRef90_Q4P5F6
UniRef90_Q4PIJ4
UniRef90_H2ZT56
UniRef90_V4LG88
UniRef90_C5M405
```

```
UniRef90_G3Y415
UniRef90_JSQE38
UniRef90_JSQE38
UniRef90_S3DXU1
UniRef90_T5ABH0
UniRef90_T5ABH0
UniRef90_T5ABH0
UniRef90_T5ABH0
UniRef90_T5ABH0
UniRef90_T5ABH0
UniRef90_M9M6K5
UniRef90_M9M6K9
UniRef90_M9M6K
```



```
UniRef90_G3Y415
UniRef90_W4XRM0
UniRef90_S3DXU1
UniRef90_S3DXU1
UniRef90_T5ABH0
UniRef90_H1VC22
UniRef90_H1VC22
UniRef90_M9M6K5
UniRef90_M9M6K5
UniRef90_W2S5D5
UniRef90_UP10003B8840B
UniRef90_UP1000383840B
                                                                                                                                                                                                                                          100
                                                                                                                                                                                                                                                                                                                     110
                                                                                         T G R V R Q V S P P P V P Q G D N P N G P E F C A N N S E E R T G G F T W S H W V P T Q V Q E L I S D H S W K P N K M M M D M P V D P N S A S E R A E R E R P E Q R D Q R E Q R S G G K S A S S K S E I K E T T S K I D R W L G E G P P P P N W Q G Q G P S I S P S G S Q E G N T G E S T S M A L K Q L Q L P L A Q P A R L Q G R S L T P A A H
                                                                                      K D F K W R P

F G E N P A K A I Q E A E K R A S P P S Q A S A E G
Q R Y A R R T S K L A A R S Q A A A T A A A A Q A S
T P A H R G P R C D R C R K N K C D R N L P V C N H C Q E D N E T D C N Y
S S D S T S L Q M S S S D S T P H P M S S S D S T
P Q K P R N R G K K T K K S E E I V I D D D E E E E Q Q E D A E D A E D A E A E
C C E D Y S H C A X G T A Q T L F T
UniRef90_M2MDW2
UniRef90_W3X9K7
UniRef90_UPI0004622DCC
UniRef90_UPI0003595A66
UniRef90_K3UKH0
UniRef90_M3VZP7
lupas_21
lupas_14
lupas_28
inet
 conf
```

sol25 sol5 sol0 jhmm

```
130

MSQGSGNVLDLSDEAPLPRPTISPASAPPPQKRSTQAKCDPLSNPMSVPGPSQHTVPSQIQQPTLQQSHSPQVQSSHSPQYSSSSRIGRPPSVLSVRRSGGSHSRGQSRSSEEPSYHSQPLFDPLAPPADGQNKSSYLGTSQNYGSTQSYQATQQQFPPTQPQTLQGGNKSSYLGTSQNYGSTQSYQATQQQFPPTQPQTLQGAPSGPPTVYQGGQSATYSQPQTLQGAPSGPPTVYQGGQSATYSQQQHSQIHIQTPAHQAPQPQRPWTPTESPGQAPSGPPTVYQGGQSATYSQPQQQHSPWTPTESPGQAPSGPPTVYQGGQSATYSQPSGQAPSGPPTVYQGGQSATYSQPSGQSARTSPHPSPRAHPSPGQDHVDYPDPARPNSMGMPPATTMGYENSLSAGVSSPGSADQNSYIDPALEAAGPAYDPAFTFSSLDSLSAASSSTTSPALAPPWPEPHYEHHVPTSLHHNVPTSLHHNELGNHNINHDDKTRDRVHGFDMDFDRTPIAADSHQRLHVSPFGQNRSSDSCQPPSGQSHHPVSPHPTSRIQPAAASNQPDPTSCIQPAASSHHPSPSPSFGQSSSVSYTDPYSQPPSGQSHHPVSPHPTSRIQPAASSDRPHLTSRIQPAASNQPDPTSCIQPAASSCSSVSYTDPYSQPPSGQSHHPVXPHPTSRIQPAASSDRPHLTSRIQPAASNQPDPTSCIQPAASSCSSDSSKPNTPPGLRTRSARQSSSSVSYTDPYSQPPSGQSTLNPRSISSDSSKPNTPPGLRTRSACRQSSSVSYTDPYSQPPLDRTRSACRQSSSVSYTDPYSQPPLDRTRSACRQSSSVSYTDPYSQPPLDRTRSACRQSSSVSYTDPYSQPPLDRTRSACRQSSSVSYTDPYSQPPLDRTRSACRQSSSVSYTDPYSQPPLDRTRSACRQSSSVSYTDPYSQPPLDRTRSACRQSSSVSYTDPYSQPPLDRTRSACRQSSSVSYTDPYSQPPLVHEGGGATPKKRKVPSDHGLARDRYASKTAVNEHPAEEESPKYQSMSSSDSTPQQLSSSDLTPQPPLVHEGGAASPGTTQTLPSSDBHASPGTTQTLPSSPGTTQTLPS
UniRef90_G3Y415
UniRef90_W4XRM0
UniRef90_J5QE38
UniRef90_S3DXU1
UniRef90_S3CE62
UniRef90_T5ABH0
UniRef90_UP10003DF78AC
UniRef90_H1VC22
UniRef90_S3CJ36
UniRef90_M9M6K5
UniRef90_F2PY37
UniRef90_F2PY37
UniRef90_W2S5D5
UniRef90_UP10002A4A851
UniRef90_UP10002A4A851
UniRef90_UP1000383840B
UniRef90_UP1000383840B
UniRef90_UP1000383840B
UniRef90_W2MDW2
 UniRef90_M2MDW2
UniRef90_W3X9K7
UniRef90_UPI0004622DCC
UniRef90_UPI0003595A66
UniRef90_K3UKH0
UniRef90_M3VZP7
  lupas_21
lupas_14
lupas_28
  inet
  conf
```

sol25 sol5 sol0 jhmm

```
UniRef90_G3Y415
UniRef90_W4XRM0
UniRef90_J5QE38
UniRef90_S3DXU1
UniRef90_S3CE62
UniRef90_T5ABH0
UniRef90_UPI0003DF78AC
UniRef90_H1VC22
UniRef90_H1VC22
UniRef90_M9M6K5
UniRef90_M9M6K5
UniRef90_W2S5D5
UniRef90_UPI0002A4A851
UniRef90_UPI0002A4A851
UniRef90_F6YTM2
UniRef90_UPI000383840B
UniRef90_UPI000383840B
UniRef90_M2MDW2
UniRef90_M2MDW2
UniRef90_W3X9K7
UniRef90_UPI0004622DCC
UniRef90_UPI0003595A66
UniRef90_K3UKH0
UniRef90_M3VZP7
lupas_21
lupas_14
lupas_28
inet
                                            conf
sol25
sol5
```

sol0 jhmm

```
UniRef90_G3Y415
UniRef90_W4XRM0
UniRef90_J5QE38
UniRef90_S3DXU1
UniRef90_S3CE62
UniRef90_T5ABH0
UniRef90_UPI0003DF78AC
UniRef90_H1VC22
UniRef90_H1VC22
UniRef90_M9M6K5
UniRef90_M9M6K5
UniRef90_W2S5D5
UniRef90_UPI0002A4A851
UniRef90_UPI0002A4A851
UniRef90_F6YTM2
UniRef90_UPI000383840B
UniRef90_UPI000383840B
UniRef90_M2MDW2
UniRef90_M2MDW2
UniRef90_M3M9K7
UniRef90_UPI0004622DCC
UniRef90_UPI0003595A66
UniRef90_K3UKH0
UniRef90_M3VZP7
lupas_21
lupas_14
lupas_28
inet
                                                conf
sol25
sol5
```

sol0

```
250 260 270 280

L P S P D Y L S

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

D Y F G S A D N R I S K A S L S A W D A L A D G A S H P R S N S V S S L L R S Q I A A A A T S S V P G T P G T A T P I L S S R S S Q A P R R R D P F T A T P D L S H V T L R A F Y S M T A E R L G P L H M P S H R E S C A A W R L P A S N Q P H P T S R I Q P A A S N Q P H P T S R I Q P A A S I Q P D P T S P P P G T L P A Y P M D P N M V D P A L A G S A S A S S A S S D S T P N S Q S S S S S S S S S S S S S S S D S T P N S E T A P P N L P P Q S P F G P G N M F S R S P G A S V F P N A Q N Q L C F T F P H S P G D S V K S N R P M A P P P S T P N S E T A P P N L P P Q S P F G P G N M F S S T Y D L G Y Q L G P S Y A D P T T D F S Q M S Q S M L Q H D A A S S S D S T H Q S M S S D S T P Q P M S T S D S T A Q P M S S S D S T D N L P P M S T S D S T A Q P M S S S D S T D N L P P M S T S D S T A Q P M S S S D S T T N V Q P S T T Q T L P S S G T T Q T L P S S P G T T Q T L F T S P G T T Q T L S S S G T T Q T L P S S P G T T Q T L F T S P G T T Q T L S S S G T T Q T L P S S P G T T Q T L F T S P G T T Q T L S S S G T T Q T L P S S P G T T Q T L F T S P G T T Q T L S S S G T T Q T L P S S P G T T Q T L F T S P G T T Q T L S S S G T T Q T L P S S P G T T Q T L F T S P G T T Q T L S S S G T T Q T L P S S P G T T Q T L F T S P G T T Q T L S S S G T T Q T L P S S P G T T Q T L F T S P G T T Q T L S S S G T T Q T L P S S P G T T Q T L F T S P G T T Q T L S S S G T T Q T L P S S P G T T Q T L F T S P G T T Q T L S S S G T T Q T L P S S
UniRef90_G3Y415
UniRef90_W4XRM0
UniRef90_J5QE38
UniRef90_S3DXU1
UniRef90_S3CE62
UniRef90_T5ABH0
UniRef90_UPI0003DF78AC
UniRef90_H1VC22
UniRef90_H1VC22
UniRef90_M9M6K5
UniRef90_M9M6K5
UniRef90_W2S5D5
UniRef90_UPI0002A4A851
UniRef90_UPI0002A4A851
UniRef90_F6YTM2
UniRef90_UPI000383840B
UniRef90_UPI000383840B
UniRef90_M2MDW2
                                                                                                                                                                                                                                                                                                                                                                                                      250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    280
UniRef90_M2MDW2
UniRef90_W3X9K7
UniRef90_UPI0004622DCC
UniRef90_UPI0003595A66
UniRef90_K3UKH0
UniRef90_M3VZP7
 lupas_21
lupas_14
lupas_28
 inet
                                                                                                                                                                                                                              conf
 sol25
 sol5
   sol0
```

```
290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           320
UniRef90_G3Y415
UniRef90_W4XRM0
UniRef90_JSQE38
UniRef90_S3DXU1
UniRef90_S3CE62
UniRef90_UP10003DF78AC
UniRef90_UP10003DF78AC
UniRef90_HVC22
UniRef90_S3CJ36
UniRef90_S2CJ36
UniRef90_W2S5D5
UniRef90_UP2SD5
U
 UniRef90_G3Y415
UniRef90_UPI000363840B
UniRef90_M2
UniRef90_UPI0004622DCC
UniRef90_UPI0004622DCC
UniRef90_UPI0003595A66
 lupas_21
lupas_14
lupas_28
 inet
                                                                                                                                                                              conf
 sol25
```

sol5 sol0

```
350
                                                                                                                                                                                                                            360
                                                                                          330
                                                                                                                                      340
UniRef90_G3Y415
UniRef90_W4XRM0
UniRef90_J5QE38
UniRef90_S3DXU1
UniRef90_T5ABH0
UniRef90_UP10003DF78AC
UniRef90_H1VC22
UniRef90_H1VC22
UniRef90_S3CJ36
UniRef90_W2S5D5
UniRef90_W2S5D5
UniRef90_W2S5D5
UniRef90_UP10002A4A851
UniRef90_UP10003B8840B
UniRef90_G3Y415
UniRef90_W2MDW2
UniRef90_M3X9K7
UniRef90_UPl0004622DCC
UniRef90_UPl0003595A66
UniRef90_K3UKH0
UniRef90_M3VZP7
                                                  SDSTYQPMSSSDSTLPPMSSSDSTYLSMSSSD
QKSQSL
GTTQSLSVSSGTTQTLPSSPGTTQTLFTSPGTTQTPSSSG
                                                   sol0
jhmm
```

lupas_21 lupas_14 lupas_28 inet conf sol25 sol5

```
UniRef90_G3Y415
UniRef90_W4XRM0
UniRef90_J5QE38
UniRef90_S3DXU1
UniRef90_S3CE62
UniRef90_T5ABH0
UniRef90_UPI0003DF78AC
UniRef90_H1VC22
UniRef90_S3CJ36
UniRef90_M9M6K5
UniRef90_W2S5D5
UniRef90_W2S5D5
UniRef90_UPI0002A4A851
UniRef90_UPI0002A4A851
UniRef90_UPI0003AB3840B
UniRef90_UPI0003B38840B
UniRef90_UPI0003B3840B
UniRef90_UPI0003B3B40B
                                                                                                 370
                                                                                                                                              380
                                                                                                                                                                                             390
                                                                                                                                                                                                                                           400
                                                       SGAIMVGGGPS
                                                                                                                  S R H G D G P A L P P P S S Y S G L T R T Q P Q T T A
                                                     A S P I F S P H T P G Y A E S I M S V A A S Q T P H S P Q K S Q N P P E Q Y G R G G G A V P Q R I D S X P L S P S G Q S R P P Q A G T G P
                                                       N S P A E K Q R E D L S G T A N A L G T T
                                                                                                                                                                      PKEGPELQSTP
                                                       TTKSLPPSSGTTQTPPPSSGTTQTLPSSP
                                                                                                                                                                                                      GTAQTLFTS
```

lupas_21 lupas_14 lupas_28 inet conf sol25 sol5 sol0 jhmm

UniRef90_G3Y415
UniRef90_W4XRM0
UniRef90_J5QE38
UniRef90_S3DXU1
UniRef90_S3CE62
UniRef90_T5ABH0
UniRef90_UP10003DF78AC
UniRef90_H1VC22
UniRef90_S3CJ36
UniRef90_M9M6K5
UniRef90_M9M6K5
UniRef90_W2S5D5
UniRef90_UP10002A4A851
UniRef90_W2S5D5
UniRef90_UP1000383840B
UniRef90_UP1000383840B
UniRef90_W3X9K7
UniRef90_W3X9K7
UniRef90_UP10003595A66
UniRef90_UP10003595A66
UniRef90_W3UKH0
UniRef90_M3VZP7

lupas_21 lupas_14 lupas_28 jnet conf sol25 sol5 sol0 jhmm