

gi |168693647|ref |NP\_001108225.1|-----TLP LVAALLLA-----CSLS-----\* \* \* \* \* : : \* \* \* \* \* 56  
 gi |114626940|ref |XP\_001143396.1|-----MARGDHLTSFADFNGPEPNVLRREGDVMKVGVIIVLFSPLGLDVS-----PTGLAETVHCDLQPVGPER-GEVITYTTSQVSKGCVAG 82  
 gi |6679649|ref |NP\_031958.1|-----MDRG-----VLPLPTLILFLVYI-----SFPV-----TTGLAERVGCDDLPVDFTR-GEVITYTTSQVSEGCVAQ 57  
 gi |73968182|ref |XP\_851469.1|-----MGTTEFKNYKILHLLGLLQGLAWNGSLPCPWTTPDKAPCADPLVDRMDRT-----ALPLVVALLLAICSLRHITGAGVPEVEPEVALCSWCSLGCAEPTGLAETIHCDDLPVDA-GEVITYTTSQVSEGCVAQ 123  
 gi |115497110|ref |NP\_001069865.1|-----MDRG-----VLCQAMALLLVCSLGS-----PTSLAETIVCDLQPVDS-----EVTYVTSQVSEGCVAQ 53  
 gi |118099243|ref |XP\_001234821.1|-----MGMMEGCGRVLGLSPCVTRICRHRAGGCRRCRRRPPQPEVLLHPDSS-----SMSGSRFFPAAARSLSRSLGVAAGMCRRESPLLPILLALLGRDPAPAETHCDLQPVTAEPFITLFTYTTVLRGCVN 127  
 1.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100.....110.....120.....130.....140.....150



gi |168693647|ref |NP\_001108225.1|APN-AILEVHVLFLEFPFG-PSOLELTLQASKONGTPREVLLVLSVNSVFVHLHQAIGIPLHLAYNSSLVTFQEPGPNVITLSPFP-KTQLEWAAERGPITSAELNDPOSILLRLGCAQCGLSFCMLBASQDMGRULEWRPRTPAL 203  
 gi |114626940|ref |XP\_001143396.1|APN-AILEVHVLFLEFPFG-PSOLELTLQASKONGTRPREVLLVLSVNSVFVHLHQAIGIPLHLAYNSSLVTFQEPGPNVITLSPFP-KTQLEWAAERGPITSAELNDPOSILLRLGCAQCGLSFCMLBASQDMGRULEWRPRTPAL 229  
 gi |6679649|ref |NP\_031958.1|AAN-AVREHVHVLFLDFPFG-LSLELTLQASKONGTETREVFLVLSNKNVVFVKFQAPETPLHLAYDSSLVIFQGPQVNIITVLPRLTSRKKIILDWAAKGAITSIAALDDPOSIVLVLGQDQKAFLLCLPEAKHDMGATLEWQPAQTF 205  
 gi |73968182|ref |XP\_851469.1|VFN-ATVEVHILFLESRE-LSLELTLQASKONGTRPREVFLVLSAKNVLLQLQAPGIPLYLAFNPKLI-FQHPGVNITLSPFTTKSOLLAWADKGSIASIAELNDPOSILLRLDQAPKFPFCNLEPLVDMGHTLEWSPLTRAS 270  
 gi |115497110|ref |NP\_001069865.1|LPD-ATLEVHVLFLEFGD-VSRLBLTLQTSKOGGIRPREVLLVLSVNSIFLKLQAPGIPQLAYDSEKLV-FHEALDANITQLPFTTKDQLLNWANTQGSIASVAELSNPOSIFLRDQASSPFSNLEPQKDMGHTLWTP---K 196  
 gi |118099243|ref |XP\_001234821.1|SSTLASHEVHVLSIQWSKTPVPMNLVSIITPRDDCTRPAALILQCI---CQLASITLPCQNLIIHTDASLR---PKVQKGLPKDARGHLLLEWQRTYGGITSYSELKDPRIHLOLGENSENBPQNCIPKDFDAPHLAEVLFER-E 268  
 .....160.....170.....180.....190.....200.....210.....220.....230.....240.....250.....260.....270.....280.....290.....300



gi |168693647|ref |NP\_001108225.1|VRGCHLEGVAGHKEAHILRVLPGHSAAPRTVTVKVELSCAPGDL-D-AVLLILOGPPYVSWLIDAN-HNMQIWTTEYSFKIFPEKNIIRGFKLPDTPGGLGAEARMLNASIVASFVELPLASIVSVLHASSCGGRLOTSPAPIQTTPP-KDTC 350  
 gi |114626940|ref |XP\_001143396.1|VRGCHLEGVAGHKEAHILRVLPGHSAAG-----IGSRP-----APDFNPHYIIPPGANQ-----NPVPPSSLGGRLQTSAPAPIQTTPP-KDTC 305  
 gi |6679649|ref |NP\_031958.1|VQSCRLEGVSGHKEAYILRILPGSEAGPRTVVMVELSCISG--D-AILLHGGPPYVSWFIDIN-HSMQILNTEYSVKIFPGSKVGVLELDDTPGGLAEARKLNASIVSVFVELPLVSNVSRASSCGGVFTTPAPVVTTPP-KDTC 350  
 gi |73968182|ref |XP\_851469.1|VRGCRLEGVPGHKEAHILRVLPGPEAGPRTVTVKVELSCAGDPE-AVLLILOGPYSVSWLIDAN-HNMQIWTTEYSFKIFPEKNIIRGFVLPDTPGGLGAEARMLNASIVASFVELPLASVSVLQAHSCGGLOTSPPPVOTTPPTESC 418  
 gi |115497110|ref |NP\_001069865.1|AWGCRLEGVAGHKEAHILRILPGPEASPRTVTVKLELSCAWRDTDAAVLLILOGPPYVSWLIDAN-HNMQIWTTEYSFKIFPEKNIIRGFVLPDTPGGLGAEARMLNASIVASFVELVANDVSLRHS CGSGLQPSFPVBIITP-NKGC 344  
 gi |118099243|ref |XP\_001234821.1|VRGCTSSSAQASAAHVQLLHKPSLP--ITVEKTLTLCPRQOQNNQILLILOGPANLWLLMLNCSLQFLASCTYKILHFPMDPRKGLLPDTEGGLIAKAFKENVYIIASYSVPIPIPHIILNPNRAWSPIK----- 400  
 .....310.....320.....330.....340.....350.....360.....370.....380.....390.....400.....410.....420.....430.....440.....450



gi |168693647|ref |NP\_001108225.1|SPPELLMSLITKCAADDAMTLVLLKELVAHLKCTIIFGLTFWDPSCAEADRDGKFLVRSAYSSCGMQVSAS-MISNEAVVNISSSSPQRKKVHCLNMDLSLQGLGLYLSPHFLQASNTIEPGQSFVQVRSFVSSEFLLQLDSCHLDLGP 499  
 gi |114626940|ref |XP\_001143396.1|SPPELLMSLITKCAADDAMTLVLLKELVAHLKCTIIFGLTFWDPSCAEADRDGKFLVRSAYSSCGMQVSAS-MISNEAVVNISSSSPQRKKVHCLNMDLSLQGLGLYLSPHFLQASNTIEPGQSFVQVRSFVSSEFLLQLDSCHLDLGP 454  
 gi |6679649|ref |NP\_031958.1|SPVLLMSLITPKCQNVMTLALNKKHVQTLCTIIFGLTFWDPSCAEDTDDHVLVSSAYSSCGMKVTAH-VVSNVEVVISFPGSGPPLRKKVQCIDMDLSLQGLGLYLSPHFLQASNTIELGQAFVQVSVPLTSEVTVLQDSCHLDLGP 499  
 gi |73968182|ref |XP\_851469.1|NQELLLSLIQPKCSEEDVMTVVLKDLISILRCTIMSLFSDPSCAEADRDQFVLRSTYSSCGMAVTEN-VVSNVEVVNLFSSSSLQWKKVHCINMESLQGLGLYLSPHFLQASNTIELGQGFVQVSMMPSPPELTLQLDSCHLDLGP 567  
 gi |115497110|ref |NP\_001069865.1|NQELLLSLIQPKCSDGMTLVLLKDLISILLLCTIKSLTFDSSCAAKETEDFVLSGYSYSSCGMEVMEV-VVSNVEVIRLLSSSSPQRKKVQCINTDLSLQGLGLYLSPHFLQASNTIELGQGFVQVSVSPPELMIQLDSCHLDLGP 493  
 gi |118099243|ref |XP\_001234821.1|-----DVVNIILRDISCAEKKNATHFMLHLLSHCGI-SLENHGANNELVLSLQKSVLRSVVRVAFQCPVPEFLRLFPPTAAFKAPQTELEVNVKIEVQASMHLEDYPADLQKCYL-MAP 517  
 .....460.....470.....480.....490.....500.....510.....520.....530.....540.....550.....560.....570.....580.....590.....600



gi |168693647|ref |NP\_001108225.1|EGGVVELIQGRAAKGNCVSLSPSPGDPFRFLLHFYITVPIPKGLSCTVALRPKTGSQDQEVHRTVFMRLNIIIPDLSSGCTSKGLVLPVAVLGITFGAFLIGALLTAALWYIYSHTRSPSKREPVVAAPASSESSSTNHSIGSTQS 649  
 gi |114626940|ref |XP\_001143396.1|EGGVVELIQGRAAKGNCVSLSPSPGDPFRFLLHFYITVPIPKGLSCTVALRPKTGSQDQEVHRTVFMRLNIIIPDLSSGCTSKGLVLPVAVLGITFGAFLIGALLTAALWYIYSHTRSPSKREPVVAAPASSESSSTNHSIGSTQS 604  
 gi |6679649|ref |NP\_031958.1|EGDMVELIQSRTAKGSCVTLSPSPGDPFRFLLRGMVMPPTAGLSCNLAALRPSL--QEVYKIVSMRLNVVSPGLSG--KGLVLPVAVLGITFGAFLIGALLTAALWYIYSHTRSPSKREPVVAAPASSESSSTNHSIGSTQS 644  
 gi |73968182|ref |XP\_851469.1|EGDMVELIQSRTAKGSCVTLSPSPGDPFRFLLRGMVMPPTAGLCTVALRSRLS--PETRHISMRLNIIIPDLSDG--KGLVLPVAVLGITFGAFLIGALLTAALWYIYSHTRSPSKREPVVAAPASSESSSTNHSIGSTQS 712  
 gi |115497110|ref |NP\_001069865.1|DMEIVELIQGQEARSCVSLSPSGDIRFLLRGMVMPPTAGLSCVTHMPRIR--LEVHKVSTRLNIIITSLHD--KGLVLPVAVLGITFGAFLIGALLTAALWYIYSHTRSPSKREPVVAAPASSESSSTNHSIGSTQS 638  
 gi |118099243|ref |XP\_001234821.1|GMEPLLVOGNKASSSVAMLEPPSNRARKVWRFR-FTYITVPEGRVVPFSAALKCKAGLNNTIFEKVLEVKVDVWRVLPN--NGLGLSAVLGITFGAFLIGALLTAALWYIYSHTRIPFGRLS 641  
 .....610.....620.....630.....640.....650.....660.....670.....680.....690.....700.....710.....720.....730.....740.....750



gi |168693647|ref |NP\_001108225.1|TPCSTSSMA 658  
 gi |114626940|ref |XP\_001143396.1|TPCSTSSMA 613  
 gi |6679649|ref |NP\_031958.1|TPCSTSSMA 653  
 gi |73968182|ref |XP\_851469.1|TPCSTSSMA 721  
 gi |115497110|ref |NP\_001069865.1|TPCSTSSMA 647  
 gi |118099243|ref |XP\_001234821.1|----- 641

