

Supplementary sequences:

>Pp-Kinesin09-b_425498_Motor_Domain

SRIRVYLRLRPSVKPSPAINIESETHRVLIDVEKSIGGGPPKAYVNQIVFNVNDIVQ**TTNQQTMYELCAKASVDEFLKGYN**
STIMSYGQVGAGKTFTMTGDMKVYVHRGIIPRAIQQIFEEKEAKPEAGIVVHMSYMEIYQEGLYDLLQKRRDDLMIE
DNQLLNVRGLAKVRVETETEALKWFQEGEKSRSGNHFLNSLSSRSHTILTFYMERRVARVSTQLALQVAKNLNVDLAG
VERLKKTKGDTGSLMRKEACINNKTLSFLEQTIFALRLKKAHIPFRHSKVTTLLKESLGNNHKTVFMVCAWPPEEYFLDETI
GALRFAQRVKYLKIFQVTHKKPDCADTT

>Pp-Kinesin09-c_428375_Motor_Domain

MLQFVSSTKFSAMGAGFDSTIDIYLRVRPISSGAKAVLELNQEEGRVTWTIPRHVSLGLANHQREHFTFKFTGLFDMESK
QDEVFQKVAHKVVIGSLDGYNGTIFAYGQTGSGKTYITGGSERYVDRGIIPRTISLIFSEIAERSEYAYTLHFSYMEVYNET
GYDLLNPDHETKALEDLPKDFILANEPIIANYQFANAFRVATEEEALNLVFGDTNRIISSTPMNMASSRSHCIFTAHILAC
KVGEETVRKSKLHLVDLAGSERVWKTGVDGQ**ILREAKYINLSLHYLEQ**VIVALQEKFQGKMRTHIPYRNSMMTSVLRD
SIGGNCLTVMIAVTIAQDQLPETISTCRFAQRVAMISNQVTLNEEVDPNLLI

>Pp-Kinesin14_Vb_435597_Full_Length

MGDAKGVNRNSWGGGLPSYRQFDADDEPRVREAPVYVPQSPSLTGRVPQSPSLAGRVPQSPSLAGRRHSISAVQFP
DTPKQKSLQSPTFVSKVLKVKDR**LSSAREECIELRQEASDLQEYSNAKIERVTRYLGVLAEKARRL**DEVALDSESRVTPL
KKEKKKLFNELVSAKGNVRVYCRARPQFEDEGPSSTTYPDDFTLRNLNSNVTAAPNKDFELDRIYGPHISQADIFQDLQPL
VQSALDGFNVSIFAYGQTGAGKTFTMEGPSHDRGLYYRVLEELFDLVNSEATPTSSTSFVTMFELYNEQVRDLLKAPD
NRGASTVLFGEPRGRGVELVDERLDSPSGFARIFKFGKQMRANVDGVKFDRSSRSHLVVTIHHSSDSLTEEHYSKLSMV
DLAGSERLNKAEANGDRLTESLHINKSLSALGDVLSALTTKKDYIPYDHSKLTELLYDSLGGDSKAVLIANVNPSNAEVQE
TIATLNFASRARS AEISLGNRDTIKKWRDMASEARKELYEKEKEATEALGEVMQLKRALKESDDQCLLLFGEVQKAWKL
ASSLQADLTSHESYINKLQLENDRLSEQSIRDKEQYTNVLTQLTTFTTREEQYQSQIKERSARNEALEVRVQVLEQQLNEA
RVAAARTLPARPDNSAELQRLREETENALDMNQKLEELSKRDELIERLHQENEKLFERLTDRSMTTISSPRVSSTPKIPR
AESRGMDDFNLDGGFVSATAVPGSPDMRSSSSMRESAGPPSSPGGSGALLKYSGGESVKSTPAGEYLTAALMDFNPA
QYESDAAIADGANKLLMLVLA AVIKAGASREHEMLAEIQGAVFGFLHKMENLLVMDTMLVSRVRILYIRSLLSRAPELQ
SLKVPPVERFLEKAGSGSATGSGSGRSSRNSSLGSSPQRSPAHRNKGADDYGPFGKVSRLRQEKRSKFSSLVSKLMGNGD
QDNGRPHVTEGKLKETTEEARAFAIGNKGLASLFVHTPAGELQRQIRGWLAENFDLFLSLTGEESIGGVTSHELLESTAILD
GWMSGLGVPAQPSTDALGQLSDYTSMVYTRQLQHLDVAATLATEEAEDAAQVTKLRSALVESHKRRKVLQMQR
TNVALLSKDDATSPTRSSSMDTENVRIASLMSLD DFFKQAEIYRDAPHGTTTVNKKMTYLRRDLAEERMSTLLSIDQP
CANKCIMDARKFVESLEEQQVVS GGRHSRSTMDELDASGNIGQWDEAMNNGVESEVVQWSVLQFNNGSATPFVI
KCGATS NLELVVKAQAKMQEKNKEIVAVVPVPSVLDGLSVETIRQTISHLPESFLQLAMARTADGTRARYTRYKTLAI
RVPGLKHVVEELEETSMK

***Note: The sequence in bold is absent in Phytozome.**