abcam

Product datasheet

Recombinant Human MCAK protein ab132006

1 Image

Description

Product name	Recombinant Human MCAK protein
Expression system	Wheat germ
Accession	Q99661
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MAMDSSLQAR LFPGLAIKIQ RSNGLIHSAN VRTVNLEKSC VSVEWAEGGA TKGKEIDFDD VAAINPELLQ LLPLHPKDNL PLQENVTIQK QKRRSVNSKI PAPKESLRSR STRMSTVSEL RITAQENDME VELPAAANSR KQFSVPPAPT RPSCPAVAEI PLRMVSEEME EQVHSIRGSS SANPVNSVRR KSCLVKEVEK MKNKREEKKA QNSEMRMKRA QEYDSSFPNW EFARMIKEFR ATLECHPLTM TDPIEEHRIC VCVRKRPLNK QELAKKEIDV ISIPSKCLLL VHEPKLKVDL TKYLENQAFC FDFAFDETAS NEVVYRFTAR PLVQTIFEGG KATCFAYGQT GSGKTHTMGG DLSGKAQNAS KGIYAMASRD VFLLKNQPCY RKLGLEVYVT FFEIYNGKLF DLLNKKAKLR VLEDGKQQVQ VVGLQEHLVN SADDVIKMID MGSACRTSGQ TFANSNSSRS HACFQIILRA KGRMHGKFSL VDLAGNERGA DTSSADRQTR MEGAEINKSL LALKECIRAL GQNKAHTPFR ESKLTQVLRD SFIGENSRTC MIATISPGIS SCEYTLNTLR YADRVKELSP HSGPSGEQLI QMETEEMEAC SNGALIPGNL SKEEEELSSQ MSSFNEAMTQ IRELEEKAME ELKEIIQQGP DWLELSEMTE QPDYDLETFV NKAESALAQQ AKHFSALRDV IKALRLAMQL EEQASRQISS KKRPQ
Predicted molecular weight	108 kDa including tags
Amino acids	1 to 725
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab132006** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	ELISA Western blot SDS-PAGE
Form	Liquid

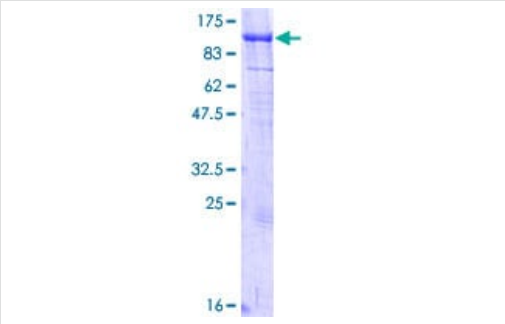
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl

General Info

Function	Promotes ATP-dependent removal of tubulin dimers from microtubules. Regulates the turnover of microtubules at the kinetochore and functions in chromosome segregation during mitosis.
Tissue specificity	Expressed at high levels in thymus and testis, at low levels in small intestine, the mucosal lining of colon, and placenta, and at very low levels in spleen and ovary; expression is not detected in prostate, peripheral blood Leukocytes, heart, brain, lung, liver, skeletal muscle, kidney or pancreas. Isoform 2 is testis-specific.
Sequence similarities	Belongs to the kinesin-like protein family. MCAK/KIF2 subfamily. Contains 1 kinesin-motor domain.
Developmental stage	Isoform 2 is expressed in fetal testis.
Domain	The microtubule tip localization signal (MtLS) motif; mediates interaction with MAPRE1 and targeting to the growing microtubule plus ends.
Post-translational modifications	Phosphorylated upon DNA damage, probably by ATM or ATR. Phosphorylation by STK12, regulates association with centromeres and kinetochores and the microtubule depolymerization activity.
Cellular localization	Cytoplasm > cytoskeleton. Nucleus. Chromosome > centromere. Chromosome > centromere > kinetochore. Associates with the microtubule network at the growing distal tip (the plus-end) of microtubules, probably through interaction with MTUS2/TIP150 and MAPRE1 (By similarity). Centromeric localization requires the presence of BUB1 and SGOL2.

Images



SDS-PAGE - Recombinant Human MCAK protein (ab132006)

12.5% SDS-PAGE using ab132006 stained with Coomassie Blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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