

CKAP5 Rabbit Polyclonal Antibody

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Catalog # AP93519

Product Information

Application	WB
Primary Accession	Q14008
Reactivity	Human, Mouse
Host	Polyclonal, Rabbit, IgG
Clonality	Polyclonal
Calculated MW	225495

Additional Information

Gene ID	9793
Other Names	Cytoskeleton-associated protein 5, Colonic and hepatic tumor overexpressed gene protein, Ch-TOG, CKAP5, KIAA0097
Dilution	WB~~1:1000
Storage Conditions	-20°C

Protein Information

Name	CKAP5
Synonyms	KIAA0097
Function	Binds to the plus end of microtubules and regulates microtubule dynamics and microtubule organization. Acts as a processive microtubule polymerase. Promotes cytoplasmic microtubule nucleation and elongation. Plays a major role in organizing spindle poles. In spindle formation protects kinetochore microtubules from depolymerization by KIF2C and has an essential role in centrosomal microtubule assembly independently of KIF2C activity. Contributes to centrosome integrity. Acts as a component of the TACC3/ch-TOG/clathrin complex proposed to contribute to stabilization of kinetochore fibers of the mitotic spindle by acting as inter-microtubule bridge. The TACC3/ch-TOG/clathrin complex is required for the maintenance of kinetochore fiber tension (PubMed:23532825). Enhances the strength of NDC80 complex-mediated kinetochore-tip microtubule attachments (PubMed:27156448).
Cellular Location	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle pole. Cytoplasm, cytoskeleton, spindle. Chromosome, centromere, kinetochore. Note=Detected on centrosomes and kinetochores during interphase and mitosis independently from TACC3 and

clathrin. Located to spindle poles and microtubules during mitosis. In complex with TACC3 localized to microtubule plus-ends in mitosis and interphase. In complex with TACC3 and clathrin localized to inter-microtubule bridges in mitotic spindles. Accumulation sites at microtubule plus ends protruded approximately 100 nm from MAPRE1/EB1 sites in interphase cells.

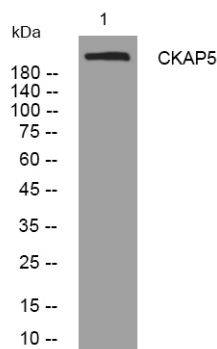
Tissue Location

Overexpressed in hepatomas and colonic tumors. Also expressed in skeletal muscle, brain, heart, placenta, lung, liver, kidney and pancreas. Expression is elevated in the brain; highly expressed in the Purkinje cell bodies of the cerebellum

Background

This gene encodes a cytoskeleton-associated protein which belongs to the TOG/XMAP215 family. The N-terminal half of this protein contains a microtubule-binding domain and the C-terminal half contains a KXGS motif for binding tubulin dimers. This protein has two distinct roles in spindle formation; it protects kinetochore microtubules from depolymerization and plays an essential role in centrosomal microtubule assembly. This protein may be necessary for the proper interaction of microtubules with the cell cortex for directional cell movement. It also plays a role in translation of the myelin basic protein (MBP) mRNA by interacting with heterogeneous nuclear ribonucleoprotein (hnRNP) A2, which associates with MBP. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Aug 2011],

Images



Western blot analysis of lysates from Jurkat cells, primary antibody was diluted at 1:1000, 4°over night

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