

CKAP5 Rabbit Polyclonal Antibody

CKAP5 Rabbit Polyclonal Antibody Catalog # AP93519

## Specification

# **CKAP5** Rabbit Polyclonal Antibody - Product Information

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

# **CKAP5** Rabbit Polyclonal Antibody - 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

# **CKAP5 Rabbit Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/23532825" target="\_blank">23532825</a>). Enhances the strength of NDC80 complex-mediated kinetochore-tip microtubule attachments (PubMed:<a href="http://www.uniprot.org/citations/27156448" target="\_blank">27156448</a>).

#### **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

## **CKAP5** Rabbit Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## **CKAP5** Rabbit Polyclonal Antibody - Images



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

## **CKAP5 Rabbit Polyclonal Antibody - 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],