

Anti-CDK5RAP2 Antibody

Catalog # AP54033

### Specification

# Anti-CDK5RAP2 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IHC <u>Q96SN8</u> Human, Mouse Rabbit Polyclonal 215038

### **Anti-CDK5RAP2 Antibody - Additional Information**

Gene ID 55755

**Other Names** CEP215; KIAA1633; CDK5 regulatory subunit-associated protein 2; CDK5 activator-binding protein C48; Centrosome-associated protein 215

Target/Specificity Recognizes endogenous levels of CDK5RAP2 protein.

**Dilution** WB~~1/500 - 1/1000 IHC~~1:100~500

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

#### Anti-CDK5RAP2 Antibody - Protein Information

Name CDK5RAP2

Synonyms CEP215, KIAA1633

Function

Potential regulator of CDK5 activity via its interaction with CDK5R1 (PubMed:<a href="http://www.uniprot.org/citations/15164053" target="\_blank">15164053</a>). Negative regulator of centriole disengagement (licensing) which maintains centriole engagement and cohesion. Involved in regulation of mitotic spindle orientation (By similarity). Plays a role in the spindle checkpoint activation by acting as a transcriptional regulator of both BUBR1 and MAD2 promoter (PubMed:<a href="http://www.uniprot.org/citations/19282672" target=" blank">19282672</a>). Together with EB1/MAPRE1, may promote microtubule



polymerization, bundle formation, growth and dynamics at the plus ends (PubMed:<a href="http://www.uniprot.org/citations/18042621" target="\_blank">18042621</a>, PubMed:<a href="http://www.uniprot.org/citations/17959831" target="\_blank">17959831</a>, PubMed:<a href="http://www.uniprot.org/citations/19553473" target="\_blank">19553473</a>). Regulates centrosomal maturation by recruitment of the gamma-tubulin ring complex (gTuRC) onto centrosomes (PubMed:<a href="http://www.uniprot.org/citations/18042621" target="\_blank">18042621</a>, PubMed:<a href="http://www.uniprot.org/citations/17959831" target="\_blank">18042621</a>, PubMed:<a href="http://www.uniprot.org/citations/17959831" target="\_blank">17959831</a>, PubMed:<a href="http://www.uniprot.org/citations/26485573" target="\_blank">26485573</a>, PubMed:<a href="http://www.uniprot.org/citations/39321809" target="\_blank">39321809</a>). In complex with PDE4DIP isoform 13/MMG8/SMYLE, MAPRE1 and AKAP9, contributes to microtubules nucleation and extension from the centrosome to the cell periphery (PubMed:<a href="http://www.uniprot.org/citations/29162697" target="\_blank">29162697</a>). Required for the recruitment of AKAP9 to centrosomes

(PubMed:<a href="http://www.uniprot.org/citations/29162697" target="\_blank">29162697</a>). Plays a role in neurogenesis (By similarity).

#### **Cellular Location**

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Golgi apparatus. Cytoplasm. Cytoplasm, cytoskeleton. Note=Found in the pericentriolar region adhering to the surface of the centrosome and in the region of the centrosomal appendages. Localizes to microtubule plus ends in the presence of EB1/MAPRE1. Localization to centrosomes versus Golgi apparatus may be cell type-dependent. For instance, in SK-BR-3 and HEK293F cells, localizes to centrosomes but not to the Golgi apparatus (PubMed:29162697)

#### **Tissue Location**

Widely expressed. Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas

#### Anti-CDK5RAP2 Antibody - Protocols

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

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

Anti-CDK5RAP2 Antibody - Images





Western blot analysis of CDK5RAP2 expression in Panc1 (A), Hela (B), mouse heart (C) whole cell lysates.



Immunohistochemical analysis of CDK5RAP2 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

## Anti-CDK5RAP2 Antibody - Background

Rabbit polyclonal antibody to CDK5RAP2