

Anti-CDK5RAP2 Antibody

Catalog # AP54033

Product Information

Application WB
Primary Accession Q96SN8

Reactivity Human, Mouse

HostRabbitClonalityPolyclonalCalculated MW215038

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 KLH-conjugated synthetic peptide encompassing a sequence within the

N-term region of human CDK5RAP2. The exact sequence is proprietary.

Dilution WB~~1/500 - 1/1000

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

Protein Information

Name CDK5RAP2

Synonyms CEP215, KIAA1633

Function Potential regulator of CDK5 activity via its interaction with CDK5R1

(PubMed:<u>15164053</u>). 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:<u>19282672</u>). Together with EB1/MAPRE1, may promote microtubule polymerization, bundle formation, growth and

dynamics at the plus ends (PubMed: 18042621, PubMed: 17959831,

PubMed: 19553473). Regulates centrosomal maturation by recruitment of the gamma-tubulin ring complex (gTuRC) onto centrosomes (PubMed: 18042621, PubMed: 17959831, PubMed: 26485573, PubMed: 39321809). 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:<u>29162697</u>). Required for the recruitment of AKAP9 to centrosomes (PubMed:<u>29162697</u>). 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)

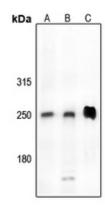
Tissue Location

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

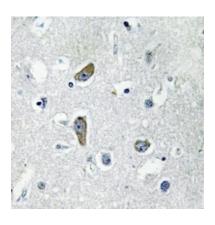
Background

Rabbit polyclonal antibody to CDK5RAP2

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.

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