

CDK5RAP2 Antibody (Ascites)

Mouse Monoclonal Antibody (Mab)
Catalog # AM2155a

Specification

CDK5RAP2 Antibody (Ascites) - Product Information

Application WB,E
Primary Accession Q96SN8

Other Accession NP 001011649.1

Reactivity
Host
Clonality
Human
Mouse
Monoclonal

Isotype IgM Calculated MW 215038

CDK5RAP2 Antibody (Ascites) - Additional Information

Gene ID 55755

Other Names

CDK5 regulatory subunit-associated protein 2, CDK5 activator-binding protein C48, Centrosome-associated protein 215, CDK5RAP2, CEP215, KIAA1633

Target/Specificity

This CDK5RAP2 Antibody is generated from mouse immunized with recombinant protein of human CDK5RAP2.

Dilution

WB~~1:500~2000

E~~Use at an assay dependent concentration.

Format

Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CDK5RAP2 Antibody (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

CDK5RAP2 Antibody (Ascites) - Protein Information

Name CDK5RAP2

Synonyms CEP215, KIAA1633



Function Potential regulator of CDK5 activity via its interaction with CDK5R1 (PubMed:15164053). 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:19282672). 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:29162697). Required for the recruitment of AKAP9 to centrosomes (PubMed:29162697). 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

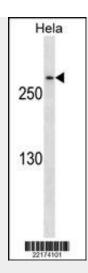
CDK5RAP2 Antibody (Ascites) - Protocols

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

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

CDK5RAP2 Antibody (Ascites) - Images





CDK5RAP2 Antibody (Cat. #AM2155a) western blot analysis in Hela cell line lysates (35µg/lane). This demonstrates the CDK5RAP2 antibody detected the CDK5RAP2 protein (arrow).

CDK5RAP2 Antibody (Ascites) - Background

Neuronal CDC2-like kinase, which is involved in the regulation of neuronal differentiation, is composed of a catalytic subunit, CDK5, and an activating subunit, p25NCK5A. The protein encoded by this gene binds to p25NCK5A and therefore may be involved in neuronal differentiation. The encoded protein may also be a substrate of neuronal CDC2-like kinase. Multiple transcript variants exist for this gene, but the full-length nature of only two has been determined.

CDK5RAP2 Antibody (Ascites) - References

Ichikawa, S., et al. J. Bone Miner. Res. 25(8):1821-1829(2010) Wang, Z., et al. J. Biol. Chem. 285(29):22658-22665(2010) Joslyn, G., et al. Alcohol. Clin. Exp. Res. 34(5):800-812(2010) Lee, S., et al. Cell Cycle 9(4):774-783(2010) Barber, M.J., et al. PLoS ONE 5 (3), E9763 (2010)