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CENPJ Rabbit pAb

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Catalog # AP55312

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9HC77
Reactivity	Rat, Mouse
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	153000
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CENPJ
Epitope Specificity	351-450/1338
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm > cytoskeleton > centrosome. Cytoplasm > cytoskeleton > centrosome > centriole. Localized within the center of microtubule asters. During centriole biogenesis, it is concentrated within the proximal lumen of both parental centrioles and procentrioles.
DISEASE	Defects in CENPJ are the cause of microcephaly primary type 6 (MCPH6) [MIM:608393]. A disorder defined as a head circumference more than 3 standard deviations below the age-related mean. Brain weight is markedly reduced and the cerebral cortex is disproportionately small. Despite this marked reduction in size, the gyral pattern is relatively well preserved, with no major abnormality in cortical architecture. Primary microcephaly is further defined by the absence of other syndromic features or significant neurological deficits. Defects in CENPJ are the cause of Seckel syndrome type 4 (SCKL4) [MIM:613676]. SCKL4 is a rare autosomal recessive disorder characterized by proportionate dwarfism of prenatal onset associated with low birth weight, growth retardation, severe microcephaly with a bird-headed like appearance, and mental retardation.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a protein that belongs to the centromere protein family. During cell division, this protein plays a structural role in the maintenance of centrosome integrity and normal spindle morphology, and it is involved in microtubule disassembly at the centrosome. This protein can function as a transcriptional coactivator in the Stat5 signaling pathway, and also as a coactivator of NF-kappaB-mediated transcription, likely via its interaction with the coactivator p300/CREB-binding protein. Mutations in this gene are associated with primary autosomal recessive microcephaly, a disorder characterized by severely reduced brain size and mental retardation. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Apr 2012]

Additional Information

Gene ID	55835
Other Names	Centrosomal P4.1-associated protein, Centromere protein J, CENP-J, Centrosome assembly and centriole elongation protein {ECO:0000312|HGNC:HGNC:17272}, LAG-3-associated protein, LYST-interacting protein 1, CPAP {ECO:0000303|PubMed:11003675, ECO:0000312|HGNC:HGNC:17272}
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

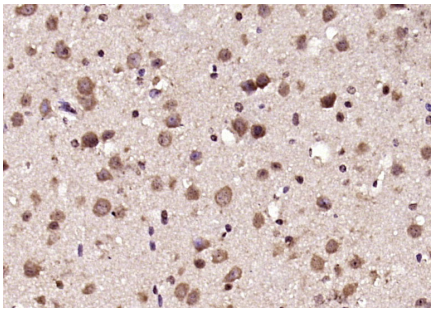
Name	CPAP {ECO:0000303|PubMed:11003675, ECO:0000312|HGNC:HGNC:17272}
Function	Plays an important role in cell division and centrosome function by participating in centriole duplication (PubMed:17681131, PubMed:20531387). Inhibits microtubule nucleation from the centrosome. Involved in the regulation of slow processive growth of centriolar microtubules. Acts as a microtubule plus-end tracking protein that stabilizes centriolar microtubules and inhibits microtubule polymerization and extension from the distal ends of centrioles (PubMed:15047868, PubMed:27219064, PubMed:27306797). Required for centriole elongation and for STIL-mediated centriole amplification (PubMed:22020124). Required for the recruitment of CEP295 to the proximal end of new-born centrioles at the centriolar microtubule wall during early S phase in a PLK4-dependent manner (PubMed:27185865). May be involved in the control of centriolar-microtubule growth by acting as a regulator of tubulin release (PubMed:27306797).
Cellular Location	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole. Note=Localized within the center of microtubule asters (PubMed:11003675). During centriole biogenesis, it is concentrated within the proximal lumen of both parental centrioles and procentrioles (PubMed:17681131).

Background

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Images

Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody



incubation with (CENPJ) Polyclonal Antibody, Unconjugated (AP55312) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.