

CP110 Rabbit pAb

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Catalog # AP59214

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	O43303
Reactivity	Rat, Pig, Mouse, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	113424
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CP110
Epitope Specificity	761-860/1012
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, centriole. Note=Recruited early and then associates with the growing distal tips. Recruited to the mother centriole by KIF24. Removed from centrioles by TTBK2, leading to initiation of ciliogenesis.
SUBUNIT	Interacts with CALM1, CETN2, CEP76 and CEP97. Interacts with NEURL4 and CCNF; these interactions are not mutually exclusive and both lead to CCP110 ubiquitination and proteasome-dependent degradation. Via its interaction with NEURL4, may indirectly interact with HERC2. Interacts with KIF24, leading to its recruitment to centrioles.
Post-translational modifications	Phosphorylated by CDKs. Ubiquitinated by the SCF(Cyclin F) during G2 phase, leading to its degradation by the proteasome and preventing centrosome reduplication.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Necessary for centrosome duplication at different stages of procentriole formation. Collaborates with CEP97, being involved in the suppression of a cilia assembly program. Required for correct spindle formation and has a role in regulating cytokinesis and genome stability via cooperation with CALM1 and CETN2.

Additional Information

Gene ID	9738
Other Names	Centriolar coiled-coil protein of 110 kDa, Centrosomal protein of 110 kDa, CP110, Cep110, CCP110, CEP110, CP110, KIAA0419
Target/Specificity	Highly expressed in testis. Detected at intermediate levels in spleen, thymus, prostate, small intestine, colon and peripheral blood leukocytes.

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	CCP110
Synonyms	CEP110, CP110, KIAA0419
Function	Necessary for centrosome duplication at different stages of procentriole formation. Acts as a key negative regulator of ciliogenesis in collaboration with CEP97 by capping the mother centriole thereby preventing cilia formation (PubMed: 17681131 , PubMed: 17719545 , PubMed: 23486064 , PubMed: 30375385 , PubMed: 35301795). Also involved in promoting ciliogenesis. May play a role in the assembly of the mother centriole subdistal appendages (SDA) thereby effecting the fusion of recycling endosomes to basal bodies during cilia formation (By similarity). Required for correct spindle formation and has a role in regulating cytokinesis and genome stability via cooperation with CALM1 and CETN2 (PubMed: 16760425).
Cellular Location	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, cilium basal body {ECO:0000250 UniProtKB:Q7TSH4} Note=Recruited early and then associates with the growing distal tips Recruited to the mother centriole by KIF24 (PubMed:21620453). Removed from centrioles by TTBK2, leading to initiation of ciliogenesis and localizes only to the daughter centriole in ciliated cells. In cytotoxic T lymphocytes remains associated with the mother centriole during docking of the centrosome at the immunological synapse upon target contact (By similarity). Recruited at the distal end of the mother centriole by MPHOSPH9 (PubMed:30375385) {ECO:0000250 UniProtKB:Q7TSH4, ECO:0000269 PubMed:21620453, ECO:0000269 PubMed:30375385}
Tissue Location	Highly expressed in testis. Detected at intermediate levels in spleen, thymus, prostate, small intestine, colon and peripheral blood leukocytes.

Background

Necessary for centrosome duplication at different stages of procentriole formation. Collaborates with CEP97, being involved in the suppression of a cilia assembly program. Required for correct spindle formation and has a role in regulating cytokinesis and genome stability via cooperation with CALM1 and CETN2.

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