

CP110 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP59214

Specification

CP110 Polyclonal Antibody - Product Information

Application IHC-P, IHC-F, IF, E

Primary Accession <u>043303</u>

Reactivity Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 113 KDa
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived

laG

from human CP110

Epitope Specificity **761-860/1012**

Isotype 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:

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. This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

Background Descriptions

Important Note

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.



CP110 Polyclonal Antibody - 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~~N/A<br \> <span class
="dilution_IHC-F">IHC-F~~N/A<br \> <span class
="dilution_IF">IF~~1:50~200<br \> E~~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

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.

CP110 Polyclonal Antibody - 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.

CP110 Polyclonal Antibody - Protocols

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

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

CP110 Polyclonal Antibody - Images