

CCP110 Antibody (C-Terminus)

Rabbit Polyclonal Antibody Catalog # ALS15620

Specification

CCP110 Antibody (C-Terminus) - Product Information

Application IHC, IF
Primary Accession O43303
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 113kDa KDa

CCP110 Antibody (C-Terminus) - Additional Information

Gene ID 9738

Other Names

Centriolar coiled-coil protein of 110 kDa, Centrosomal protein of 110 kDa, CP110, Cep110, CEP110, CP110, KIAA0419

Target/Specificity

Human CCP110 / CP110. Two isoforms of CCP110 are known to exist; this antibody will only detect the longer isoform.

Reconstitution & Storage

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions

CCP110 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

CCP110 Antibody (C-Terminus) - 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:17719545, PubMed:17681131, 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

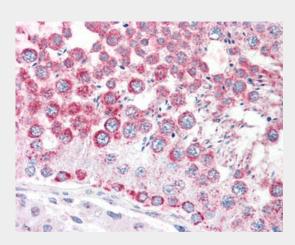
Highly expressed in testis. Detected at intermediate levels in spleen, thymus, prostate, small intestine, colon and peripheral blood leukocytes.

CCP110 Antibody (C-Terminus) - Protocols

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

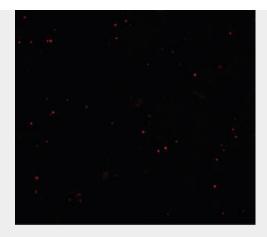
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

CCP110 Antibody (C-Terminus) - Images



Anti-CCP110 antibody IHC staining of human testis.





Immunofluorescence of CCP110 in rat colon tissue with CCP110 antibody at 20 ug/ml.

CCP110 Antibody (C-Terminus) - Background

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. Required for correct spindle formation and has a role in regulating cytokinesis and genome stability via cooperation with CALM1 and CETN2.

CCP110 Antibody (C-Terminus) - References

Ishikawa K.,et al.DNA Res. 4:307-313(1997). Bechtel S.,et al.BMC Genomics 8:399-399(2007). Loftus B.J.,et al.Genomics 60:295-308(1999). Martin J.,et al.Nature 432:988-994(2004). Chen Z.,et al.Dev. Cell 3:339-350(2002).