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CP110 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP8565c

Specification

CP110 Antibody (Center) Blocking Peptide - Product Information

Primary Accession O43303

CP110 Antibody (Center) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP8565c was selected from the Center region of human CP110. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CP110 Antibody (Center) Blocking Peptide - 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.

CP110 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

CP110 Antibody (Center) Blocking Peptide - Images

CP110 Antibody (Center) Blocking Peptide - Background

CP110 is necessary for centrosome duplication. This protein collaborates with CEP97, being involved in the suppression of a cilia assembly program. It is required for correct spindle formation and has a role in regulating cytokinesis and genome stability via cooperation with CALM1 and CETN2.

CP110 Antibody (Center) Blocking Peptide - References

Spektor,A., et.al., Cell 130 (4), 678-690 (2007)Chen,Z., et.al., Dev. Cell 3 (3), 339-350 (2002)