

CEP63 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP4805c

Product Information

Application	WB, IHC-P, E
Primary Accession	<u>Q96MT8</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24657
Calculated MW	81344
Antigen Region	520-548

Additional Information

Gene ID	80254
Other Names	Centrosomal protein of 63 kDa, Cep63, CEP63
Target/Specificity	This CEP63 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 520-548 amino acids from the Central region of human CEP63.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CEP63 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CEP63 (<u>HGNC:25815</u>)
Function	Required for normal spindle assembly (PubMed: <u>21406398</u> , PubMed: <u>21983783</u> , PubMed: <u>26297806</u> , PubMed: <u>35793002</u>). Plays a key role in mother-centriole-dependent centriole duplication; the function seems also to involve CEP152, CDK5RAP2 and WDR62 through a stepwise assembled complex at the centrosome that recruits CDK2 required for centriole

	duplication (PubMed: <u>21983783</u> , PubMed: <u>26297806</u>). Reported to be required for centrosomal recruitment of CEP152; however, this function has been questioned (PubMed: <u>21983783</u> , PubMed: <u>26297806</u>). Also recruits CDK1 to centrosomes (PubMed: <u>21406398</u>). Plays a role in DNA damage response (PubMed: <u>21406398</u>). Following DNA damage, such as double-strand breaks (DSBs), is removed from centrosomes; this leads to the inactivation of spindle assembly and delay in mitotic progression (PubMed: <u>21406398</u>). Promotes stabilization of FXR1 protein by inhibiting FXR1 ubiquitination (PubMed: <u>35989368</u>).
Cellular Location	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriolar satellite Note=Colocalizes with CDK5RAP2, CEP152 and WDR62 in a discrete ring around the proximal end of the parental centriole. At this site, a cohesive structure is predicted to engage parental centrioles and procentrioles.

Background

CEP63 is a protein with six coiled-coil domains. The protein is localized to the centrosome, a non-membraneous organelle that functions as the major microtubule-organizing center in animal cells.

References

Sovio, U., et al. PLoS Genet. 5 (3), E1000409 (2009) Weedon, M.N., et al. Nat. Genet. 40(5):575-583(2008) Petretti, C., et al. EMBO Rep. 7(4):418-424(2006)

Images



CEP63 Antibody (Center) (Cat. #AP4805c) western blot analysis in WiDr,293 cell line lysates (35ug/lane).This demonstrates the CEP63 antibody detected the CEP63 protein (arrow).

CEP63 Antibody (Center) (Cat. #AP4805c) IHC analysis in formalin fixed and paraffin embedded prostate carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CEP63 Antibody (Center)) for immunohistochemistry. Clinical relevance has not been evaluated. Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.