

CEP164 Rabbit pAb

Catalog # AP98749

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q9UPV0
Other Accession	Q9UPV0
Host	Rabbit
Clonality	Polyclonal
Calculated MW	164314
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CEP128
Epitope Specificity	1101-1200/1460
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 WW domain.
Post-translational modifications	Phosphorylation at Ser-186 is induced upon DNA-damage caused by treatment with IR irradiation, UV irradiation, hydroxyurea or amphidicolin. Also MDC1-mediated chromatin remodeling is critical for DNA damage-induced phosphorylation.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a centrosomal protein involved in microtubule organization, DNA damage response, and chromosome segregation. The encoded protein is required for assembly of primary cilia and localizes to mature centrioles. Defects in this gene are a cause of nephronophthisis-related ciliopathies. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2012]

Additional Information

Gene ID	22897
Other Names	NPHP15; D030051D21; RGD1560988; RGD1561243; CE164_HUMAN; CEP164; KIAA1052; CE164_MOUSE; centrosomal protein 164; centrosomal protein 164kDa
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=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	CEP164
Synonyms	KIAA1052, NPHP15
Function	Plays a role in microtubule organization and/or maintenance for the formation of primary cilia (PC), a microtubule-based structure that protrudes from the surface of epithelial cells. Plays a critical role in G2/M checkpoint and nuclear divisions. A key player in the DNA damage-activated ATR/ATM signaling cascade since it is required for the proper phosphorylation of H2AX, RPA, CHEK2 and CHEK1. Plays a critical role in chromosome segregation, acting as a mediator required for the maintenance of genomic stability through modulation of MDC1, RPA and CHEK1.
Cellular Location	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole. Nucleus Note=Localizes specifically to very distally located appendage structures on the mature centriole from which initiate PC formation (PubMed:26337392). Persisted at centrioles throughout mitosis Expressed in chromatin-enriched nuclear fraction of HeLa cells. In response to DNA damage, it translocates to nuclear foci that contain the DNA damage response proteins KAT5/TIP60 and CHEK1
Tissue Location	Expressed in several cell lines.

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