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CE164 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10981a

Product Information

Application	FC, WB, E
Primary Accession	Q9UPV0
Other Accession	NP_055771.4
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24951
Calculated MW	164314
Antigen Region	246-274

Additional Information

Gene ID	22897
Other Names	Centrosomal protein of 164 kDa, Cep164, CEP164, KIAA1052, NPHP15
Target/Specificity	This CE164 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 246-274 amino acids from the N-terminal region of human CE164.
Dilution	FC~~1:10~50 WB~~1:1000 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	CE164 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

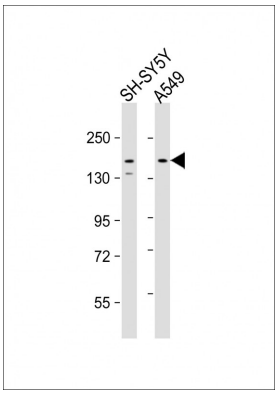
Background

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,CHK2 and CHK1. Plays a critical role in chromosome segregation, acting as a mediator required for the maintenance of genomic stability through modulation of MDC1, RPA and CHK1.

References

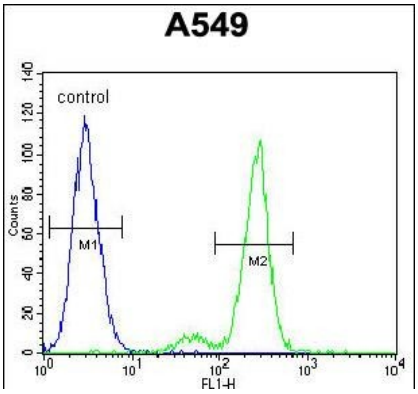
Pan, Y.R., et al. Cell Cycle 8(4):655-664(2009)
Sivasubramaniam, S., et al. Genes Dev. 22(5):587-600(2008)
Graser, S., et al. J. Cell Biol. 179(2):321-330(2007)
Petretti, C., et al. EMBO Rep. 7(4):418-424(2006)
Zick, A., et al. Nucleic Acids Res. 33(13):4235-4242(2005)

Images



All lanes : Anti-CE164 Antibody (N-term) at 1:1000 dilution Lane 1: SH-SY5Y whole cell lysate Lane 2: A549 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 164 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

CE164 Antibody (N-term) (Cat. #AP10981a) flow cytometric analysis of A549 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



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