

### **CE164 Antibody (N-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10981a

## **Specification**

# CE164 Antibody (N-term) - Product Information

FC, WB, E **Application Primary Accession** O9UPV0 Other Accession NP 055771.4 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 164314 Antigen Region 246-274

## CE164 Antibody (N-term) - 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.

# CE164 Antibody (N-term) - 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**

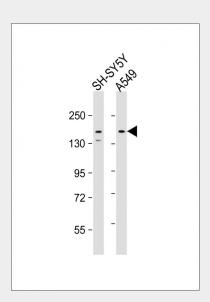
Expressed in several cell lines.

# CE164 Antibody (N-term) - 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

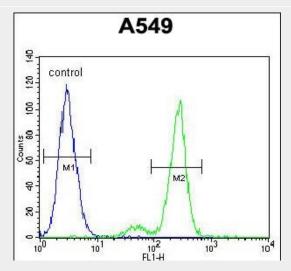
## CE164 Antibody (N-term) - Images



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  $\mu$ g 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.

## CE164 Antibody (N-term) - 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.

# CE164 Antibody (N-term) - 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)