

Pericentrin 1 (H-300): sc-68927

BACKGROUND

Pericentrin 1 (nuclear pore complex protein Nup85) is a 656 amino acid member of the nucleoporin Nup85 family. Pericentrin 1 is an essential component of the nuclear pore complex (NPC) and is likely required for NPC assembly and maintenance. Bidirectional transport of macromolecules between the cytoplasm and nucleus occurs through NPCs embedded in the nuclear envelope. The Pericentrin 1 containing NPC subcomplex, Nup107-160, works to organize RNA export and in tethering NUP98/Nup98 and NUP153 to the nucleus. The Nup107-160 complex is likely required for spindle assembly during mitosis and for membrane clustering of CCL2-activated CCR2. Pericentrin 1 also acts as a regulator of microtubule nucleation by associating with γ -tubulin and anchors the PKA holoenzyme at the association site. The gene encoding human Pericentrin 1 is found at chromosome 17q25.1.

REFERENCES

1. Cronshaw, J.M., et al. 2002. Proteomic analysis of the mammalian nuclear pore complex. *J. Cell Biol.* 158: 915-927.
2. Harel, A., et al. 2003. Removal of a single pore subcomplex results in vertebrate nuclei devoid of nuclear pores. *Mol. Cell* 11: 853-864.

CHROMOSOMAL LOCATION

Genetic locus: NUP85 (human) mapping to 17q25.1; Nup85 (mouse) mapping to 11 E2.

SOURCE

Pericentrin 1 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of Pericentrin 1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Pericentrin 1 (H-300) is recommended for detection of Pericentrin 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Pericentrin 1 (H-300) is also recommended for detection of Pericentrin 1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Pericentrin 1 siRNA (h): sc-106396, Pericentrin 1 siRNA (m): sc-152168, Pericentrin 1 shRNA Plasmid (h): sc-106396-SH, Pericentrin 1 shRNA Plasmid (m): sc-152168-SH, Pericentrin 1 shRNA (h) Lentiviral Particles: sc-106396-V and Pericentrin 1 shRNA (m) Lentiviral Particles: sc-152168-V.

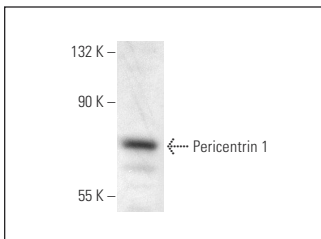
Molecular Weight of Pericentrin 1: 75 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



Pericentrin 1 (H-300): sc-68927. Western blot analysis of Pericentrin 1 expression in HeLa whole cell lysate.

SELECT PRODUCT CITATIONS

1. Mennella, V., et al. 2012. Subdiffraction-resolution fluorescence microscopy reveals a domain of the centrosome critical for pericentriolar material organization. *Nat. Cell Biol.* 14: 1159-1168.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **Pericentrin 1 (D-4): sc-376111**, our highly recommended monoclonal alternative to Pericentrin 1 (H-300).