SANTA CRUZ BIOTECHNOLOGY, INC.

Pericentrin 2 (H-140): sc-68928

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Pericentrin 2, also known as Pericentrin B or Kendrin, is an integral component of the pericentriolar material. The protein localizes specifically to centrosomes throughout all stages of the cell cycle. The protein remains centrosomal following microtubule depolymerization. Pericentrin 2 binds calmodulin and is widely expressed in most tissues, including kidney, placenta, liver and thymus.

REFERENCES

1. Flory, M.R., Moser, M.J., Monnat, R.J., Jr. and Davis, T.N. 2000. Identification of a human centrosomal calmodulin-binding protein that shares homology with pericentrin. Proc. Natl. Acad. Sci. USA 11: 5919-5923.
2. Fritzler, M.J., Zhang, M., Stinton, L.M. and Rattner, J.B. 2003. Spectrum of centrosome autoantibodies in childhood varicella and post-varicella acute cerebellar ataxia. BMC Pediatr. 3: 11.
3. Miyoshi, K., Asanuma, M., Miyazaki, I., Diaz-Corrales, F.J., Katayama, T., Tohyama, M. and Ogawa, N. 2004. DISC1 localizes to the centrosome by binding to kendrin. Biochem. Biophys. Res. Commun. 317: 1195-1199.
4. Zimmerman, W.C., Sillibourne, J., Rosa, J. and Doxsey, S.J. 2004. Mitosis-specific anchoring of γ tubulin complexes by pericentrin controls spindle organization and mitotic entry. Mol. Biol. Cell 15: 3642-3657.
5. Giehl, M., Fabarius, A., Frank, O., Hochhaus, A., Hafner, M., Hehlmann, R. and Seifarth, W. 2005. Centrosome aberrations in chronic myeloid leukemia correlate with stage of disease and chromosomal instability. Leukemia 19: 1192-1197.
6. Golubkov, V.S., Chekanov, A.V., Doxsey, S.J. and Strongin, A.Y. 2005. Centrosomal pericentrin is a direct cleavage target of membrane type-1 matrix metalloproteinase in humans but not in mice: potential implications for tumorigenesis. J .Biol. Chem. 280: 42237-44241.
7. SWISS-PROT/TrEMBL (O95613). World Wide Web URL: http://www.expasy.ch/sprot/sprot-top.html

CHROMOSOMAL LOCATION

Genetic locus: PCNT2 (human) mapping to 21q22.3.

SOURCE

Pericentrin 2 (H-140) is a rabbit polyclonal antibody raised against amino acids 3197-3336 mapping at the C-terminus of Pericentrin 2 of human origin.

PRODUCT

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

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.

APPLICATIONS

Pericentrin 2 (H-140) is recommended for detection of Pericentrin 2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

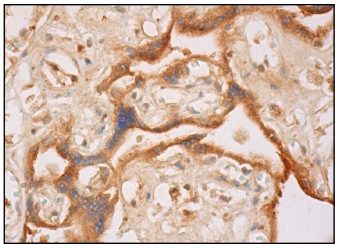
Suitable for use as control antibody for Pericentrin 2 siRNA (h): sc-45456, Pericentrin 2 shRNA Plasmid (h): sc-45456-SH and Pericentrin 2 shRNA (h) Lentiviral Particles: sc-45456-V.

Molecular Weight of Pericentrin 2: 220 kDa.

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Pericentrin 2 (H-140): sc-68928. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of trophoblastic cells.

SELECT PRODUCT CITATIONS

1. Mennella, V., Keszthelyi, B., McDonald, K.L., Chhun, B., Kan, F., Rogers, G.C., Huang, B. and Agard, D.A. 2012. Subdiffraction-resolution fluorescence microscopy reveals a domain of the centrosome critical for pericentriolar material organization. Nat. Cell Biol. 14: 1159-1168.

PROTOCOLS

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