

Pals1 (H-250): sc-33831

BACKGROUND

Two highly conserved complexes are responsible for the assembly of tight junctions, the Crumbs-Pals1-Patj complex and the Cdc42-Par6-Par3-aPKC complex. Tight junctions assist in the formation of polarity in the epithelia by establishing a barrier to separate apical and basolateral membranes. Pals1, importantly, mediates interaction between the two complexes via interaction with Par6. Loss of Pals1 function results in delayed polarization, decreased transepithelial electrical resistance and an inability to form luminal cysts. Because tumors exhibit perturbations in epithelial polarity, Pals1 presents a new potential target in the study of carcinogenesis.

REFERENCES

1. Roh, M.H., et al. 2002. The MAGUK protein, Pals1, functions as an adapter, linking mammalian homologues of Crumbs and Discs Lost. *J. Cell Biol.* 157: 161-172.
2. Roh, M.H., et al. 2003. The Crumbs3-Pals1 complex participates in the establishment of polarity in mammalian epithelial cells. *J. Cell Sci.* 116: 2895-2906.

CHROMOSOMAL LOCATION

Genetic locus: MPP5 (human) mapping to 14q23.3; Mpp5 (mouse) mapping to 12 C3.

SOURCE

Pals1 (H-250) is a rabbit polyclonal antibody raised against amino acids 1-250 mapping at the N-terminus of MAGUK p55 subfamily member 5 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.

RESEARCH USE

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

APPLICATIONS

Pals1 (H-250) is recommended for detection of Pals1 of mouse, rat and 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 Pals1 siRNA (h): sc-43991, Pals1 siRNA (m): sc-44938, Pals1 shRNA Plasmid (h): sc-43991-SH, Pals1 shRNA Plasmid (m): sc-44938-SH, Pals1 shRNA (h) Lentiviral Particles: sc-43991-V and Pals1 shRNA (m) Lentiviral Particles: sc-44938-V.

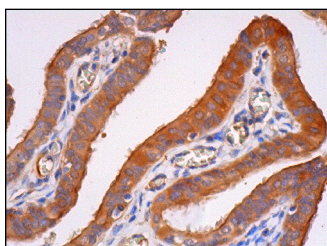
Molecular Weight of Pals1: 77 kDa.

Positive Controls: ARPE-19 whole cell lysate: sc-364357.

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



Pals1 (H-250): sc-33831. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic and apical membrane staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Carvalho, G., et al. 2011. Participation of the cell polarity protein PALS1 to T-cell receptor-mediated NF-κB activation. *PLoS ONE* 6: e18159.

STORAGE

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

PROTOCOLS

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



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Try **Pals1 (G-5): sc-365411**, our highly recommended monoclonal alternative to Pals1 (H-250).