

## Pals1 (W-15): sc-28447

### 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 lumenal cysts. Because tumors exhibit perturbations in epithelial polarity, Pals1 presents a new potential target in the study of carcinogenesis.

### REFERENCES

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- Penkert, R.R., et al. 2004. Internal recognition through PDZ domain plasticity in the Par-6-Pals1 complex. *Nat. Struct. Mol. Biol.* 11: 1122-1127.
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- Cao, X., et al. 2005. PALS1 specifies the localization of ezrin to the apical membrane of gastric parietal cells. *J. Biol. Chem.* 280: 13584-13592.

### CHROMOSOMAL LOCATION

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

### SOURCE

Pals1 (W-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region 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.

Blocking peptide available for competition studies, sc-28447 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

Pals1 (W-15) 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), 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).

Pals1 (W-15) is also recommended for detection of Pals1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Pals1 siRNA (h): sc-43991, Pals1 shRNA Plasmid (h): sc-43991-SH and Pals1 shRNA (h) Lentiviral Particles: sc-43991-V.

Molecular Weight of Pals1: 77 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### 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](http://www.scbt.com) or our catalog for detailed protocols and support products.