

# PACSIN2 (H-146): sc-366059

## BACKGROUND

PACSINs are members of a family of cytoplasmic adapter proteins, which share a conserved, C-terminal, protein-binding SH3 domain and a CDC15-NT domain. PACSIN1-related proteins include syndapin 1 (the rat homolog of PACSIN1), FAP52, EM13 and PSTPIP, all of which seem to be involved in signaling pathways associated with cytoskeletal organization. PACSIN1 expression is restricted to terminally differentiated neural tissue, whereas PACSIN2 is widely expressed. PACSIN2 shows vesicle-like distribution and may be involved in regulating endocytotic processes.

## REFERENCES

1. Frosch, P.M., Geier, C., Kaup, F.J., Muller, A. and Frosch, M. 1993. Molecular cloning of an echinococcal microtrichal antigen immunoreactive in *Echinococcus multilocularis* disease. *Mol. Biochem. Parasitol.* 58: 301-310.
2. Merilainen, J., Lehto, V.P. and Wasenius, V.M. 1997. FAP52, a novel, SH3 domain-containing focal adhesion protein. *J. Biol. Chem.* 272: 23278-23284.
3. Wu, Y., Spencer, S.D. and Lasky, L.A. 1998. Tyrosine phosphorylation regulates the SH3-mediated binding of the Wiskott-Aldrich syndrome protein to PSTPIP, a cytoskeletal-associated protein. *J. Biol. Chem.* 273: 5765-5770.
4. Plomann, M., Lange, R., Vopper, G., Cremer, H., Heinlein, U.A., Scheff, S., Baldwin, S.A., Leitges, M., Cramer, M., Paulsson, M. and Barthels, D. 1998. PACSIN, a brain protein that is upregulated upon differentiation into neuronal cells. *Eur. J. Biochem.* 256: 201-211.
5. Ritter, B., Modregger, J., Paulsson, M. and Plomann, M. 1999. PACSIN2, a novel member of the PACSIN family of cytoplasmic adapter proteins. *FEBS Lett.* 454: 356-362.
6. Qualmann, B., Roos, J., DiGregorio, P.J. and Kelly, R.B. 1999. Syndapin 1, a synaptic dynamin-binding protein that associates with the neural Wiskott-Aldrich syndrome protein. *Mol. Biol. Cell* 10: 501-513.

## CHROMOSOMAL LOCATION

Genetic locus: PACSIN2 (human) mapping to 22q13.2; Pascin2 (mouse) mapping to 15 E1.

## SOURCE

PACSIN2 (H-146) is a rabbit polyclonal antibody raised against amino acids 171-316 mapping within an internal region of PACSIN2 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

PACSIN2 (H-146) is recommended for detection of PACSIN2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PACSIN2 (H-146) is also recommended for detection of PACSIN2 in additional species, including equine, bovine, porcine and avian.

Suitable for use as control antibody for PACSIN2 siRNA (h): sc-36173, PACSIN2 siRNA (m): sc-36174, PACSIN2 shRNA Plasmid (h): sc-36173-SH, PACSIN2 shRNA Plasmid (m): sc-36174-SH, PACSIN2 shRNA (h) Lentiviral Particles: sc-36173-V and PACSIN2 shRNA (m) Lentiviral Particles: sc-36174-V.

Molecular Weight (predicted) of PACSIN2 isoform 1/2: 56/51 kDa.

Molecular Weight (observed) of PACSIN2: 65 kDa.

Positive Controls: mouse lung extract: sc-2390 or NIH/3T3 whole cell lysate: sc-2210.

## 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.

## RESEARCH USE

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