



## PACSIN3 (C-12): sc-48254

### BACKGROUND

PACSINs are a family of cytoplasm-resident phosphoproteins that aid in vesicle formation and transport. It is presumed that all isoforms oligomerize and bind Dynamin, Synaptojanin 1 and N-WASP through their Src homology 3 domains. Furthermore, PACSINs co-localize with Dynamin, but not with Clathrin, indicating that the proteins may play a specific role with a defined population of Dynamin at distinct cellular locations. PACSIN3 (protein kinase C and casein kinase substrate in neurons 3) contains a short proline-rich region and lacks asparagine-proline-phenylalanine motifs, which differentiates it from the rest of the PACSIN family. Sequence analysis of cDNAs encoding mouse and human PACSIN3 predict that the human protein consists of 424 amino acids and is 94% identical to the mouse protein. Studies of the mouse protein report predominant expression of a 48 kDa protein in mouse lung, skeletal muscle and heart as well as in brain, kidney and uterus.

### REFERENCES

1. Modregger, J., Ritter, B., Witter, B., Paulsson, M. and Plomann, M. 2001. All three PACSIN isoforms bind to endocytic proteins and inhibit endocytosis. *J. Cell Sci.* 113: 4511-4521.
2. Sumoy, L., Pluvinet, R., Andreu, N., Estivill, X. and Escarceller, M. 2001. PACSIN3 is a novel SH3 domain cytoplasmic adapter protein of the PACSIN-syndapin-F gene family. *Gene* 262: 199-205.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606513. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Mori, S., Tanaka, M., Nanba, D., Nishiwaki, E., Ishiguro, H., Higashiyama, S. and Matsuura, N. 2003. PACSIN3 binds ADAM12/meltrin  $\alpha$  and up-regulates ectodomain shedding of heparin-binding epidermal growth factor-like growth factor. *J. Biol. Chem.* 278: 46029-46034.

### CHROMOSOMAL LOCATION

Genetic locus: PACSIN3 (human) mapping to 11p12-p11.12; Pascin3 (mouse) mapping to 2 E1.

### SOURCE

PACSIN3 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PACSIN3 of human origin.

### STORAGE

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

### PRODUCT

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

Blocking peptide available for competition studies, sc-48254 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

PACSIN3 (C-12) is recommended for detection of PACSIN3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

Suitable for use as control antibody for PACSIN3 siRNA (h): sc-61279, PACSIN3 siRNA (m): sc-61280, PACSIN3 shRNA Plasmid (h): sc-61279-SH, PACSIN3 shRNA Plasmid (m): sc-61280-SH, PACSIN3 shRNA (h) Lentiviral Particles: sc-61279-V and PACSIN3 shRNA (m) Lentiviral Particles: sc-61280-V.

Molecular Weight of PACSIN3: 48 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

### 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.