

# PACSIN3 (N-15): sc-48257

## 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 colocalize 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 in mouse lung, skeletal muscle, and heart as well as in brain, kidney, and uterus.

## REFERENCES

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3. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 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.
5. Houdart, F., Girard-Nau, N., Morin, F., Voisin, P. and Vannier, B. 2005. The regulatory subunit of PDE6 interacts with PACSIN in photoreceptors. *Mol. Vis.* 11: 1061-1070.
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## CHROMOSOMAL LOCATION

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

## SOURCE

PACSIN3 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-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-48257 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PACSIN3 (N-15) 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), 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).

PACSIN3 (N-15) is also recommended for detection of PACSIN3 in additional species, including equine, canine, bovine and porcine.

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.

Positive Controls: HeLa whole cell lysate: sc-2200.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> 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.