

PACSIN1 (A-3): sc-166756

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

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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., et al. 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. PACSIN 2, 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 I, a synaptic Dynamin-binding protein that associates with the neural Wiskott-Aldrich syndrome protein. *Mol. Biol. Cell* 10: 501-513.

CHROMOSOMAL LOCATION

Genetic locus: PACSIN1 (human) mapping to 6p21.31; Pascin1 (mouse) mapping to 17 A3.3.

SOURCE

PACSIN1 (A-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 360-390 near the C-terminus of PACSIN1 of mouse origin.

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-166756 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

PACSIN1 (A-3) is recommended for detection of PACSIN1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 PACSIN1 siRNA (h): sc-36171, PACSIN1 siRNA (m): sc-36172, PACSIN1 shRNA Plasmid (h): sc-36171-SH, PACSIN1 shRNA Plasmid (m): sc-36172-SH, PACSIN1 shRNA (h) Lentiviral Particles: sc-36171-V and PACSIN1 shRNA (m) Lentiviral Particles: sc-36172-V.

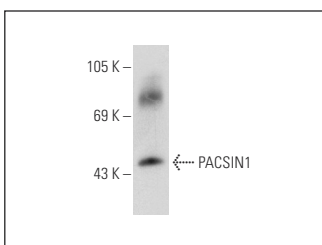
Molecular Weight of PACSIN1: 52 kDa.

Positive Controls: rat cerebellum extract: sc-2398, mouse brain extract: sc-2253 or Daudi cell lysate: sc-2415.

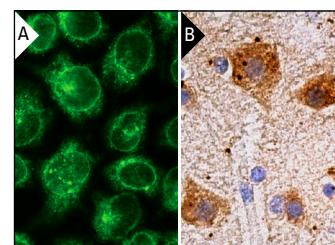
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohisto-mount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



PACSIN1 (A-3): sc-166756. Western blot analysis of PACSIN1 expression in mouse brain tissue extract.



PACSIN1 (A-3): sc-166756. Immunofluorescence staining of formalin-fixed A-431 cells showing cytoplasmic and nuclear vesicles localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human brain tissue showing cytoplasmic staining of neuronal cells (B).

RESEARCH USE

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

PROTOCOLS

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