

Goat Anti-PACSIN1 Antibody

Peptide-affinity purified goat antibody Catalog # AF1774a

Specification

Goat Anti-PACSIN1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, IHC, E <u>Q9BY11</u> <u>NP_065855</u>, <u>29993</u> Human Pig, Dog Goat Polyclonal 100ug/200ul IgG 50966

Goat Anti-PACSIN1 Antibody - Additional Information

Gene ID 29993

Other Names Protein kinase C and casein kinase substrate in neurons protein 1, Syndapin-1, PACSIN1, KIAA1379

Dilution WB~~1:1000 IHC~~1:100~500 E~~N/A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions Goat Anti-PACSIN1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-PACSIN1 Antibody - Protein Information

Name PACSIN1

Synonyms KIAA1379



Function

Plays a role in the reorganization of the microtubule cytoskeleton via its interaction with MAPT; this decreases microtubule stability and inhibits MAPT-induced microtubule polymerization. Plays a role in cellular transport processes by recruiting DNM1, DNM2 and DNM3 to membranes. Plays a role in the reorganization of the actin cytoskeleton and in neuron morphogenesis via its interaction with COBL and WASL, and by recruiting COBL to the cell cortex. Plays a role in the regulation of neurite formation, neurite branching and the regulation of neurite length. Required for normal synaptic vesicle endocytosis; this process retrieves previously released neurotransmitters to accommodate multiple cycles of neurotransmission. Required for normal excitatory and inhibitory synaptic transmission (By similarity). Binds to membranes via its F-BAR domain and mediates membrane tubulation.

Cellular Location

Cytoplasm. Cell projection. Synapse, synaptosome. Cell projection, ruffle membrane. Membrane; Peripheral membrane protein Cytoplasmic vesicle membrane; Peripheral membrane protein. Synapse. Cytoplasm, cytosol Cell membrane; Peripheral membrane protein; Cytoplasmic side. Note=Colocalizes with MAPT in axons. In primary neuronal cultures, present at a high level in presynaptic nerve terminals and in the cell body. Colocalizes with DNM1 at vesicular structures in the cell body and neurites (By similarity). Associates with membranes via its F-BAR domain.

Tissue Location

Highly expressed in brain and, at much lower levels, in heart and pancreas.

Goat Anti-PACSIN1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

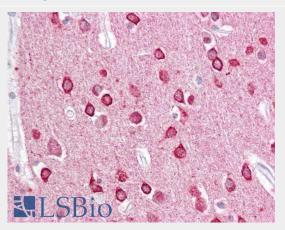
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-PACSIN1 Antibody - Images

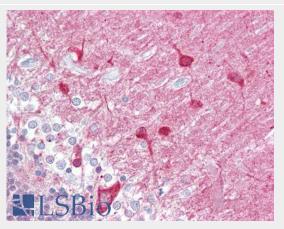




AF1774a (1 μ g/ml) staining of Hippocampus) lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1774a (2.5 μ g/ml) staining of paraffin embedded Human Cortex. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



AF1774a (2.5 μ g/ml) staining of paraffin embedded Human Cer. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-PACSIN1 Antibody - References

Crystallization and preliminary X-ray crystallographic analysis of human PACSIN 1 protein. Bai X, et al. Acta Crystallogr Sect F Struct Biol Cryst Commun, 2010 Jan 1. PMID 20057076.

Molecular mechanism of membrane constriction and tubulation mediated by the F-BAR protein Pacsin/Syndapin. Wang Q, et al. Proc Natl Acad Sci U S A, 2009 Aug 4. PMID 19549836.

Identification of interaction partners for individual SH3 domains of Fas ligand associated members of the PCH protein family in T lymphocytes. Linkermann A, et al. Biochim Biophys Acta, 2009 Feb. PMID 19041431.

Replication of a genome-wide case-control study of esophageal squamous cell carcinoma. Ng D, et al. Int J Cancer, 2008 Oct 1. PMID 18649358.

PACSINs bind to the TRPV4 cation channel. PACSIN 3 modulates the subcellular localization of TRPV4. Cuajungco MP, et al. J Biol Chem, 2006 Jul 7. PMID 16627472.