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PACSIN1 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP8087a

Specification

PACSIN1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q9BY11

PACSIN1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 29993

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8087a was selected from the N-term region of human PACSIN1 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PACSIN1 Antibody (N-term) Blocking Peptide - 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.

PACSIN1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

PACSIN1 Antibody (N-term) Blocking Peptide - Images

PACSIN1 Antibody (N-term) Blocking Peptide - Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The STE group (homologs of yeast Sterile 7, 11, 20 kinases) consists of 50 kinases related to the mitogen-activated protein kinase (MAPK) cascade families (Ste7/MAP2K, Ste11/MAP3K, and Ste20/MAP4K). MAP kinase cascades, consisting of a MAPK and one or more upstream regulatory kinases (MAPKKs) have been best characterized in the yeast pheromone response pathway. Pheromones bind to Ste cell surface receptors and activate yeast MAPK pathway.

PACSIN1 Antibody (N-term) Blocking Peptide - References

Sumoy, L., et al., Gene 262 (1-2), 199-205 (2001).