

# Syndapin I / PACSIN1 Antibody

Goat Polyclonal Antibody Catalog # ALS14548

## **Specification**

# Syndapin I / PACSIN1 Antibody - Product Information

Application WB, IHC
Primary Accession Q9BY11
Reactivity Human, Pig
Host Goat
Clonality Polyclonal
Calculated MW 51kDa KDa

## Syndapin I / PACSIN1 Antibody - Additional Information

### **Gene ID 29993**

#### **Other Names**

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

# Target/Specificity

Human PACSIN1. Reported variants represent identical protein (NP 065855.1; NP 001186512.1).

### **Reconstitution & Storage**

Store at -20°C. Minimize freezing and thawing.

#### **Precautions**

Syndapin I / PACSIN1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Syndapin I / 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**

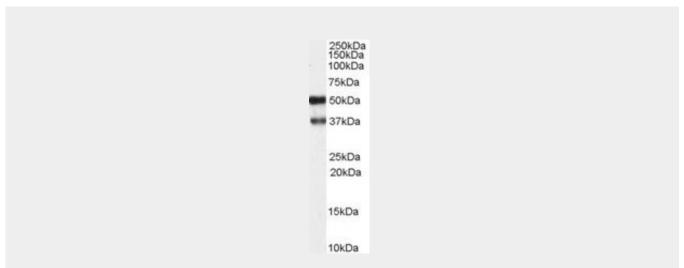
Highly expressed in brain and, at much lower levels, in heart and pancreas.

# Syndapin I / PACSIN1 Antibody - Protocols

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

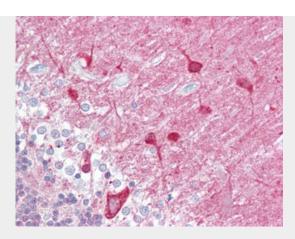
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Syndapin I / PACSIN1 Antibody - Images

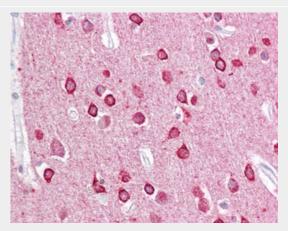


PACSIN1 antibody (1 ug/ml) staining of Human Brain (hippocampus) lysate (35 ug protein/ml in...





Anti-PACSIN1 antibody IHC of human brain, cerebellum.



Anti-PACSIN1 antibody IHC of human brain, cortex.

# Syndapin I / PACSIN1 Antibody - Background

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.

# Syndapin I / PACSIN1 Antibody - References

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

Nagase T., et al.DNA Res. 7:65-73(2000).

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Bechtel S., et al.BMC Genomics 8:399-399(2007).

Goh S.L., et al.PLoS ONE 7:E51628-E51628(2012).