

**PAC SIN2 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8088b**

### Specification

#### PAC SIN2 Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	<a href="#">Q9UNF0</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	342-371

#### PAC SIN2 Antibody (C-term) - Additional Information

**Gene ID** 11252

#### Other Names

Protein kinase C and casein kinase substrate in neurons protein 2, Syndapin-2, Syndapin-II, PAC SIN2

#### Target/Specificity

This PAC SIN2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 342-371 amino acids from the C-terminal region of human PAC SIN2.

#### Dilution

WB~~1:1000

IHC-P~~1:25

E~~Use at an assay dependent concentration.

#### Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

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

#### Precautions

PAC SIN2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### PAC SIN2 Antibody (C-term) - Protein Information

**Name** PAC SIN2

**Function** Regulates the morphogenesis and endocytosis of caveolae (By similarity). Lipid-binding

protein that is able to promote the tubulation of the phosphatidic acid-containing membranes it preferentially binds. Plays a role in intracellular vesicle-mediated transport. Involved in the endocytosis of cell-surface receptors like the EGF receptor, contributing to its internalization in the absence of EGF stimulus (PubMed:[21693584](#), PubMed:[23129763](#), PubMed:[23236520](#), PubMed:[23596323](#)). Essential for endothelial organization in sprouting angiogenesis, modulates CDH5-based junctions. Facilitates endothelial front-rear polarity during migration by recruiting EHD4 and MICALL1 to asymmetric adherens junctions between leader and follower cells (By similarity).

#### **Cellular Location**

Cytoplasm {ECO:0000250|UniProtKB:Q9WVE8}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q9WVE8}. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:Q9WVE8}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9WVE8}; Cytoplasmic side {ECO:0000250|UniProtKB:Q9WVE8}. Cell projection, ruffle membrane {ECO:0000250|UniProtKB:Q9WVE8}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9WVE8}; Cytoplasmic side {ECO:0000250|UniProtKB:Q9WVE8}. Early endosome {ECO:0000250|UniProtKB:Q9WVE8}. Recycling endosome membrane. Cell membrane {ECO:0000250|UniProtKB:Q9WVE8}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9WVE8}; Cytoplasmic side {ECO:0000250|UniProtKB:Q9WVE8}. Cell projection. Membrane, caveola. Cell junction, adherens junction {ECO:0000250|UniProtKB:Q9WVE8}. Note=Detected at the neck of flask-shaped caveolae. Localization to tubular recycling endosomes probably requires interaction with MICALL1 and EHD1 {ECO:0000250|UniProtKB:Q9WVE8}

#### **Tissue Location**

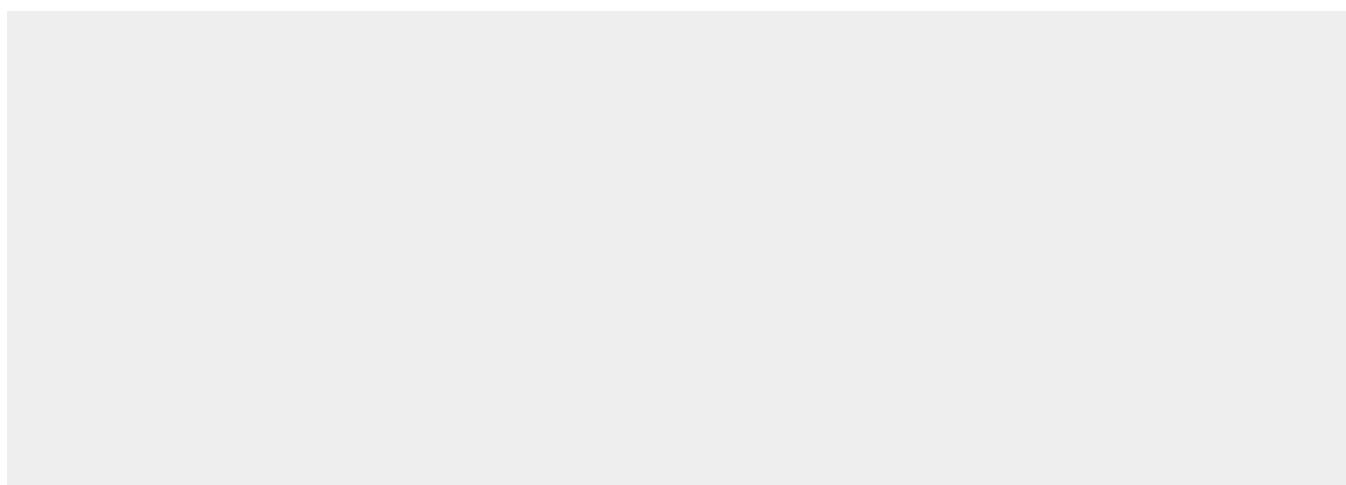
Widely expressed.

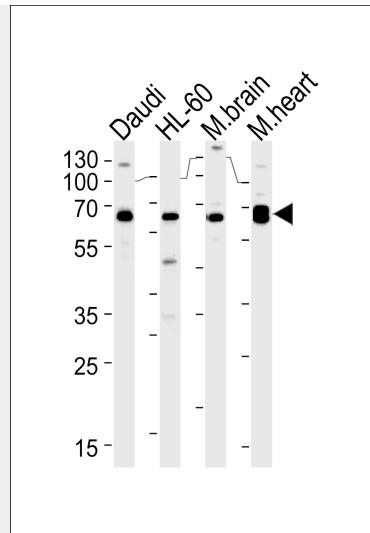
#### **PACSIN2 Antibody (C-term) - Protocols**

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

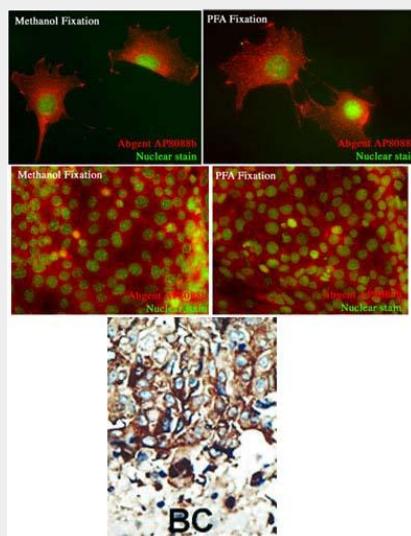
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **PACSIN2 Antibody (C-term) - Images**

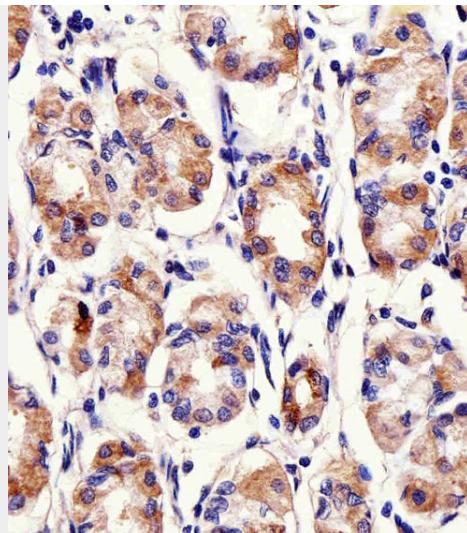




PACSIN2 Antibody (S357) (Cat.# AP8088b) western blot analysis in Daudi,HL-60 cell line and mouse brain, rat heart lysates (35ug/lane). This demonstrates the PACSIN2 antibody detected the PACSIN2 protein (arrow).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



Immunohistochemical analysis of paraffin-embedded H. pylori stomach section using PACSIN2 Antibody (C-term)(Cat#AP8088b). AP8088b was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.

### PACSIN2 Antibody (C-term) - Background

PACSIN may play a role in vesicle formation and transport. This protein homo- and hetero-aggregates with other PACSINS. It also binds dynamin 1, synaptosomal-associated protein 25 kDa (SNAP-25), synapsin 1 and the neural Wiskott-Aldrich syndrome protein (N-WASP). The protein exhibits a cvesicle-like cytoplasmic distribution and is ubiquitously expressed. PACSIN is phosphorylated by casein kinase 2 (CK2) and protein kinase C (PKC). The protein contains 1 FCH domain and 1 SH3 domain.

### PACSIN2 Antibody (C-term) - References

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002). Wiemann, S., et al., Genome Res. 11(3):422-435 (2001). Ritter, B., et al., FEBS Lett. 454(3):356-362 (1999). Dunham, I., et al., Nature 402(6761):489-495 (1999).

### PACSIN2 Antibody (C-term) - Citations

- [A junctional PACSIN2/EHD4/MICAL-L1 complex coordinates VE-cadherin trafficking for endothelial migration and angiogenesis](#)
- [Expression of a Human Caveolin-1 Mutation in Mice Drives Inflammatory and Metabolic Defect-Associated Pulmonary Arterial Hypertension](#)
- [A disease-associated frameshift mutation in caveolin-1 disrupts caveolae formation and function through introduction of a de novo ER retention signal](#)
- [Clostridium difficile Toxin A Undergoes Clathrin-Independent, PACSIN2-Dependent Endocytosis](#)
- [Characterization of a caveolin-1 mutation associated with both PAH and congenital generalized lipodystrophy](#)
- [EHD3 is Required for Tubular Recycling Endosome Stabilization and an Asparagine-Glutamic Acid Residue Pair within its EH Domain Dictates its Selective Binding to NPF Peptides](#)
- [Endocytic recycling protein EHD1 regulates primary cilia morphogenesis and SHH signaling during neural tube development](#)
- [Differential roles of C-terminal Eps15 homology domain proteins as vesiculators and tubulators of recycling endosomes](#)
- [Cooperation of MICAL-L1, syndapin2, and phosphatidic acid in tubular recycling endosome biogenesis](#)
- [The F-BAR protein PACSIN2 regulates epidermal growth factor receptor internalization](#)
- [Pacsin 2 is recruited to caveolae and functions in caveolar biogenesis](#)
- [The F-BAR domain protein PACSIN2 associates with Rac1 and regulates cell spreading and](#)

[migration.](#)