

# PACSIN1 Monoclonal antibody

Catalog Number: 68115-1-Ig

## Basic Information

<b>Catalog Number:</b> 68115-1-Ig	<b>GenBank Accession Number:</b> BC040228	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 1000 ug/ml	<b>GeneID (NCBI):</b> 29993	<b>CloneNo.:</b> 1B7B4
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q9BY11	<b>Recommended Dilutions:</b> WB 1:1000-1:4000 IHC 1:2000-1:8000 IF-P 1:200-1:800 IF/ICC 1:400-1:1600
<b>Isotype:</b> IgG1	<b>Full Name:</b> protein kinase C and casein kinase substrate in neurons 1	
<b>Immunogen Catalog Number:</b> AG4102	<b>Calculated MW:</b> 444 aa, 51 kDa	
	<b>Observed MW:</b> 48-51 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, IF-P, FC (Intra), ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> human, mouse, rat, pig, rabbit, chicken	<b>WB :</b> pig brain tissue, rabbit brain tissue, rat brain tissue, mouse brain tissue, chicken brain tissue
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	<b>IHC :</b> mouse cerebellum tissue, mouse brain tissue
	<b>IF-P :</b> mouse brain tissue,
	<b>IF/ICC :</b> SH-SY5Y cells,

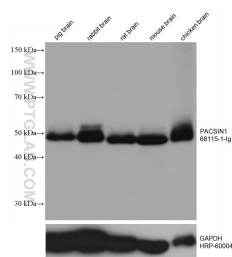
## Background Information

PACSIN1 (also known as syndapin-1) is a member of the protein kinase C and casein kinase substrate in neurons (PACSIN) family. In mammals, the PACSIN family is comprised of three members, PACSIN1, PACSIN2, and PACSIN3 (PMID: 34990060). PACSIN1 is expressed mainly in neurons, whereas PACSIN2 is ubiquitously expressed in all tissues, and PACSIN3 is expressed mainly in skeletal muscle and the heart (PMID: 23668323). All of these three members contain an N-terminal F-BAR domain and a C-terminal SH3 domain. PACSIN1 plays a role in endocytosis and endosomal recycling. Meanwhile, it has a role in actin remodeling and microtubule nucleation and also plays a particular role in membrane shaping and reconstruction (PMID: 23035120; 34422904). PACSIN1 is involved in neuromorphogenesis and the regulation of the nervous system, and the inappropriate expression of PACSIN1 has been associated with some neurological diseases, including schizophrenia, Alzheimer's disease, and Huntington's disease (PMID: 34990060).

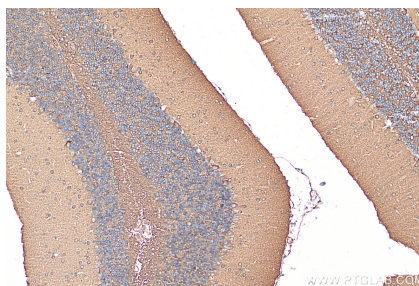
## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

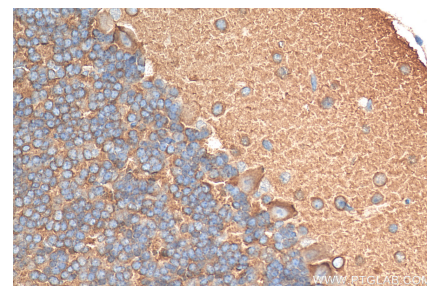
## Selected Validation Data



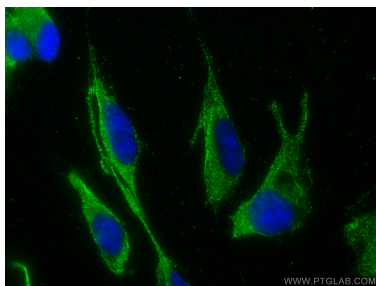
Various lysates were subjected to SDS PAGE followed by western blot with 68115-1-Ig (PACSIN1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



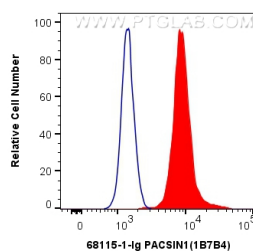
Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue slide using 68115-1-Ig (PACSIN1 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



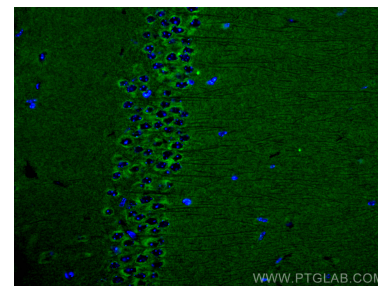
Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue slide using 68115-1-Ig (PACSIN1 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed SH-SY5Y cells using PACSIN1 antibody (68115-1-Ig, Clone: 1B7B4) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



1X10<sup>6</sup> SH-SY5Y cells were intracellularly stained with 0.4 ug Anti-Human PACSIN1 (68115-1-Ig, Clone:1B7B4) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-Ig, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using PACSIN1 antibody (68115-1-Ig, Clone: 1B7B4) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).