

**ProSAPiP1 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP54423****Specification**

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**ProSAPiP1 Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	<a href="#">O60299</a>
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	72 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ProSAPiP1
Epitope Specificity	151-250/673
Isotype	IgG
<b>Purity</b>	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell junction > synapse > postsynaptic cell membrane > postsynaptic density. Cytoplasm > cytoskeleton. Detected at synapses, postsynaptic density, synaptic spines and dendrites.
SIMILARITY	Belongs to the PROSAPIP1 family.
SUBUNIT	Interacts (via C-terminus) with SHANK3 (via PDZ domain). Interacts (via coiled coil) with SIPA1L1. Can form homooligomers (By similarity).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Background Descriptions**

The ProSAP family of proteins contain many protein-protein interaction domains and serve as scaffolding mediators within the post-synaptic density (PSD) of excitatory brain synapses. The PSD is an electron-dense structure underneath the post-synaptic plasma membrane of excitatory synapses that anchors and clusters glutamate receptors opposite to the pre-synaptic neurotransmitter release site. Shank proteins contain PDZ modular domains that coordinate the synaptic localization of ion channels, receptors, signaling enzymes, and cell adhesion molecules. The PDZ domain mediates protein-protein interactions via the recognition of a conserved sequence motif at the C-terminus of their target protein(s). ProSAPiP1 (proline rich synapse associated protein interacting protein 1) is a 673 amino acid protein that interacts with the PDZ domain of Shank 3. ProSAPiP1 expression is brain-specific with highest expression within the cerebellum, hippocampus and cerebral cortex.

**ProSAPiP1 Polyclonal Antibody - Additional Information**

**Gene ID 9762****Other Names**

Leucine zipper putative tumor suppressor 3, ProSAP-interacting protein 1, LZTS3 ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=30139](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=30139))  
HGNC:30139

**Dilution**

WB~~1:1000  
IHC-P~~N/A  
IHC-F~~N/A  
IF~~1:50~200  
ICC~~N/A  
E~~N/A

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**ProSAPiP1 Polyclonal Antibody - Protein Information**

**Name** LZTS3 ([HGNC:30139](#))

**Function**

May be involved in promoting the maturation of dendritic spines, probably via regulating SIPA1L1 levels at the postsynaptic density of synapses.

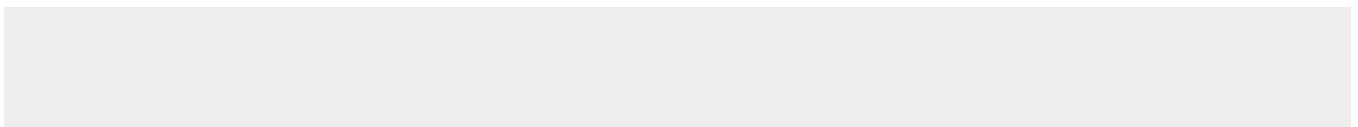
**Cellular Location**

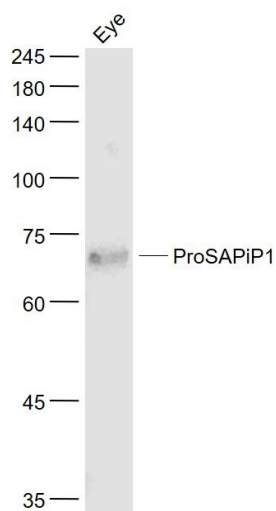
Synapse {ECO:0000250|UniProtKB:Q8K1Q4}. Postsynaptic density {ECO:0000250|UniProtKB:Q8K1Q4}. Cell projection, dendritic spine {ECO:0000250|UniProtKB:Q8K1Q4}. Cell projection, dendrite {ECO:0000250|UniProtKB:Q8K1Q4}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q8K1Q4}. Note=Rather found at excitatory than inhibitory synapses. {ECO:0000250|UniProtKB:Q8K1Q4}

**ProSAPiP1 Polyclonal Antibody - 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](#)

**ProSAPiP1 Polyclonal Antibody - Images**



**Sample:**

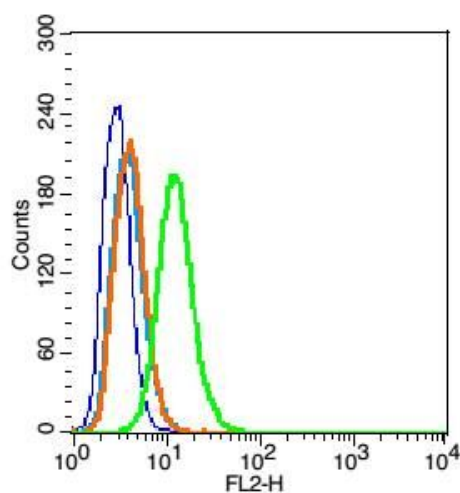
Eye (Mouse) Lysate at 40 ug

Primary: Anti- ProSAPiP1 (bs-11198R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 72 kD

Observed band size: 72 kD



Blank control: RSC96(blue), the cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice..

Isotype Control Antibody: Rabbit IgG(orange) ; Secondary Antibody: Goat anti-rabbit IgG-FITC(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA ; Primary Antibody Dilution: 1 µg in 100 µL 1X PBS containing 0.5% BSA(green).