

# Prosapip1 Antibody

Catalog # ASC10979

## **Product Information**

Application	WB, IF, E, IHC-P
Primary Accession	<u>O60299</u>
Other Accession	<u>NP_055546</u> , <u>7662176</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	71791
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Prosapip1 antibody can be used for detection of Prosapip1 by Western blot at 1 [g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 [g/mL. For immunofluorescence start at 20 [g/mL.

## **Additional Information**

Gene ID Other Names	9762 Leucine zipper putative tumor suppressor 3, ProSAP-interacting protein 1, ProSAPiP1, LZTS3, KIAA0552, PROSAPIP1
Target/Specificity	ProSAPiP1;
Reconstitution & Storage	Prosapip1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	Prosapip1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	LZTS3 ( <u>HGNC:30139</u> )
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}

# Background

Prosapip1 Antibody: Prosapip1 is a binding partner of the postsynaptic density (PSD) protein ProSAP2/Shank3, a major scaffolding protein in excitatory brain synapses. Prosapip1 is thought to bind ProSAP2/Shank3 through ProSAP2/Shank3's PDZ domain and link it in turn to the Spine-associated Rap-Gap (SPAR). Prosapip1 shares significant homology with another PSD protein, PSD-Zip70, with both coding for a Fez1 domain that can be found in a total of four related protein, forming a novel family of scaffolding molecules termed 'Fezzins'. Recent studies show that Prosapip1 can be found in endocrine cells in which it is localized primarily in the hormone-storing compartment of these cells, suggesting that Prosapip1 may have other functions in non-neuronal cells.

## References

Wendholt D, Spilker C, Schmitt A, et al. ProSAP-interacting protein 1 (ProSAPiP1), a novel protein of the postsynaptic density that links the spine-associated Rap-Gap (SPAR) to the scaffolding protein proSAP2/Shank3. J. Biol. Chem.2006; 281:13805-16.

Redecker P, Bockmann J, and Bockers TM. Secretory granules of hypophyseal and pancreatic endocrine cells contain proteins of the neuronal postsynaptic density. Cell Tissue Res.2007; 328:49-55.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.