

# Rabbit Anti-SAPAP3 antibody

# SL11316R

Product Name:	SAPAP3
Chinese Name:	PSD95Binding protein3抗体
Alias:	PSD95BP3; DLGAP3; PSD 95/SAP90 binding protein 3; SAP90/PSD 95 associated
	protein 3; DAP3; Discs, large (Drosophila) homolog associated protein 3; Disks large associated protein 3; DLGAP3; SAPAP 3; DLGP3 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Cow, Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-
	500IF=1:100-500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	106kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SAPAP3:201-300/979
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
	antibody is stable at room temperature for at least one month and for greater than a year
	when kept at -20°C. 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.
PubMed:	<u>PubMed</u>
Product Detail:	Members of the postsynaptic density-95 (PSD-95)/SAP90 family of membrane-
	associated guanylate kinase (MAGUK) proteins function as multimodular scaffolds that
	organize protein-signaling complexes at neuronal synapses. SAPAP3 (PSD-95/SAP90-
	binding protein 3), also known as DLGAP3 (disks large-associated protein 3) or DAP3,
	is a 979 amino acid protein that belongs to the SAPAP family of PSD-95/SAP90-
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associated proteins. Localized to the cell junction, as well as to the peripheral membrane and the cell synapse, SAPAP3 is thought to play a role in the organization of neuronal cell signaling and synapses, and may also function as an adaptor protein, possibly linking ion channels with the cytoskeleton.

#### **Function:**

SAPAP3, (DLGAP3) is a member of a protein family whose members specifically interact with PSD-95/SAP90, a membrane-associated guanylate kinase localized at postsynaptic density (PSD) in neuronal cells. Like the other SAPAP proteins, SAPAP3 is thought to be an adaptor protein that also interacts with different synaptic scaffolding proteins, cytoskeletal and signaling components, such as focal adhesion kinase (FAK) and proline-rich tyrosine kinase 2 (PYK2). Both SAPAP3 protein and mRNA are targeted to dendrites, whereas SAPAP1, -2, and -4 mRNAs are detected mainly in cell bodies. Recent experiments have suggested that SAPAP3 may be involved in obsessive-compulsive disorder (OCD), as mice lacking SAPAP3 exhibited OCD-like symptoms which could be relieved by lentiviral-mediated selective expression of SAPAP3 in the striatum of SAPAP3-mutant mice. At least two isoforms are known to exist.

#### Subunit:

Interacts with DLG4/PSD-95.

#### Subcellular Location:

Cell membrane; Peripheral membrane protein. Cell junction, synapse, postsynaptic cell membrane, postsynaptic density. Cell junction, synapse. Note=Postsynaptic density of neuronal cells.

#### Similarity:

Belongs to the SAPAP family.

## **SWISS:**

O95886

#### Gene ID:

58512

## Database links:

Entrez Gene: 58512 Human

Entrez Gene: 242667 Mouse

Entrez Gene: 286923 Rat

Omim: 611413 Human

SwissProt: O95886 Human

SwissProt: Q6PFD5 Mouse

SwissProt: P97838 Rat

# Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

