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SAPAP3 Antibody
Catalog # ASC10619

Specification

SAPAP3 Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	O95886
Other Accession	O95886, 71153509
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**SAPAP3 antibody can be used for detection of SAPAP3 by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.**

SAPAP3 Antibody - Additional Information

Gene ID	**58512**

Target/Specificity
DLGAP3;

Reconstitution & Storage
SAPAP3 antibody can be stored at 4℃ for three months and -20℃, 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
SAPAP3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SAPAP3 Antibody - Protein Information

Name DLGAP3

Synonyms DAP3

Function
May play a role in the molecular organization of synapses and neuronal cell signaling. Could be an adapter protein linking ion channel to the subsynaptic cytoskeleton. May induce enrichment of PSD- 95/SAP90 at the plasma membrane.

Cellular Location
Cell membrane; Peripheral membrane protein. Postsynaptic density. Synapse. Note=Postsynaptic density of neuronal cells

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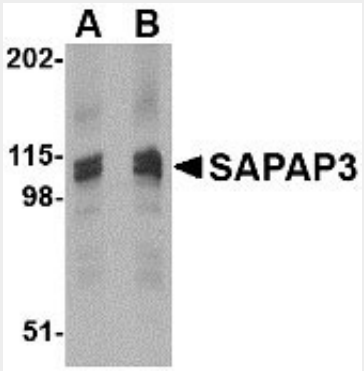
SAPAP3 Antibody - Protocols

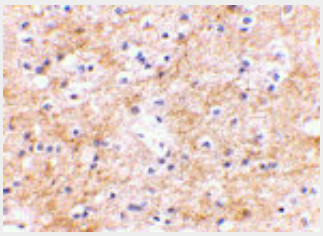
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SAPAP3 Antibody - Images



Western blot analysis of SAPAP3 in rat brain tissue lysate with SAPAP3 antibody at (A) 1 (B) 2 µg/mL.



Immunohistochemical staining of human brain tissue using SAPAP3 antibody at 2.5 µg/mL.

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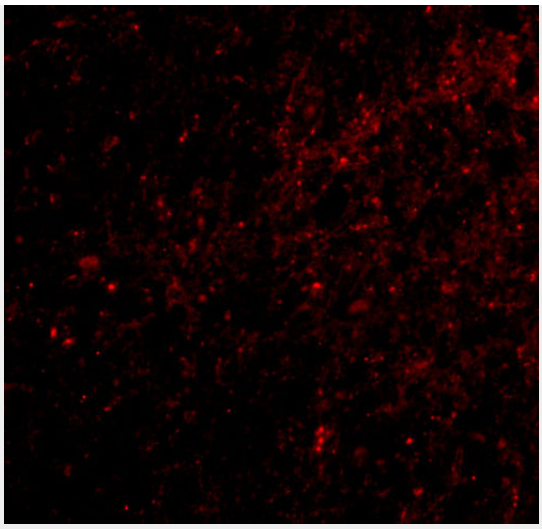

Immunofluorescence of SAPAP3 in human brain tissue with SAPAP3 antibody at 20 µg/mL.

SAPAP3 Antibody - Background

SAPAP3 Antibody: SAP90/PSD-95-associated protein 3 (SAPAP3, also known as 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.

SAPAP3 Antibody - References

SAPAPs. A family of PSD-95/SAP90-associated proteins localized at postsynaptic density. J. Biol. Chem.1997; 272:11943-51.
Kindler S, Rehbein M, Classen B, et al. Distinct spatiotemporal expression of SAPAP transcripts in the developing rat brain: a novel dendritically localized mRNA. Brain Res. Mol. Brain Res.2004; 126:14-21.
Bongiorno-Borbone L, Kadare G, Benfenati F, et al. FAK and PYK2 interact with SAP/PSD-95-associated protein-3. Biochem. Biophys. Res. Commun.2005; 337:641-6.
Welch JM, Wang D, and Feng G. Differential mRNA expression and protein localization of the SAP90/PSD-95-associated proteins (SAPAPs) in the nervous system of the mouse. J. Comp. Neurol.2004; 472:24-39.