

SAPAP2 Antibody

Catalog # ASC10702

Specification

SAPAP2 Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality

Isotype Application Notes 09P1A6 09P1A6, 9228

Human, Mouse, Rat Rabbit

Polyclonal IgG

SAPAP2 antibody can be used for detection of SAPAP2 by Western blot at 0.5 - 1

μg/mL. Antibody can also be used for immunohistochemistry starting at 5 μg/mL. For immunofluorescence start at 20 μg/mL.

SAPAP2 Antibody - Additional Information

Gene ID 9228

Target/Specificity

SAPAP2 antibody was raised against a 16 amino acid synthetic peptide from near the center of human SAPAP2.

Str>

The immunogen is located within amino acids 480 - 530 of SAPAP2.

Reconstitution & Storage

SAPAP2 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

SAPAP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SAPAP2 Antibody - Protein Information

Name DLGAP2 (HGNC:2906)

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

Tissue Location

Expressed in brain and kidney.

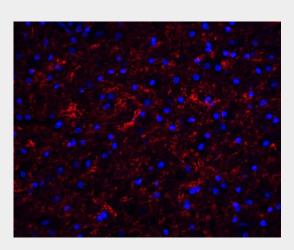


SAPAP2 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

SAPAP2 Antibody - Images



Immunofluorescence of Clusterin in human brain tissue with Clusterin antibody at 20 µg/ml.

SAPAP2 Antibody - Background

SAPAP2 Antibody: SAP90/PSD-95-associated protein 2 (SAPAP2, also known as DLGAP2) 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, SAPAP2 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). SAPAP2 mRNA is targeted to cell bodies in a similar manner to SAPAP1 and -4, whereas SAPAP3 mRNA is detected mainly in cell bodies.

SAPAP2 Antibody - References

SAPAPs. A family of PSD-95/SAP90-associated proteins localized at postsynaptic density. J. Biol. Chem.1997; 272:11943-51.

Ranta S, Zhang Y, Ross B, et al. Positional cloning and characterization of the human DLGAP2 gene and its exclusion in progressive epilepsy with mental retardation. Eur. J. Hum. Genet.2000; 8:381-4. 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.