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# SAPAP4 Antibody

Catalog # ASC10706

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | Q9Y2H0 |
| **Other Accession** | NP_055717, 34335253 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 108012 |
| **Concentration (mg/ml)** | 1 mg/mL |
| **Conjugate** | Unconjugated |
| **Application Notes** | SAPAP4 antibody can be used for detection of SAPAP4 by Western blot at 1 g/mL. |

## Additional Information

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| **Gene ID** | 22839 |
| **Other Names** | Disks large-associated protein 4, DAP-4, PSD-95/SAP90-binding protein 4, SAP90/PSD-95-associated protein 4, SAPAP-4, DLGAP4, DAP4, KIAA0964, SAPAP4 |
| **Target/Specificity** | DLGAP4; At least three isoforms of SAPAP2 are known to exist. This SAPAP4 antibody will not cross-react with other SAPAP proteins. |
| **Reconstitution & Storage** | SAPAP4 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** | SAPAP4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | DLGAP4 |
| **Synonyms** | DAP4, KIAA0964, SAPAP4 |
| **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** | Membrane; Peripheral membrane protein |

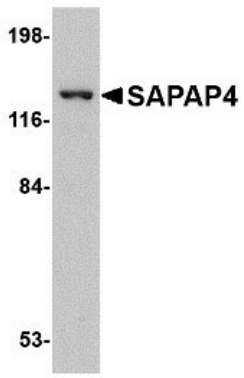
## Background

SAPAP4 Antibody: SAP90/PSD-95-associated protein 4 (SAPAP4, also known as DLGAP4) 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, SAPAP4 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). SAPAP4 mRNA is targeted to cell bodies in a similar manner to SAPAP1 and -2, whereas SAPAP3 mRNA is detected mainly in cell bodies.

## 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.

## Images




Western blot analysis of SAPAP4 in SK-N-SH cell lysate with SAPAP4 antibody at 1 µg/mL.

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