

SAPAP3 antibody (pAb)

Rabbit Anti-Human/Mouse/Rat SAPAP3

Instruction Manual

Catalog Number	PK-AB718-4411
Synonyms	SAPAP3 Antibody: SAP90, PSD-95-associated protein 3, Disks large-associated protein 3, DLGAP3
Description	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.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	SAPAP3 antibody was raised in rabbits against an 18 amino acid peptide from near the carboxy terminus of human SAPAP3.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C 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.
Applications	E, WB, IHC, IF INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. 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.
Images	Available upon request.
References	SAPAPs. A family of PSD-95/SAP90-associated proteins localized at postsynaptic density. <i>J. Biol. Chem.</i> 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. <i>Brain Res. Mol. Brain Res.</i> 2004; 126:14-21. Bongiorno-Borbone L, Kadare G, Benfenati F, et al. FAK and PYK2 interact with SAP/PSD-95-associated protein-3. <i>Biochem. Biophys. Res. Commun.</i> 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. <i>J. Comp. Neurol.</i> 2004; 472:24-39.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4411P; SAPAP3 Peptide Cat.No. PK-AB718-1463; Rat Brain Tissue Lysate

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