

SAP 102

Cat.No. 124 202; Polyclonal rabbit antibody, 200 µl antiserum (lyophilized)

Data Sheet

Reconstitution/Storage	200 µl antiserum, lyophilized. For reconstitution add 200 µl H ₂ O, then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) IP: yes ICC: not recommended (see remarks) IHC: not recommended IHC-P/FFPE: not tested yet
Immunogen	Synthetic peptide corresponding to AA 14 to 26 from rat SAP102 (UniProt Id: Q62936)
Reactivity	Reacts with: human (Q92796), rat (Q62936), mouse (P70175), hamster. No signal: zebrafish. Other species not tested yet.
Specificity	Specific for SAP 102. (K.O. verified)
matching control	124-2P
Remarks	ICC: ICC, IHC: Antibody 2 (cat. no. 124 213) is recommended.

TO BE USED IN VITRO / FOR RESEARCH ONLY

NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

SAP 102 (synapse associated protein of **102** kDa, also called **DLG 3**) belongs to the PSD 95 family containing a modular structure with three PDZ-, one SH3- and a guanylate kinase-like domain. It is a component of postsynaptic densities in central synapses. It is involved in NMDA receptor clustering and immobilization. In vitro, all three PDZ domains in SAP 102 bind the cytoplasmic tail of NR2B.

Selected References SYSY Antibodies

A network of PDZ-containing proteins regulates T cell polarity and morphology during migration and immunological synapse formation.

Ludford-Menting MJ, Oliaro J, Sacirbegovic F, Cheah ET, Pedersen N, Thomas SJ, Pasam A, Iazzolino R, Dow LE, Waterhouse NJ, Murphy A, et al.

Immunity (2005) 22(6): 737-48. **WB, ICC**

Selectivity, efficacy and toxicity studies of UCCB01-144, a dimeric neuroprotective PSD-95 inhibitor.

Bach A, Clausen BH, Kristensen LK, Andersen MG, Ellman DG, Hansen PBL, Hasseldam H, Heitz M, Özcelik D, Tuck EJ, Kopanitsa MV, et al.

Neuropharmacology (2019) : **WB; tested species: mouse**

Altered postsynaptic-density-levels of caldendrin in the para-chloroamphetamine-induced serotonin syndrome but not in the rat ketamine model of psychosis.

Smalla KH, Sahin J, Putzke J, Tischmeyer W, Gundelfinger ED, Kreutz MR

Neurochemical research (2009) 34(8): 1405-9. **WB**

Synaptic Ras GTPase activating protein regulates pattern formation in the trigeminal system of mice.

Barnett MW, Watson RF, Vitalis T, Porter K, Komiyama NH, Stoney PN, Gillingwater TH, Grant SG, Kind PC

The Journal of neuroscience : the official journal of the Society for Neuroscience (2006) 26(5): 1355-65. **WB**

Changes in NMDA receptor subunits and interacting PSD proteins in dorsolateral prefrontal and anterior cingulate cortex indicate abnormal regional expression in schizophrenia.

Kristiansen LV, Beneyto M, Haroutunian V, Meador-Woodruff JH

Molecular psychiatry (2006) 11(8): 737-47, 705. **WB**

Molecular anatomy of a trafficking organelle.

Takamori S, Holt M, Stenius K, Lemke EA, Grønborg M, Riedel D, Urlaub H, Schenck S, Brügger B, Ringler P, Müller SA, et al.

Cell (2006) 127(4): 831-46. **WB**

Immunisolation of two synaptic vesicle pools from synaptosomes: a proteomics analysis.

Morciano M, Burré J, Corvey C, Karas M, Zimmermann H, Volkandt W

Journal of neurochemistry (2005) 95(6): 1732-45. **WB**

Selected General References

SAP family proteins.

Fujita A, Kurachi Y

Biochemical and biophysical research communications (2000) 269(1): 1-6.

Molecular organization of excitatory chemical synapses in the mammalian brain.

Gundelfinger ED, tom Dieck S

Die Naturwissenschaften (2000) 87(12): 513-23.

Interaction of the N-methyl-D-aspartate receptor complex with a novel synapse-associated protein, SAP102.

Lau LF, Mammen A, Ehlers MD, Kindler S, Chung WJ, Garner CC, Haganir RL

The Journal of biological chemistry (1996) 271(35): 21622-8.

SAP102, a novel postsynaptic protein that interacts with NMDA receptor complexes in vivo.

Müller BM, Kistner U, Kindler S, Chung WJ, Kuhlendahl S, Fenster SD, Lau LF, Veh RW, Haganir RL, Gundelfinger ED, Garner CC, et al.

Neuron (1996) 17(2): 255-65.