

PSD 93

Cat.No. 124 102; 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 , but special protocol (see Valtschanoff et al. 2000) ICC: not recommended (see remarks) IHC: not tested yet IHC-P/FFPE: not tested yet
Immunogen	Synthetic peptide corresponding to AA 22 to 37 from rat PSD93 (UniProt Id: Q63622)
Reactivity	Reacts with: human (Q15700), rat (Q63622), mouse (Q91XM9), hamster. No signal: zebrafish. Other species not tested yet.
Specificity	Specific for PSD 93. (K.O. verified)
matching control	124-1P
Remarks	ICC: The affinity purified antibody is recommended.

TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

PSD 93 (postsynaptic density protein of **93** kDa, also called **chapsin 110** and **DLG 2**) 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.

PSD 93 is expressed in discrete neuronal populations as well as in specific non-neuronal cells. It exhibits complex molecular diversity attributable to tissue-specific alternative splicing. PSD 93, like PSD 95, binds to NMDA receptors and to the neuronal nitric oxide synthase (NOS).

PSD 93 and PSD 95 can heteromultimerize with each other and are recruited into the same NMDA receptor and K⁺ channel clusters. PSD 93, however, is unique among PSD 95 family members in its expression in Purkinje neuron cell bodies and dendrites.

Selected References SYSY Antibodies

SAP97 concentrates at the postsynaptic density in cerebral cortex.
Valtschanoff JG, Burette A, Davare MA, Leonard AS, Hell JW, Weinberg RJ
The European journal of neuroscience (2000) 12(10): 3605-14. **WB, IP**

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**

The molecular chaperone Hsc70 interacts with the vesicular monoamine transporter-2.

Requena DF, Parra LA, Baust TB, Quiroz M, Leak RK, Garcia-Olivares J, Torres GE
Journal of neurochemistry (2009) 110(2): 581-94. **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, Volkhardt 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.

Cloning and characterization of postsynaptic density 93, a nitric oxide synthase interacting protein.

Brennan JE, Christopherson KS, Craven SE, McGee AW, Bredt DS
The Journal of neuroscience : the official journal of the Society for Neuroscience (1996) 16(23): 7407-15.

Heteromultimerization and NMDA receptor-clustering activity of Chapsyn-110, a member of the PSD-95 family of proteins.

Kim E, Cho KO, Rothschild A, Sheng M
Neuron (1996) 17(1): 103-13.