

SAP 97

Cat.No. 124 302; 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: not tested yet ICC: not tested yet IHC: not tested yet IHC-P/FFPE: not tested yet
Immunogen	Synthetic peptide corresponding to AA 115 to 133 from rat SAP97 (UniProt Id: Q62696)
Reactivity	Reacts with: rat (Q62696). No signal: zebrafish. Other species not tested yet.
Specificity	Specific for SAP 97.
matching control	124-3P

TO BE USED IN VITRO / FOR RESEARCH ONLY

NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

SAP 97 (synapse associated protein of **97** kDa, also called **DLG 1**) like PSD 95 and SAP 102, is a scaffolding protein of the postsynaptic density. It consists of three type-one PDZ domains and binds selectively to the C-terminus of the GluR1 subunit of AMPA receptors. SAP 97 is probably involved in the clustering of AMPA receptors at the post-synaptic membrane. It is also expressed in heart, where it has been shown to be involved in the targeting of voltage gated potassium channels to subpopulations of lipid rafts.

Selected References SYSY Antibodies

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**

Selected General References

Interaction between SAP97 and PSD-95, two Maguk proteins involved in synaptic trafficking of AMPA receptors.
Cai C, Li H, Rivera C, Keinänen K
The Journal of biological chemistry (2006) 281(7): 4267-73.

Caveolin-3 and SAP97 form a scaffolding protein complex that regulates the voltage-gated potassium channel Kv1.5.
Folco EJ, Liu GX, Koren G
American journal of physiology. Heart and circulatory physiology (2004) 287(2): H681-90.

A multiprotein trafficking complex composed of SAP97, CASK, Veli, and Mint1 is associated with inward rectifier Kir2 potassium channels.
Leonoudakis D, Conti LR, Radeke CM, McGuire LM, Vandenberg CA
The Journal of biological chemistry (2004) 279(18): 19051-63.

CaMKII-dependent phosphorylation regulates SAP97/NR2A interaction.
Gardoni F, Mauceri D, Fiorentini C, Bellone C, Missale C, Cattabeni F, Di Luca M
The Journal of biological chemistry (2003) 278(45): 44745-52.

Molecular mechanisms regulating the differential association of kainate receptor subunits with SAP90/PSD-95 and SAP97.
Mehta S, Wu H, Garner CC, Marshall J
The Journal of biological chemistry (2001) 276(19): 16092-9.

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.

PSD-95 and SAP97 exhibit distinct mechanisms for regulating K(+) channel surface expression and clustering.
Tiffany AM, Manganas LN, Kim E, Hsueh YP, Sheng M, Trimmer JS
The Journal of cell biology (2000) 148(1): 147-58.

Differential interaction of the tSXV motifs of the NR1 and NR2A NMDA receptor subunits with PSD-95 and SAP97.
Bassand P, Bernard A, Rafiki A, Gayet D, Khrestchatisky M
The European journal of neuroscience (1999) 11(6): 2031-43.

SAP97 is associated with the alpha-amino-3-hydroxy-5-methylisoxazole-4-propionic acid receptor GluR1 subunit.
Leonard AS, Davare MA, Horne MC, Garner CC, Hell JW
The Journal of biological chemistry (1998) 273(31): 19518-24.