Synaptic Systems

Rudolf-Wissell-Str. 28
37079 Göttingen, Germany
Phone: +49 551-50556-0
Fax: +49 551-50556-384
E-mail: sales@sysy.com
Web: www.sysy.com

PSD 95

Cat.No. 124-0P; control peptide, 100 µg peptide (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg peptide, lyophilized. For reconstitution add 100 µl H_2O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use. Control peptides should also be stored at -20°C when still lyophilized!
Immunogen	Synthetic peptide corresponding to AA 18 to 32 from rat PSD95 (UniProt Id: P31016)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	124 002, 124 003
Remarks	This control peptide consists of the synthetic peptide (DTPPLEHSPAHLPNQ) that has been used for immunization. It has been tested in preadsorption experiments and blocks efficiently and specifically the corresponding signal in Western blots. The amount of peptide needed for efficient blocking depends on the titer and on the affinity of the antibody to the antigen.

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

PSD 95 (**p**ost**s**ynaptic **d**ensity protein **95** kDa, also called **SAP 90**: **s**ynapse **a**ssociated **p**rotein of **90** kDa and **DLG 4**) is a component of postsynaptic densities in central synapses. It contains three PDZ domains. The first and second PDZ domain localizes NMDA receptors and K+ channels to synapses, the third binds to neuroligins which are neuronal cell adhesion molecules that interact with β-neurexins and form intercellular junctions. Thus different PDZ domains of PSD 95 might be specialized for distinct functions.

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.

Binding of neuroligins to PSD-95.
Irie M, Hata Y, Takeuchi M, Ichtchenko K, Toyoda A, Hirao K, Takai Y, Rosahl TW, Südhof TC
Science (New York, N.Y.) (1997) 277(5331): 1511-5.

Mechanisms determining the time course of secretion in neuroendocrine cells.
Chow RH, Klingauf J, Heinemann C, Zucker RS, Neher E
Neuron (1996) 16(2): 369-76.

Domain interaction between NMDA receptor subunits and the postsynaptic density protein PSD-95.
Kornau HC, Schenker LT, Kennedy MB, Seeburg PH
Science (New York, N.Y.) (1995) 269(5231): 1737-40.