

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 93**

Cat.No. 124-1P; control peptide, 100 µg peptide (lyophilized)

## Data Sheet

Reconstitution/ Storage	100 $\mu$ g peptide, lyophilized. For reconstitution add 100 $\mu$ l H <sub>2</sub> O 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 22 to 37 from rat PSD93 (UniProt Id: Q63622)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	124 102, 124 103
Remarks	This control peptide consists of the synthetic peptide (DGPHDHSLPRLTHEVR) 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 93** (post**s**ynaptic **d**ensity 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 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. Brenman 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.