

## PSD 95 PDZ domain

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

Cat.No. 124-01P; control protein, 100 µg protein (lyophilized)

## **Data Sheet**

Reconstitution/ Storage	100 $\mu g$ protein, lyophilized. For reconstitution add 100 $\mu l$ H $_2O$ to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Immunogen	Recombinant protein corresponding to AA 64 to 247 from mouse PSD95 (UniProt Id: Q62108)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	124 011, 124 011BT, 124 012, 124 014
Remarks	This control protein consists of the recombinant protein (aa 68-251 of mouse PSD 95) 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 protein 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** (postsynaptic density protein **95** kDa, also called **SAP 90**: synapse associated protein 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  $\beta$ -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.