Synaptic Systems

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PSD 95 PDZ domain

Cat.No. 124 014; Polyclonal Guinea pig antibody, 100 µl antiserum (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µl antiserum, lyophilized. For reconstitution add 100 µl H_2O, then aliquot and store at -20°C until use.
Applications	**WB**: 1 : 1000 up to 1 : 10000 (AP staining) **IP**: not tested yet **ICC**: 1 : 1000 up to 1 : 3000 (see remarks) **IHC**: not tested yet **IHC-P/FFPE**: not tested yet
Immunogen	Recombinant protein corresponding to AA 64 to 247 from mouse PSD95 (UniProt Id: Q62108)
Reactivity	Reacts with: rat (P31016), mouse (Q62108). Other species not tested yet.
Specificity	Specific for PSD 95 with weak cross-reactivity to SAP 102
matching control	124-01P
Remarks	**ICC**: Produces more background staining than the monoclonal antibody cat. no. 124 011.

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 References SYSY Antibodies

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Acta neuropathologica (2018) 135(2): 213-226. **IHC-P; tested species: human**

Knockout of Amyloid β Protein Precursor (APP) Expression Alters Synaptogenesis, Neurite Branching and Axonal Morphology of Hippocampal Neurons.
Southam KA, Stennard F, Pavez C, Small DH
Neurochemical research (2018) : . **ICC; tested species: mouse**

Piperlongumine decreases cognitive impairment and improves hippocampal function in aged mice.
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MicroRNA-mediated disruption of dendritogenesis during a critical period of development influences cognitive capacity later in life.
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Hudry E, Klickstein J, Cannavo C, Jackson R, Muzikansky A, Gandhi S, Urick D, Sargent T, Wrobleski L, Roe AD, Hou SS, et al.
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Binding of neuroligins to PSD-95.
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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.