

PSD-95 Monoclonal Antibody (7E3-1B8)

Product Specifications

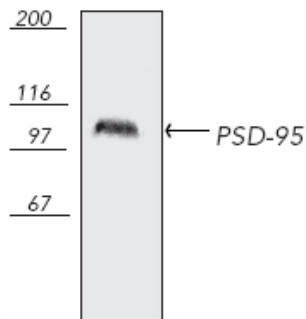
Catalog Number:	VAM-PS001
Host:	Mouse
Isotype:	IgG _{2a}
Species Reactivity:	Mouse, rat, bovine
Applications: <i>The optimal dilution for a specific application must be determined by the investigator</i>	WB³: 1:1000 (ECL)
Predicted m.w.:	~95 kDa
Concentration:	See product label
Purification:	Protein G Affinity
Format:	PBS, pH 7.2, 0.09% azide, 50% glycerol
Storage: <i>Shipping conditions may differ from the recommended storage temperature</i>	Store at -20°C
Immunogen:	Recombinant rat PSD-95 protein
Related Products:	
LYT-MB100	Mouse Brain Tissue Extract
LYT-RB100	Rat Brain Tissue Extract
SAB-100	Goat anti-Mouse IgG(Fab) Polyclonal Antibody, HRP Conjugate
VAM-PS002	PSD-95 Monoclonal Antibody (6G6-1C9)
VAM-PS005	SAP97 Monoclonal Antibody (RPI 197.4)
VAM-PS006	SAP102 Monoclonal Antibody (7D3 (mAb 119))

Background:

Postsynaptic density protein 95 kDa (PSD-95), also known as Synapse associated protein 90 kDa (SAP90), is a brain specific protein that is highly similar to the *Drosophila* dlg tumor suppressor protein¹. PSD-95 is a member of membrane associated proteins that are localized beneath the postsynaptic membrane of synapses in the CNS. PSD-95 contains a carboxyl-terminal guanylate kinase domain, an upstream SH3 domain, and three amino-terminal PDZ domains. PSD-95 interacts with NMDA receptor and Shaker-type K⁺ channel, and contributes to their clustering and localization at the synaptic spines in hippocampal neurons and the pinceau terminal of cerebellar basket cells, respectively². The yeast two hybrid method revealed that the second PDZ domain in PSD-95 binded tightly to the carboxyl terminal (t)-S/TXV sequence of the NR2B subunit of NMDA receptor and of Shaker-type K⁺ channel. PSD-95 also binds to neuronal nitric oxide synthase, possibly through interaction between PDZ domains present on both proteins.

References:

1. Cho, K.O., Hunt, C.A. and Kennedy, M.B. (1992) *Neuron* **9**, 929-942.
2. Kennedy, M. (1997) *Trends in Neurosci.* **6**, 264-268.
3. Kornam, H.C., *et al.* (1995) *Science* **269**, 1737-1740.
4. Kornau, H.C., *et al.* (1995) *Science* **269**, 1737-1740.



Western blot analysis of bovine brain tissue extract, probed with PSD-95 Monoclonal Antibody (7E3-1B8)

FOR RESEARCH USE ONLY; NOT FOR THERAPEUTIC OR DIAGNOSTIC USE

5777 Hines Drive • Ann Arbor, MI • 48108 | Tel: 800-833-8651 or 800-668-6113 | Fax: 734-668-2793
www.assaydesigns.com | orders@assaydesigns.com | technical@assaydesigns.com

Last Revised: 3/18/2008