

## PSD95 Monoclonal Antibody

### ORDERING INFORMATION

Catalog No.	Clone No.	MAb Subtype	Size
56457	7E3-1B8	IgG1	100ug

**Format:** Protein G-purified antibody in PBS, pH 7.4, 50% glycerol, 0.09% sodium azide.

### BACKGROUND

Postsynaptic Density Protein 95 (PSD95), also known as Synapse Associated Protein 90kDa, is a member of the membrane-associated guanylate kinase family of proteins. PSD95 is a scaffolding protein involved in the assembly and function of the postsynaptic density complex. This family of proteins consists of N-terminal variable segments followed by three amino-terminal PDZ domains, an upstream SH3 domain, and an inactive carboxy-terminal guanylate kinase domain. The first and second PDZ domains localize NMDA receptors and K<sup>+</sup> channels to synapses, and the third binds to neuroligins, neuronal cell adhesion molecules. PSD95 also binds to neuronal nitric oxide synthase. PSD95 is implicated in experience-dependent plasticity and plays an indispensable role in learning. Mutations in PSD95 are associated with autism.

### SPECIFICATION SUMMARY

**Antigen:** Recombinant rat PSD95

**Host Species:** Mouse

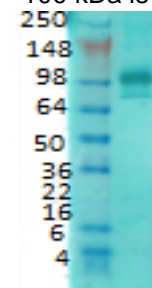
**Gene ID:** 29495

**Accession No.:** NP\_062567.1, P31016

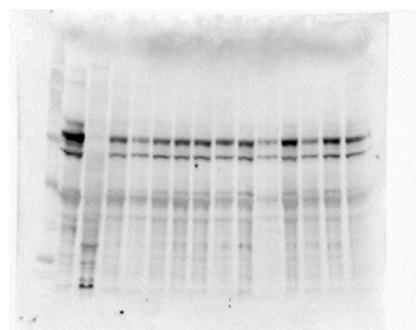
**Specificity:** This antibody recognizes mouse, rat, pig, and human PSD95.

### APPLICATIONS

*Immunoblotting:* use at 1ug/ml. A band of ~100 kDa is detected.



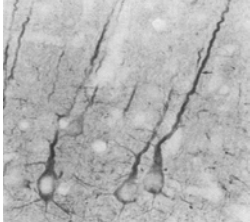
Detection of PSD95 in rat brain membrane with #56457 at 1ug/ml.



Detection of PSD95 in piglet hippocampus with #56457 at 1ug/ml. Lane 1: mw markers, Lane 2: mouse brain, Lane 3: piglet liver, Lanes 4-15: hippocampus of 12 different piglets. *Courtesy of S. Fleming, U. of Illinois.*

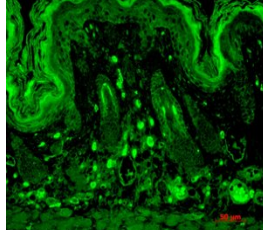
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*Immunocytochemistry:* use at 1-10ug/ml.

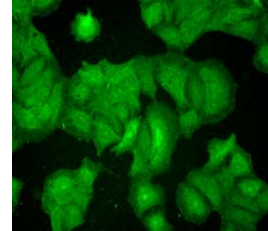


Detection of PSD95 in rat neocortex with #56457 at 1ug/ml.

*Immunofluorescence:* use at 10ug/ml.



Detection of PSD95 in mouse backskin with #56457 at 10ug/ml.



Detection of PSD95 in human HaCaT cells with #56457 at 10ug/ml.

These are recommended concentrations. Endusers should determine optimal concentrations for their application.

### DILUTION INSTRUCTIONS

Dilute in PBS or medium which is identical to that used in the assay system.

### STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C.

*For in vitro investigational use only. Not intended for therapeutic or diagnostic applications.*