

## Anti-PSD95 Monoclonal Antibody

### ORDERING INFORMATION

**Catalog No.:** 56452 (clone 6G6-1C9)  
**Size:** 100ug in PBS, pH 7.4, purified by Protein G affinity chromatography.

### 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  
**Antibody Class:** IgG2a  
**Preservatives:** 0.09% sodium azide  
**Other additives:** 50% glycerol

### SPECIFICITY

This antibody recognizes mouse, rat, and bovine PSD95.

### APPLICATIONS

*Immunoblotting:* use at 4ug/ml. A band of ~100 kDa is detected.

*Immunocytochemistry:* use at 3-15ug/ml. These are recommended concentrations. User should determine optimal concentrations for their application.

*Positive control:* Rat brain tissue

### 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. Avoid repeated freezing and thawing.

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