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## PSD93 Antibody

**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W	<b>Reactivity:</b> H M R	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 110	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #Q15700	<b>Entrez-Gene Id:</b> 1740
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### Product Usage Information

#### Application

Western Blotting

#### Dilution

1:1000

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

PSD93 Antibody recognizes endogenous levels of total PSD93 protein. This antibody also detects a background band of unknown origin ~45 kDa.

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro321 of human PSD93 protein. Antibodies are purified by protein A and peptide affinity chromatography.

### Background

Postsynaptic Density Protein 93 (PSD93) is a member of the PSD subfamily of the membrane-associated guanylate kinase (PSD-MAGUK) proteins. Structurally, it most closely resembles PSD95, consisting of an N-terminal variable segment followed by three PDZ domains, an SH3 domain, and an inactive guanylate kinase (GK) domain (1,2). PSD93 is expressed in neuronal cells and located at the synapse where it interacts with neuronal receptors and proteins including the NMDA receptor (2-4), K<sup>+</sup> channels (5,6), and the AMPA receptor (7) to regulate their membrane localization and neuronal signaling. Research studies have implicated PSD93 in postsynaptic related persistent pain induction, making PSD93 a potential target for treatment of this syndrome (3).

### Background References

1. Brenman, J.E. et al. (1996) *J Neurosci* 16, 7407-15.
2. Kim, E. et al. (1996) *Neuron* 17, 103-13.
3. Tao, Y.X. et al. (2003) *J Neurosci* 23, 6703-12.
4. Niethammer, M. et al. (1996) *J Neurosci* 16, 2157-63.
5. Kim, E. et al. (1995) *Nature* 378, 85-8.
6. Leyland, M.L. and Dart, C. (2004) *J Biol Chem* 279, 43427-36.
7. Elias, G.M. et al. (2006) *Neuron* 52, 307-20.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

**W:** Western Blotting

### Cross-Reactivity Key

**H:** Human **M:** Mouse **R:** Rat

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