

Rabbit Anti-PSD93 antibody

SL3538R

Product Name:	PSD93
Chinese Name:	突触后密度蛋白93抗体
Alias:	Channel associated protein of synapse 110; Channel associated protein of synapses 110kD; Channel-associated protein of synapse-110; Chapsyn 110; Chapsyn-110; Chapsyn110; discs large homolog 2; Discs, large homolog 2 (Drosophila); Disks large homolog 2; DKFZp781D1854; DKFZp781E0954; Dlg 2; dlg2; DLG2_HUMAN; Dlgh 2; Dlgh2; FLJ37266; Gm1197; MGC131811; Postsynaptic density protein PSD 93; Postsynaptic density protein PSD-93; Postsynaptic density protein PSD-93; PSD93.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	98kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PSD93:151-250/870
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	PSD 93 is believed to participate in the clustering of certain proteins, including N-

methyl-D-aspartate (NMDA) receptors and shaker-type potassium channels at the synaptic membrane. There are two principal modes of interaction between PSD 93 and other proteins. NMDA receptors and shaker-type potassium channels both share C-terminal sequence homology consisting of a threonine/serine-X-valine-COOH (T/SXV) motif. Other neuronal proteins that share this motif (beta 1 adrenergic receptor, some serotonin receptors, some sodium channel subunits, and additional potassium channel subunits) may interact with PSD 93 by binding to its PDZ domains. Neuronal nitric oxide synthase (nNOS), which lacks the T/SXV motif but which has its own PDZ domain, has been shown to associate with PSD 93 in vitro through a pseudo-homotypic PDZ-PDZ interaction.

Function:

Required for perception of chronic pain through NMDA receptor signaling. Regulates surface expression of NMDA receptors in dorsal horn neurons of the spinal cord. Interacts with the cytoplasmic tail of NMDA receptor subunits as well as inward rectifying potassium channels. Involved in regulation of synaptic stability at cholinergic synapses. Part of the postsynaptic protein scaffold of excitatory synapses.

Subunit:

Interacts through its PDZ domains with NETO1. Interacts with NOS1/nNOS through second PDZ domain. Interacts with KCNJ2/Kir2.1 (via C-terminus) through one of its PDZ domains. Interacts with FRMPD4 (via C-terminus). Interacts with LRFN1, LRFN2 and LRFN4. Interacts with FASLG.

Subcellular Location:

Membrane; Lipid-anchor. Cell junction, synapse, postsynaptic cell membrane, postsynaptic density. Cell junction, synapse. Note=Concentrated in soma and postsynaptic density of a subset of neurons.

Post-translational modifications:

Palmitoylation of isoform 1 is not required for targeting to postsynaptic density.

Similarity:

Belongs to the MAGUK family.

Contains 1 guanylate kinase-like domain.

Contains 3 PDZ (DHR) domains.

Contains 1 SH3 domain.

SWISS:

Q15700

Gene ID:

1740

Database links:

Entrez Gene: 1740Human

Entrez Gene: 23859Mouse

Entrez Gene: 64053Rat

Omim: 603583Human

SwissProt: Q15700Human

SwissProt: Q91XM9Mouse

SwissProt: Q63622Rat

Unigene: 367656Human

Unigene: 147213 Mouse

Unigene: 257035Mouse

Unigene: 202966Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.