

Product datasheet

Anti-PSD95 antibody [S28-43] ab99009

1 Abreviews 1 References 2 Images

Overview

Product name	Anti-PSD95 antibody [S28-43]
Description	Mouse monoclonal [S28-43] to PSD95
Host species	Mouse
Tested applications	Suitable for: ICC/IF, WB, IP, IHC-P, IHC-Fr, Electron Microscopy
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Fusion protein, corresponding to amino acids 77-200 of Human PSD95
Positive control	Rat brain tissue extract

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	Preservative: 0.09% Sodium Azide Constituents: 50% Glycerol, PBS, pH 7.4
Purity	Protein G purified
Clonality	Monoclonal
Clone number	S28-43
Isotype	IgG2a

Applications

Our [Abpromise guarantee](#) covers the use of **ab99009** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use at an assay dependent concentration.
WB		1/1000. Predicted molecular weight: 80 kDa.
IP		Use at an assay dependent concentration.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration.
Electron Microscopy		Use at an assay dependent concentration. (Immuno-gold). Sufficient for detection of PSD95 in 20 µg of rat brain tissue extract using Goat anti-mouse IgG:HRP as the secondary antibody.

Target

Function

Interacts with the cytoplasmic tail of NMDA receptor subunits and shaker-type potassium channels. Required for synaptic plasticity associated with NMDA receptor signaling. Overexpression or depletion of DLG4 changes the ratio of excitatory to inhibitory synapses in hippocampal neurons. May reduce the amplitude of ASIC3 acid-evoked currents by retaining the channel intracellularly. May regulate the intracellular trafficking of ADR1B.

Tissue specificity

Brain.

Sequence similarities

Belongs to the MAGUK family.
 Contains 1 guanylate kinase-like domain.
 Contains 3 PDZ (DHR) domains.
 Contains 1 SH3 domain.

Domain

The PDZ domain 3 mediates interaction with ADR1B.
 The L27 domain near the N-terminus of isoform 2 is required for HGS/HRS-dependent targeting to postsynaptic density.

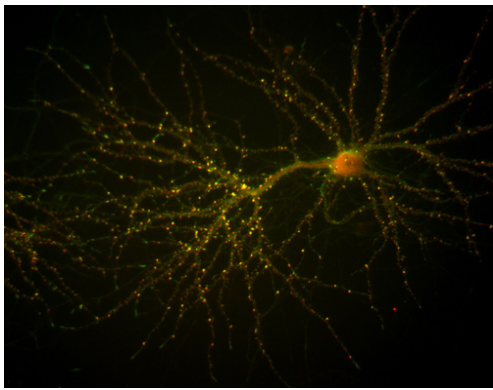
Post-translational modifications

Palmitoylation of isoform 1 is required for targeting to postsynaptic density.

Cellular localization

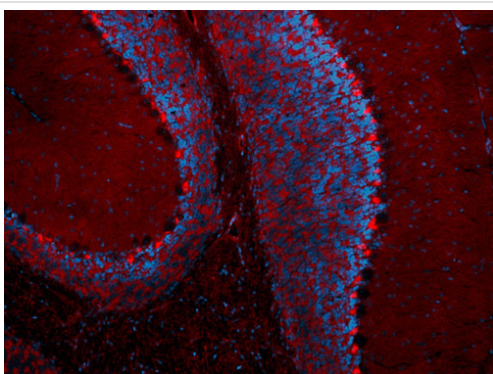
Cell membrane. Cell junction, synapse, postsynaptic cell membrane, postsynaptic density. Cell projection, axon. Cell junction, synapse. High levels in postsynaptic density of neurons in the forebrain. Also in presynaptic region of inhibitory synapses formed by cerebellar basket cells on axon hillocks of Purkinje cells.

Images



Immunofluorescent detection of PSD95 using ab99009 in cultures of dissociated hippocampal neurons.

Immunocytochemistry/ Immunofluorescence - Anti-PSD95 antibody [S28-43] (ab99009)



Immunolabelling of PSD95 using a dilution of ab99009 in Mouse cerebellum sections. Specific labelling of the puncta below the Purkinje cells of the cerebellum is seen in this image.

Immunocytochemistry/ Immunofluorescence - Anti-PSD95 antibody [S28-43] (ab99009)

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