

DLG4 antibody - middle region
Rabbit Polyclonal Antibody
Catalog # AI13277**Specification**

DLG4 antibody - middle region - Product Information

Application	WB
Primary Accession	P78352
Other Accession	NM_001365 , NP_001356
Reactivity	Human, Mouse, Rat, Rabbit, Horse, Bovine, Guinea Pig, Dog
Predicted	Human, Mouse, Rat, Rabbit, Horse, Bovine, Guinea Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	85kDa kDa

DLG4 antibody - middle region - Additional Information**Gene ID 1742**

Alias Symbol	PSD95, SAP90, SAP-90
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Other Names

Disks large homolog 4, Postsynaptic density protein 95, PSD-95, Synapse-associated protein 90, SAP-90, SAP90, DLG4, PSD95

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-DLG4 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

DLG4 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

DLG4 antibody - middle region - Protein Information

Name DLG4 ([HGNC:2903](#))

Synonyms PSD95

Function

Postsynaptic scaffolding protein that plays a critical role in synaptogenesis and synaptic plasticity by providing a platform for the postsynaptic clustering of crucial synaptic proteins. 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. Also regulates AMPA-type glutamate receptor (AMPA) immobilization at postsynaptic density keeping the channels in an activated state in the presence of glutamate and preventing synaptic depression (By similarity). Under basal conditions, cooperates with FYN to stabilize palmitoyltransferase ZDHHC5 at the synaptic membrane through FYN-mediated phosphorylation of ZDHHC5 and its subsequent inhibition of association with endocytic proteins (PubMed:26334723).

Cellular Location

Cell membrane; Lipid-anchor; Cytoplasmic side. Postsynaptic density {ECO:0000250|UniProtKB:P31016}. Synapse Cytoplasm {ECO:0000250|UniProtKB:P31016}. Cell projection, axon {ECO:0000250|UniProtKB:P31016}. Cell projection, dendritic spine {ECO:0000250|UniProtKB:P31016}. Cell projection, dendrite {ECO:0000250|UniProtKB:P31016}. Presynapse {ECO:0000250|UniProtKB:P31016}. Note=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. Suppression of neuronal activity induces synaptic accumulation and clustering of DLG4. {ECO:0000250|UniProtKB:P31016}

Tissue Location

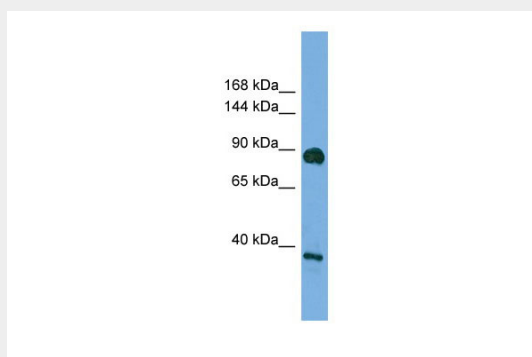
Brain.

DLG4 antibody - middle region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

DLG4 antibody - middle region - Images



WB Suggested Anti-DLG4 Antibody Titration: 0.2-1 µg/ml

ELISA Titer: 1:1562500

Positive Control: HT1080 cell lysate

DLG4 antibody - middle region - References

Stathakis D.G.,et al.Genomics 44:71-82(1997).
Stathakis D.G.,et al.Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases.
Stathakis D.G.,et al.J. Neurochem. 73:2250-2265(1999).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Zody M.C.,et al.Nature 440:1045-1049(2006).