

DLG4 Blocking Peptide (C-erm)
Synthetic peptide
Catalog # BP21835a**Specification**

DLG4 Blocking Peptide (C-erm) - Product InformationPrimary Accession [P78352](#)**DLG4 Blocking Peptide (C-erm) - Additional Information**

Gene ID 1742

Other Names

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

Target/Specificity

The synthetic peptide sequence is selected from aa 568-579 of HUMAN DLG4

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

DLG4 Blocking Peptide (C-erm) - Protein InformationName 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:<a href="http://www.uniprot.org/citations/26334723"

target="_blank">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 Blocking Peptide (C-erm) - Protocols

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

- [Blocking Peptides](#)

DLG4 Blocking Peptide (C-erm) - Images

DLG4 Blocking Peptide (C-erm) - Background

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DLG4 Blocking Peptide (C-erm) - References

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Ota T.,et al.Nat. Genet. 36:40-45(2004).
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