

## DLG4 rabbit pAb

Catalog No: YT7974

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;ELISA

Target: PSD95

**Fields:** >>Hippo signaling pathway;>>Glutamatergic synapse;>>Huntington

disease;>>Pathways of neurodegeneration - multiple diseases;>>Cocaine

addiction

P78352

Q62108

Gene Name: DLG4 PSD95

Protein Name: DLG4

Human Gene Id: 1742

**Human Swiss Prot** 

No:

Mouse Gene Id: 13385

**Mouse Swiss Prot** 

No:

Rat Gene ld: 29495

Rat Swiss Prot No: P31016

**Immunogen:** Synthesized peptide derived from human DLG4 AA range: 530-610

**Specificity:** This antibody detects endogenous levels of Human, Mouse, Rat DLG4

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:1000-2000 ELISA 1:5000-20000

1/2



**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

**Storage Stability:** -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 80kD

**Background:** This gene encodes a member of the membrane-associated guanylate kinase

(MAGUK) family. It heteromultimerizes with another MAGUK protein, DLG2, and is recruited into NMDA receptor and potassium channel clusters. These two MAGUK proteins may interact at postsynaptic sites to form a multimeric scaffold for the clustering of receptors, ion channels, and associated signaling proteins. Multiple transcript variants encoding different isoforms have been found for this

gene. [provided by RefSeq, Jul 2008],

**Function:** domain: The L27 domain near the N-terminus of isoform 2 is required for

HGS/HRS-dependent targeting to post-synaptic density.,domain:The PDZ domain 3 mediates interaction with ADR1B.,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 ACCN3 acid-evoked currents by retaining the channel intracellularly. May regulate the

intracellular trafficking of ADR1B.,PTM:Palmitoylation of isoform 1 is required for

targeting to postsynaptic density., similarity: Belongs to the MAGUK

family.,similarity:Contains 1 guanylate kinase-like domain.,similarity:Contains 1 SH3 domain.,similarity:Contains 2 PDZ (DHR) domains.,similarity:Contains 3

Subcellular Location:

Cell membrane; Lipid-anchor; Cytoplasmic side. Cell junction, synapse, postsynaptic density. Cell junction, synapse. Cytoplasm. Cell projection, axon. Cell projection, dendritic spine. Cell projection, dendrite. Cell junction, synapse, presynapse. 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. .

**Expression:** Brain.

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