Immunotag™ PSD-95 Polyclonal Antibody

Antibody Specification

Catalog No.	ITT3879
Product Description	Immunotag™ PSD-95 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	PSD-95
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from human PSD-95 around the non-phosphorylation site of S295
Specificity	PSD-95 Polyclonal Antibody detects endogenous levels of PSD-95 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	DLG4
Accession No.	P78352 Q62108 P31016
Alternate Names	DLG4; PSD95; Disks large homolog 4; Postsynaptic density protein 95; PSD-95; Synapse-associated protein 90; SAP-90; SAP90

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Description	discs large MAGUK scaffold protein 4(DLG4) Homo sapiens 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],
Cell Pathway/ Category	Huntington's disease,
Protein Expression	Brain,Mammary gland,
Subcellular Localization	cytoplasm,endoplasmic reticulum,plasma membrane,synaptic vesicle,voltage-gated potassium channel complex,ionotropic glutamate receptor complex,postsynaptic density,basolateral plasma membrane,cell junction,endocytic vesicle membrane,G
Protein 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 PDZ (DHR) domains.,subcellular location: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.,subunit:Interacts with ANKS1B and PRR7 (By similarity). Interacts through its first two PDZ domains with GRIN2A, GRIN2B, GRIN2C, GRIN2D, ACCN3, certain splice forms of GRIN1, KCND2, CXADR and SYNGAP1. Interacts through its second PDZ domain with the PDZ domain of NOS1 or the C-terminus of CAPON. May interact with HTR2A. Interacts through its guanylate kinase-like domain with DLGAP1/GKAP, DLGAP2, DLGAP3, DLGAP4, MAP1A and BEGAIN. Interacts through its third PDZ domain with CRIPT (By similarity). Interacts through its first two PDZ domains with KCNA1, KCNA2, KCNA3, KCNA4 and ERBB4. Interacts through its first PDZ domain with GRIK2, KCNA4 and CRIPT. Interacts through its third PDZ domain with NLGN1, and probably with NLGN2 and NLGN3. Interacts through its guanylate kinase-like domain with KIF13B. Isoform 2 interacts through an L27 domain with HGS/HRS and the first L27 domain of CASK. Interacts with LRFN1.,tissue specificity:Brain.,
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