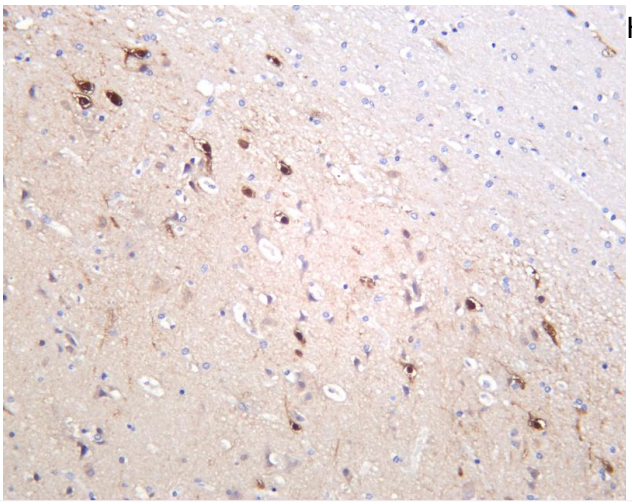
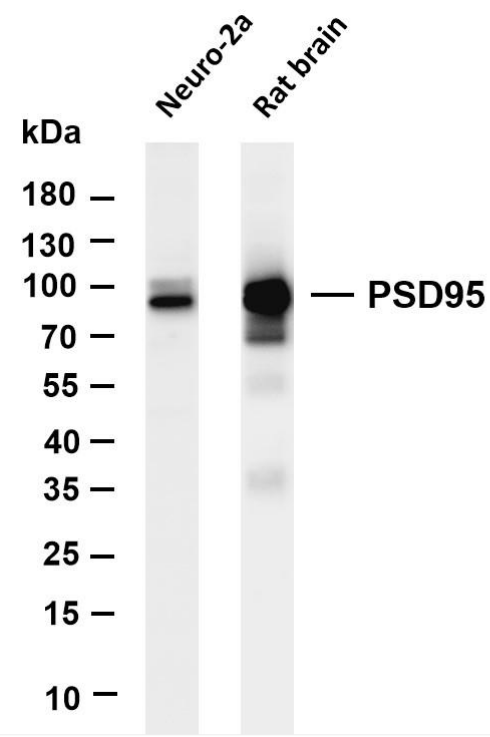
PSD95 Rabbit mAb

Catalog No	YP-rAb-17819
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	DLG4
Protein Name	Disks large homolog 4
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:500-1:2000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	DLG4 ; PSD95 ; Disks large homolog 4 ; Postsynaptic density protein 95 ; PSD-95 ; Synapse-associated protein 90 ; SAP-90 ; SAP90
Observed Band	95kD
Calculated Molecular Weight	81kD
Cell Pathway	Cytoplasm, Membrane
Tissue Specificity	Brain.
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

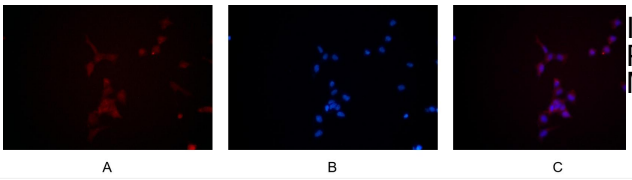
	PDZ (DHR) domains.,subcellular location:High levels in postsynaptic density of neurons in the forebrain. Also in presynaptic region of inhibitory synapses formed by cerebellar basket cells on axon hillocks of Purkinje cells.,subunit:Interacts with ANKS1B and PRR7 (By similarity). Interacts through its 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.,
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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Human brain was stained with anti-PSD95 rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-PSD95 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Neuro-2a Lane 2: Rat brain Predicted band size: 81kDa Observed band size: 95kDa



Immunofluorescence analysis of HEK293. Picture A: PSD95 antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B