

## Basic Information

<b>Product Name</b>	Anti-PSD95/DLG4 Antibody
<b>Gene Name</b>	DLG4
<b>Source</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Species Reactivity</b>	human, mouse, rat
<b>Tested Application</b>	WB, FCM
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.
<b>Immunogen</b>	E.coli-derived human PSD95 recombinant protein (Position: H581-L724). Human PSD95 shares 100% amino acid (aa) sequence identity with both mouse and rat PSD95.
<b>Concentration</b>	500 ug/ml
<b>Purification</b>	Immunogen affinity purified.
<b>Observed MW</b>	95-100 kDa
<b>Dilution Ratios</b>	Western blot (WB): 1:500-2000 Flow Cytometry (Fixed):1:50-200

## Storage

12 months from date of receipt, -20°C as supplied.

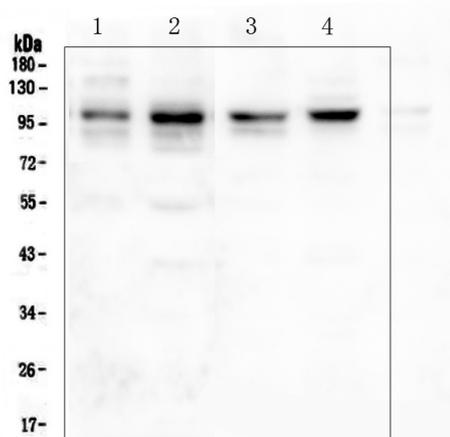
## Background Information

DLG4 discs large homolog 4, also known as PSD95 or SAP-90, is a protein that in humans is encoded by the DLG4 gene. It is a member of the membrane-associated guanylate kinase (MAGUK) family. This gene is mapped to 17p13.1. DLG4 can heteromultimerize 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. Overexpression of DLG4 in hippocampal neurons could drive maturation of glutamatergic synapses. DLG4 can orchestrate synaptic development and it has a role in synapse stabilization and plasticity. Ubiquitination of DLG4 through an MDM2-mediated pathway can regulate AMPA receptor surface expression during synaptic plasticity.

## Reference

Anti-PSD95/DLG4 Antibody被引用在3文献中。

## Selected Validation Data



Western blot analysis of PSD95/DLG4 using anti-PSD95/DLG4 antibody (PB9802). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Rat Brain tissue lysates,

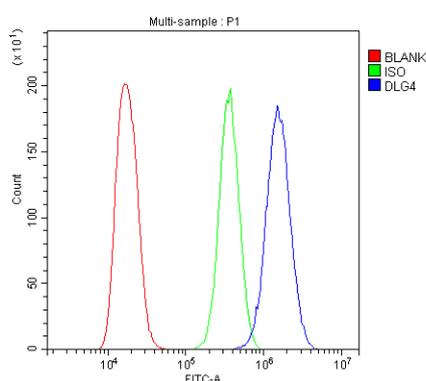
Lane 2: mouse brain tissue lysates,

Lane 3: human SHG-44 whole cell lysates,

Lane 4: human U-87MG whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-PSD95/DLG4 antigen affinity purified polyclonal antibody (PB9802) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for PSD95/DLG4 at approximately 95-100 kDa. The expected band size for PSD95/DLG4 is at 80 kDa.



Flow Cytometry analysis of A431 cells using anti-PSD95/DLG4 antibody (PB9802).

Overlay histogram showing A431 cells stained with PB9802 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PSD95/DLG4 Antibody (PB9802) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.