

Datasheet for ABIN6658152  
**anti-DLG4 antibody**

3 Images



[Go to Product page](#)

## Overview

|              |  |
|--------------|--|
| Quantity:    | 100 µg   |
| Target:      | DLG4   |
| Reactivity:  | Rat  |
| Host:        | Mouse  |
| Clonality:   | Monoclonal   |
| Conjugate:   | This DLG4 antibody is un-conjugated  |
| Application: | Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Immunofluorescence (IF),<br>Fluorescence Microscopy (FM) |

## Product Details

|                             |  |
|-----------------------------|--|
| Purpose:                    | PSD95 Antibody   |
| Immunogen:                  | PSD95 Antibody was produced in mice by repeated immunizations raised against recombinant rat PSD-95.   |
| Clone:                      | 6G6  |
| Isotype:                    | IgG2a  |
| Cross-Reactivity (Details): | A BLAST analysis was used to suggest cross-reactivity with PSD95 from mouse, rat, and bovine based on 100 % homology with the immunizing sequence. |
| Purification:               | Anti-PSD95 Antibody was purified by Protein G chromatography.  |
| Sterility:                  | Sterile filtered   |

## Target Details

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|                   |  |
|-------------------|--|
| Target:           | DLG4   |
| Alternative Name: | PSD95 ( <a href="#">DLG4 Products</a> )  |
| Background:       | <p>Synonyms: DLG4, SAP90, Synapse-associated protein 90, Postsynaptic density protein 95, Disks large homolog 4</p> <p>Background: Postsynaptic Density protein 95 (PSD95), also known as Synapse associated protein 90 kDa, is a member of the membrane-associated guanylate kinase (MAGUK) family of proteins. PSD95 is a scaffolding protein and is involved in the assembly and function of the postsynaptic density complex. These family members consist of an N-terminal variable segment followed by three amino-terminal PDZ domains, an upstream SH3 domain and an inactive carboxyl-terminal guanylate kinase (GK) domain. The first and second PDZ domain localize NMDA receptors and K<sup>+</sup> channels to synapses, and the third binds to neuroligins which are neuronal cell adhesion molecules that interact with b-neurexins and form intercellular junctions. PSD-95 also binds to neuronal nitric oxide synthase, possibly through interactions between PDZ domains present on both proteins. Thus different PDZ domains of PSD-95 might be specialized for distinct functions. PSD95 participates in synaptic targeting of AMPA receptors through an indirect manner involving Stargazin and related transmembrane AMPA receptor regulatory proteins (TARPs). The protein is implicated in experience dependent plasticity and plays an indispensable role in learning. Mutations in PSD95 are associated with autism.</p> <p>Gene Name: Dlg4</p> |
| Gene ID:          | 29495  |
| NCBI Accession:   | <a href="#">NP_031890</a>  |
| UniProt:          | <a href="#">P31016</a>   |
| Pathways:         | <a href="#">Regulation of Muscle Cell Differentiation</a> , <a href="#">Synaptic Membrane</a> , <a href="#">Skeletal Muscle Fiber Development</a> , <a href="#">Asymmetric Protein Localization</a> , <a href="#">Regulation of long-term Neuronal Synaptic Plasticity</a>   |

## Application Details

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|--------------------|--|
| Application Notes: | ELISA_Dilution: 1:250<br>Immunohistochemistry_Dilution: User Optimized<br>IF_Microscopy_Dilution: User Optimized<br>Western_Blot_Dilution: 1:250 |
| Comment:           | Anti-PSD95 Antibody is tested for WB, IHC, and IF microscopy. Expect a band approximately  |

## Application Details

~100kDa protein corresponding to the molecular mass of PSD-95 on SDS PAGE immunoblots. An additional protein of >100kDa is also detected. Additional cross-reactive bands are detected at ~75kDa and 50kDa in rat and mouse samples. Specific conditions for reactivity should be optimized by the end user.

Restrictions: For Research Use only

## Handling

Format: Liquid

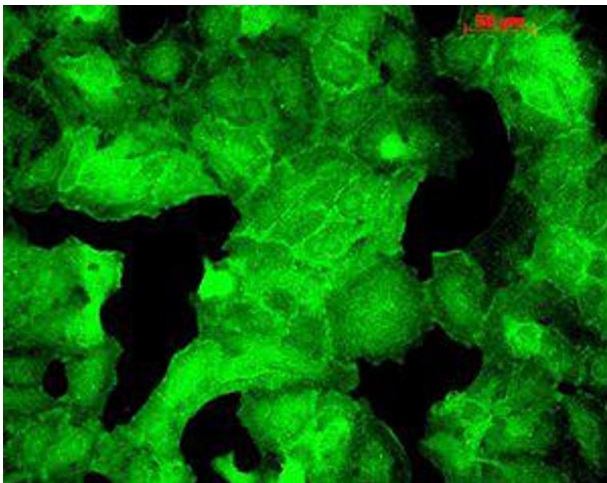
Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2  
Stabilizer: 50 % (v/v) Glycerol

Storage: 4 °C, -20 °C

Storage Comment: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

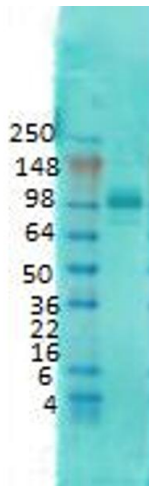
Expiry Date: 12 months

## Images



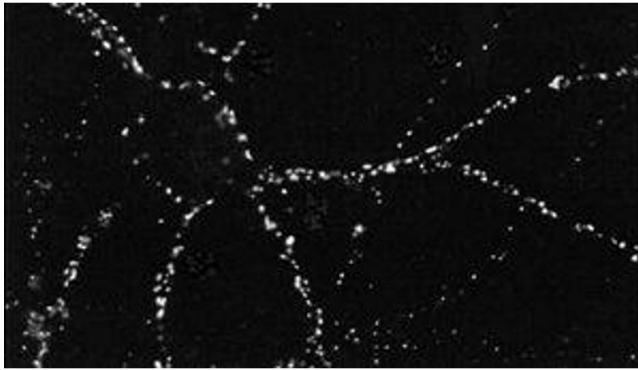
### Immunofluorescence

**Image 1.** PSD95 Immunofluorescence. Immunofluorescence of mouse anti-PSD95 antibody. Tissue: HaCat cells. Antigen retrieval: not required. Primary Antibody: PSD95 at 1ug/ml for 1h at RT. Secondary antibody: Anti-Mouse secondary at 1:10,000 for 45 min at RT. Localization: Cell Membrane and cell Junctions. Staining: PSD95 as green fluorescent signal.



### Western Blotting

**Image 2.** PSD95 Western Blot. Western Blot of mouse anti-PSD95 total antibody. Lane 1: Rat Membrane. Primary antibody: PSD95 total antibody at 1:1000 for overnight at 4°C. Secondary antibody: Goat anti-mouse IgG HRP secondary antibody at 1:10,000 for 45 min at RT. Block: 5% Biotin overnight 4°C. Predicted/Observed size: 80.4 kDa/100kDa. Other band(s): An additional protein of >100kDa is also detected. Additional cross-reactive bands are detected at ~75kDa and 50kDa in rat and mouse samples.



### Immunohistochemistry

**Image 3.** PSD95 Immunohistochemistry. Immunocytochemistry of Mouse anti-PSD95 antibody. Tissue: Cultures of dissociated hippocampal neurons. Fixation: N/A Antigen retrieval: not required. Primary antibody: PSD95 antibody at 10 ug/mL for 1h at RT. Secondary antibody: Fluorescein mouse secondary antibody at 1:10,000 for 45 min at RT. Localization: PSD95 is cell membrane and cell junctions. Staining: PSD95 as precipitated white signal.