

Datasheet for ABIN2484817
anti-DLG4 antibody (HRP)



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3 Images

Overview

| | |
|--------------|---|
| Quantity: | 100 µg |
| Target: | DLG4 |
| Reactivity: | Rat |
| Host: | Mouse |
| Clonality: | Monoclonal |
| Conjugate: | This DLG4 antibody is conjugated to HRP |
| Application: | Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunocytochemistry (ICC), Antibody Array (AA) |

Product Details

| | |
|-------------------|--|
| Immunogen: | Recombinant rat PSD-95 |
| Clone: | 6G6 |
| Isotype: | IgG2a |
| Specificity: | Detects ~100 kDa. An additional protein of >100 kDa is also detected. Additional cross-reactive bands are detected at ~75 kDa and 50 kDa in rat and mouse samples. |
| Cross-Reactivity: | Cow, Human, Mouse, Rat |
| Purification: | Protein G Purified |

Target Details

| | |
|---------|------|
| Target: | DLG4 |
|---------|------|

Target Details

Alternative Name: PSD95 ([DLG4 Products](#))

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 (1). 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⁺ 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 (2). Thus different PDZ domains of PSD-95 might be specialized for distinct functions (3, 4). PSD95 participates in synaptic targeting of AMPA receptors through an indirect manner involving Stargazin and related transmembrane AMPA receptor regulatory proteins (TARPs) (5). The protein is implicated in experience dependent plasticity and plays an indispensable role in learning (6). Mutations in PSD95 are associated with autism (7).

Gene ID: 29495

NCBI Accession: [NP_062567](#)

UniProt: [P31016](#)

Pathways: [Regulation of Muscle Cell Differentiation](#), [Synaptic Membrane](#), [Skeletal Muscle Fiber Development](#), [Asymmetric Protein Localization](#), [Regulation of long-term Neuronal Synaptic Plasticity](#)

Application Details

Application Notes:

- WB (1:250)
- IHC (1:1000)
- ICC/IF (1:100)
- optimal dilutions for assays should be determined by the user.

Comment: 1 µg/ml was sufficient for detection of PSD-95 on 20 µg rat brain tissue extract by ECL immunoblot analysis using Goat Anti-Mouse IgG: HRP as the secondary.

Restrictions: For Research Use only

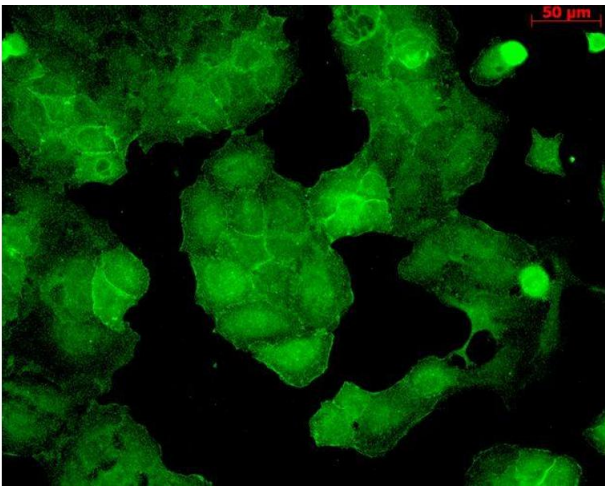
Handling

Format: Liquid

Handling

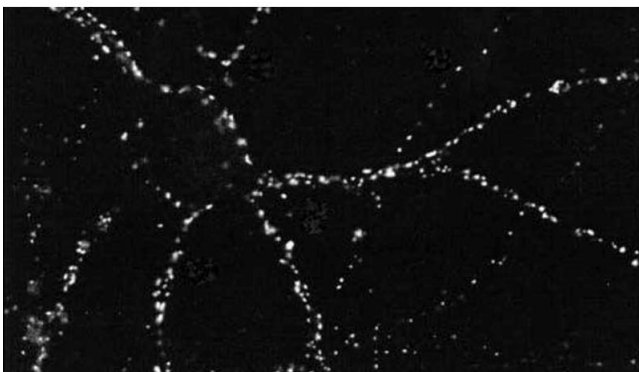
| | |
|--------------------|--|
| Concentration: | 1 mg/mL |
| Buffer: | PBS pH 7.4, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated |
| Preservative: | Sodium azide |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage: | 4 °C |
| Storage Comment: | Conjugated antibodies should be stored at 4°C |

Images



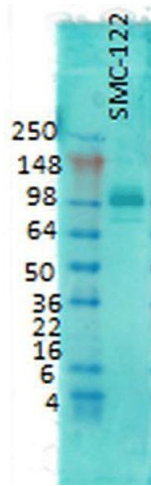
Immunofluorescence (fixed cells)

Image 1. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-PSD95 Monoclonal Antibody, Clone 6G6 . Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol for 10 minutes at -20°C. Primary Antibody: Mouse Anti-PSD95 Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Junction staining.



Immunofluorescence (fixed cells)

Image 2. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-PSD95 Monoclonal Antibody, Clone 6G6 . Tissue: dissociated hippocampal neurons. Species: Rat. Fixation: Cold 4% paraformaldehyde/0.2% glutaraldehyde in 0.1M sodium phosphate buffer. Primary Antibody: Mouse Anti-PSD95 Monoclonal Antibody at 1:1000 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Mouse IgG (green) at 1:50 for 30 minutes at RT. Magnification: 10X. Courtesy of: Mary Kennedy, Caltech.



Western Blotting

Image 3. Western Blot analysis of Rat brain membrane lysate showing detection of PSD95 protein using Mouse Anti-PSD95 Monoclonal Antibody, Clone 6G6 . Primary Antibody: Mouse Anti-PSD95 Monoclonal Antibody at 1:1000.