Datasheet for ABIN6658116

anti-DLG1 antibody (N-Term)

2 Images

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Overview

Quantity:	100 µg
Target:	DLG1
Binding Specificity:	N-Term
Reactivity:	Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This DLG1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunoprecipitation (IP)

Product Details

Purpose:	SAP97 Antibody
Immunogen:	SAP97 Antibody was produced in mice by repeated immunizations raised against a fusion protein corresponding to an n-terminal region of rat SAP97.
Clone:	S64-15
Isotype:	IgG1
Cross-Reactivity (Details):	A BLAST analysis was used to suggest cross-reactivity with SAP97 from Mouse, Human, and Rat based on 100 % homology with the immunizing sequence.
Purification:	Anti-SAP97 Antibody was purified by Protein G chromatography.
Sterility:	Sterile filtered

Target Details

Target:	DLG1
Alternative Name:	SAP97 (DLG1 Products)
Background:	Synonyms: Dlgh1, SAP97, Dlg1, Synapse-associated protein 97, Disks large homolog 1 Background: Synapse-Associated Protein 97 (SAP97/human homologue of Drosophila discs-large tumor supressor or HDLG) is one of a family of plasma membrane-associated proteins found in synaptic junctions. This is a novel, presynaptic membrane protein homologous to SAP90 and the Drosophila discs-large tumor supressor protein. SAP97 has three ~90 amino acid repeats called PDZ domains, a single interior SH3 domain, and a carboxyl-terminal guanylate kinase homology (GuK) domain that is enzymatically inactive. It is hypothesized that PDZ-domain interactions play a role in receptor and channel clustering which contributes to neuronal plasticity. SAP97 is believed to participate in the clustering of certain proteins, including N-methyl-D-aspartate (NMDA) receptors and Shaker-type potassium channels at the synaptic membrane. There are two principal modes of interaction between SAP97 and other proteins. NMDA receptors and Shaker-type potassium channels both share C-terminal sequence homology consisting of a threonine/serine-X-valine-COOH (T/SXV) motif (2). Other neuronal proteins that share this motif (beta 1 adrenergic receptor, some serotonin receptors, some sodium channel subunits, and additional potassium channel subunits) may interact with SAP97 by binding to its PDZ domains. Neuronal nitric oxide synthase (nNOS), which lacks the T/SXV motif but which has its own PDZ domain, has been shown to associate with SAP97 in vitro through a pseudo-homotypic PDZ-PDZ interaction. Gene Name: Dlg1
Gene ID:	25252
NCBI Accession:	NP_036920
UniProt:	Q62696
Pathways:	Regulation of Actin Filament Polymerization, Cell-Cell Junction Organization, Production of Molecular Mediator of Immune Response

Application Details

Application Notes:	Immunoprecipitation_Dilution: User Optimized Immunohistochemistry_Dilution: User Optimized Western_Blot_Dilution: 1:1000
Comment:	Anti-SAP97 Antibody is tested for use in WB, IHC and IP. Expect a band approximately ~130kDa on specific lysates. Specific conditions for reactivity should be optimized by the end user.

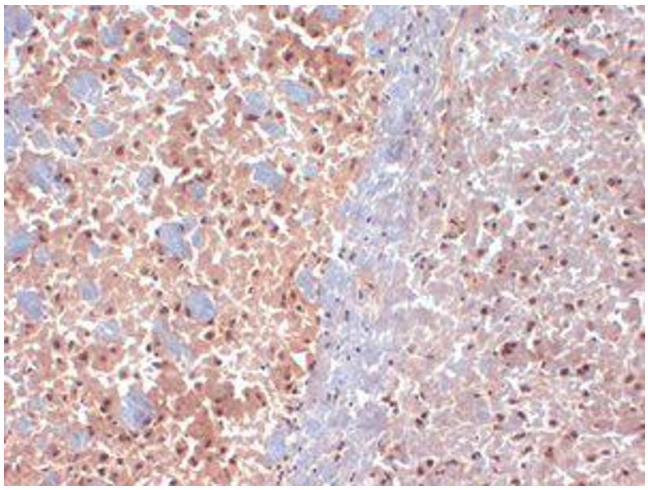
Application Details

Restrictions:	For Research Use only

Handling

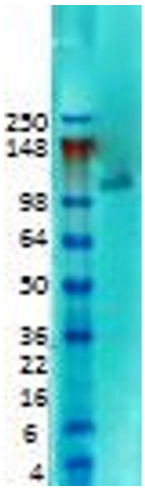
Format:	Liquid
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: 50 % (v/v) Glycerol
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. 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



Immunohistochemistry

Image 1. SAP97 Immunohistochemistry. Immunohistochemistry of mouse anti-sap97 antibody. Tissue: Frozen sections of mouse brain extract. Primary Antibody: SAP97 antibody at 1 µg/mL for 1h at RT. Secondary antibody: Peroxidase mouse secondary at 1:10,000 for 45 min at RT. Localization: Membrane. Staining: SAP97 as brown signal.



Western Blotting

Image 2. SAP97 Western Blot. Western Blot of mouse anti-SAP97 antibody. Lane 1: Rat Brain Membrane. Primary antibody: SAP97 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% Blotto overnight 4°C. Predicted/Observed size:100.5 kDa/130kD. Other band(s): none.