

### **DLG1** Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21841c

### **Specification**

## **DLG1 Antibody (Center) - Product Information**

Application WB,E
Primary Accession Q12959
Reactivity Human
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 100455

## **DLG1** Antibody (Center) - Additional Information

### **Gene ID 1739**

#### **Other Names**

Disks large homolog 1, Synapse-associated protein 97, SAP-97, SAP97, hDlg, DLG1

### Target/Specificity

This DLG1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 643-673 amino acids from the Central region of human DLG1.

### **Dilution**

WB~~1:2000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

## **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

DLG1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### **DLG1 Antibody (Center) - Protein Information**

### Name DLG1 (HGNC:2900)

**Function** Essential multidomain scaffolding protein required for normal development (By similarity). Recruits channels, receptors and signaling molecules to discrete plasma membrane domains in polarized cells. Promotes epithelial cell layer barrier function via maintaining cell-cell



adhesion (By similarity). May also play a role in adherens junction assembly, signal transduction, cell proliferation, synaptogenesis and lymphocyte activation. Regulates the excitability of cardiac myocytes by modulating the functional expression of Kv4 channels. Functional regulator of Kv1.5 channel. During long-term depression in hippocampal neurons, it recruits ADAM10 to the plasma membrane (PubMed:23676497).

#### **Cellular Location**

Cell membrane; Peripheral membrane protein. Basolateral cell membrane. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q62696}. Postsynaptic density {ECO:0000250|UniProtKB:Q62696}. Synapse {ECO:0000250|UniProtKB:Q62696} Cell membrane, sarcolemma. Apical cell membrane. Cell junction. Cytoplasm Note=Colocalizes with EPB41 at regions of intercellular contacts Basolateral in epithelial cells (PubMed:12807908). May also associate with endoplasmic reticulum membranes. Mainly found in neurons soma, moderately found at postsynaptic densities (By similarity) {ECO:0000250|UniProtKB:Q62696, ECO:0000269|PubMed:10859302, ECO:0000269|PubMed:12807908, ECO:0000269|PubMed:8922391, ECO:0000269|PubMed:9192623}

#### **Tissue Location**

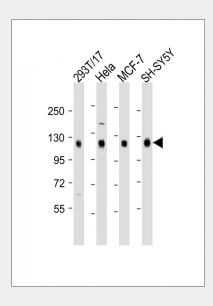
Abundantly expressed in atrial myocardium (at protein level). Expressed in lung fibroblasts, cervical epithelial and B-cells (at protein level). Expressed in the brain (at protein level) (PubMed:23676497). Widely expressed, with isoforms displaying different expression profiles.

## **DLG1 Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### **DLG1** Antibody (Center) - Images





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All lanes: Anti-DLG1 Antibody (Center) at 1:2000 dilution Lane 1: 293T/17 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: MCF-7 whole cell lysate Lane 4: SH-SY5Y whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 100 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

## DLG1 Antibody (Center) - Background

Essential multidomain scaffolding protein required for normal development (By similarity). Recruits channels, receptors and signaling molecules to discrete plasma membrane domains in polarized cells. May play a role in adherens junction assembly, signal transduction, cell proliferation, synaptogenesis and lymphocyte activation. Regulates the excitability of cardiac myocytes by modulating the functional expression of Kv4 channels. Functional regulator of Kv1.5 channel.

# **DLG1** Antibody (Center) - References

Lue R.A., et al. Proc. Natl. Acad. Sci. U.S.A. 91:9818-9822(1994). Ota T., et al. Nat. Genet. 36:40-45(2004). Bechtel S., et al.BMC Genomics 8:399-399(2007). Muzny D.M., et al. Nature 440:1194-1198(2006). Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.