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Anti-SAP97 Picoband Antibody

Catalog # ABO12239

Specification

Anti-SAP97 Picoband Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	Q12959
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Disks large homolog 1(DLG1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-SAP97 Picoband Antibody - Additional Information

Gene ID 1739

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

Calculated MW
100455 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization
Membrane ; Peripheral membrane protein . Basolateral cell membrane . Endoplasmic reticulum membrane . Cell junction, synapse, postsynaptic cell membrane, postsynaptic density . Cell junction, synapse. Cell membrane, sarcolemma. Colocalizes with EPB41 at regions of intercellular contacts. Basolateral in epithelial cells. May also associate with endoplasmic reticulum membranes. Mainly found in neurons soma, moderately found at postsynaptic densities (By similarity). .

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

Protein Name
Disks large homolog 1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E.coli-derived human SAP97 recombinant protein (Position: M1-A165). Human SAP97 shares 89.7% and 84.2% amino acid (aa) sequence identity with mouse and rat SAP97, respectively.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage

At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities
Belongs to the MAGUK family.

Anti-SAP97 Picoband Antibody - 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.

Anti-SAP97 Picoband Antibody - Protocols

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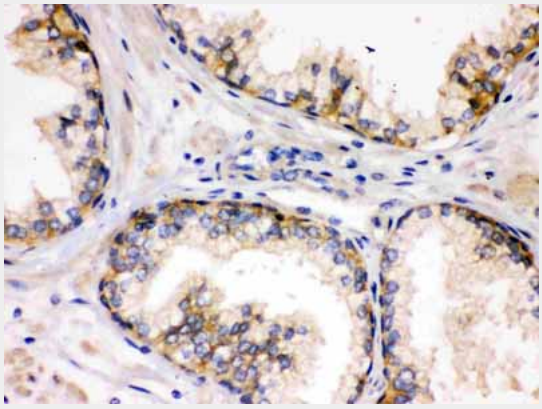
Provided below are standard protocols that you may find useful for product applications.

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

Anti-SAP97 Picoband Antibody - Images

Anti- SAP97 Picoband antibody, ABO12239, Western blottingAll lanes: Anti SAP97 (ABO12239) at 0.5ug/mlLane 1: Rat Lung Tissue Lysate at 50ugLane 2: Mouse Lung Tissue Lysate at 50ugLane 3: HELA Whole Cell Lysate at 40ugLane 4: MM231 Whole Cell Lysate at 40ugLane 5: COLO320 Whole Cell Lysate at 40ugLane 6: A549 Whole Cell Lysate at 40ugLane 7: NIH3T3 Whole Cell Lysate at 40ugPredicted bind size: 130KDObserved bind size: 130KD



Anti- SAP97 Picoband antibody, ABO12239, IHC(P)IHC(P): Human Prostatic Cancer Tissue

Anti-SAP97 Picoband Antibody - Background

Disks large homolog 1 (DLG1), also known as synapse-associated protein 97 or SAP97, is a protein that in humans is encoded by the SAP97 gene. SAP97 is expressed throughout the body in epithelial cells, including the kidney and brain. There is some evidence that SAP97 regulates cell-to-cell

adhesion during cell death, and may interact with HPV. In the brain, SAP97's function is involved in the trafficking of transmembrane receptors from the ER to the plasma membrane. SAP97's function has been investigated by reducing its expression by knockout or increasing its expression heterologously. Mice in which the SAP97 gene has been knocked out die perinatally, have a cleft palate, and deficiencies in renal function. Overexpression of SAP97 in mammalian neurons leads to increased synaptic strength.