

Anti-SAP97 Picoband Antibody

Catalog # ABO12239

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.

Additional Information

Gene ID	1739
Other Names	Disks large homolog 1, Synapse-associated protein 97, SAP-97, SAP97, hDlg, DLG1
Calculated MW	100455
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, By Heat Western blot, 0.1-0.5 μ g/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. .
Source	Eukaryota
Protein Name	Disks large homolog 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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.

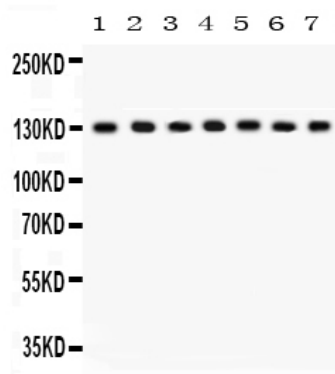
Protein Information

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.

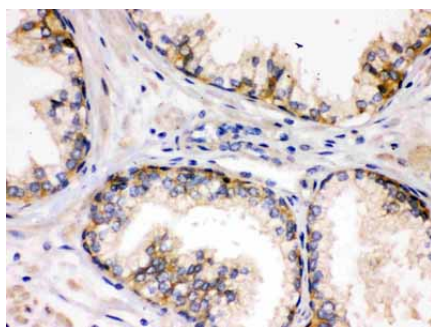
Background

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.

Images



Anti- SAP97 Picoband antibody, ABO12239, Western blotting
 All lanes: Anti SAP97 (ABO12239) at 0.5ug/ml
 Lane 1: Rat Lung Tissue Lysate at 50ug
 Lane 2: Mouse Lung Tissue Lysate at 50ug
 Lane 3: HELA Whole Cell Lysate at 40ug
 Lane 4: MM231 Whole Cell Lysate at 40ug
 Lane 5: COLO320 Whole Cell Lysate at 40ug
 Lane 6: A549 Whole Cell Lysate at 40ug
 Lane 7: NIH3T3 Whole Cell Lysate at 40ug
 Predicted bind size: 130KD
 Observed bind size: 130KD



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.