

# Anti-SAP97/DLG1 Antibody Picoband™

Catalog Number: PB9552

#### **About DLG1**

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.

### Overview

Product Name	Anti-SAP97/DLG1 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-SAP97/DLG1 Antibody Picoband™ catalog # PB9552. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q12959

### **Technical Details**

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.
Predicted Reactive Species	Bovine, Canine, Horse, Monkey, Rabbit
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized





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Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.  If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.  Some PubMed article(s) citing the expression level of this target are as follows:  Boster Bio's internal QC testing used:  Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, By Heat  Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat



## Anti-SAP97/DLG1 Antibody Picoband™ (PB9552) Images

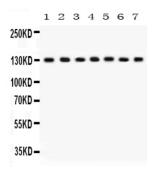


Figure 1. Western blot analysis of SAP97 using anti-SAP97 antibody (PB9552).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours.

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.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SAP97 antigen affinity purified polyclonal antibody (Catalog # PB9552) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for SAP97 at approximately 130 kDa. The expected band size for SAP97 is at 130 kDa.

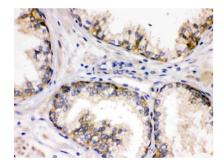


Figure 2. IHC analysis of SAP97 using anti-SAP97 antibody (PB9552).

SAP97 was detected in a paraffin-embedded section of human prostatic cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-SAP97 Antibody (PB9552) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

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