

SAP 97 (H-60): sc-25661

BACKGROUND

The discs large (dlg) tumor suppressor gene was first identified in *Drosophila* through genetic analysis of germline mutations. Several mammalian homologs were subsequently identified and categorized into a protein family designated MAGUK (membrane-associated guanylate kinase homolog). The mammalian homolog of dlg, SAP 97, is also known as hdlg-1 (human) and NE-dlg (neuronal and endocrine). The rat synaptic protein SAP 90 (also designated PSD-95) also shares homology with these proteins. MAGUKs are localized at the membrane-cytoskeleton interface and contain several distinct domains which suggest a role for these proteins in intracellular signal transduction. Interaction of hdlg-1 and NE-dlg with the tumor suppressor protein APC suggest that MAGUK proteins may also play a role in regulation of growth.

REFERENCES

1. Gateff, E., et al. 1989. Tumor-suppressor genes of *Drosophila melanogaster*. Crit. Rev. Oncog. 1: 221-245.
2. Cho, K.O., et al. 1992. The rat brain postsynaptic density fraction contains a homolog of the *Drosophila* discs-large tumor suppressor protein. Neuron 9: 929-942.

CHROMOSOMAL LOCATION

Genetic locus: DLG1 (human) mapping to 3q29; Dlg1 (mouse) mapping to 16 B2.

SOURCE

SAP 97 (H-60) is a rabbit polyclonal antibody raised against amino acids 49-108 of SAP 97 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

SAP 97 (H-60) is recommended for detection of SAP 97 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SAP 97 (H-60) is also recommended for detection of SAP 97 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SAP 97 siRNA (h): sc-36452, SAP 97 siRNA (m): sc-36453, SAP 97 shRNA Plasmid (h): sc-36452-SH, SAP 97 shRNA Plasmid (m): sc-36453-SH, SAP 97 shRNA (h) Lentiviral Particles: sc-36452-V and SAP 97 shRNA (m) Lentiviral Particles: sc-36453-V.

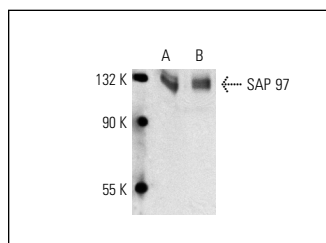
Molecular Weight of SAP 97: 130-135 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, SKBR-3 whole cell lysate or SK-N-SH cell lysate: sc-2410.

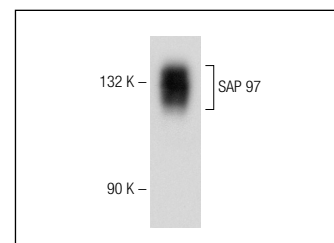
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



SAP 97 (H-60): sc-25661. Western blot analysis of SAP 97 expression in MCF7 (A) and SK-N-SH (B) whole cell lysates.



SAP 97 (H-60): sc-25661. Western blot analysis of SAP 97 expression in SKBR-3 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Anderson, C.N., et al. 2006. High throughput protein expression screening in the nervous system—needs and limitations. J. Physiol. 575: 367-372.
2. Zanin-Zhorov, A., et al. 2012. Scaffold protein Disc large homolog 1 is required for T-cell receptor-induced activation of regulatory T-cell function. Proc. Natl. Acad. Sci. USA 109: 1625-1630.
3. Kuras, Z., et al. 2012. Modulation of Kv1.3 channels by protein kinase A I in T lymphocytes is mediated by the disc large 1-tyrosine kinase Lck complex. Am. J. Physiol., Cell Physiol. 302: C1504-C1512.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.



Try **SAP 97 (2D11): sc-9961** or **SAP 97 (D-9): sc-514478**, our highly recommended monoclonal alternatives to SAP 97 (H-60). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **SAP 97 (2D11): sc-9961**.