

DLG5 (H-300): sc-135187

BACKGROUND

Membrane-associated guanylate kinase (MAGUK) family members function as molecular scaffolds for the assembly of multi-protein complexes localizing to the plasma membrane. Several mammalian proteins related to the *Drosophila* tumor suppressor discs-large (dlg) gene product belong to the MAGUK family. MAGUK family members include the postsynaptic proteins PSD-93, DLG5, Pals1, PSD-95 (SAP 90), densin-180, NE-dlg (SAP 120), dlg-1 (SAP 97), GKAP (GK-associated protein), p55, the tight junction associated proteins ZO-1-3, and the caspase-associated recruitment domain (CARD) proteins CARD 6, CARD 8-12 and CARD 14. DLG5, a cell-cell junction peripheral membrane protein, plays an important role in maintaining the structure of epithelial cell plasma membranes. It also plays an important part in transmitting extracellular signals to the cytoskeleton and the membrane. DLG5, which can interact with MPP1 and CTNBNB1, is primarily expressed in prostate and placenta.

REFERENCES

1. Nakamura, H., et al. 1998. Identification of a novel human homolog of the *Drosophila* dlg, P-dlg, specifically expressed in the gland tissues and interacting with p55. FEBS Lett. 433: 63-67.
2. Shah, G., et al. 2002. The cloning, genomic organization and tissue expression profile of the human DLG5 gene. BMC Genomics 3: 6.
3. Wakabayashi, M., et al. 2003. Interaction of LP-dlg/KIAA0583, a membrane-associated guanylate kinase family protein, with Vinexin and β -catenin at sites of cell-cell contact. J. Biol. Chem. 278: 21709-21714.
4. Stoll, M., et al. 2004. Genetic variation in DLG5 is associated with inflammatory bowel disease. Nat. Genet. 36: 476-480.
5. Yamazaki, K., et al. 2004. Association analysis of SLC22A4, SLC22A5 and DLG5 in Japanese patients with Crohn disease. J. Hum. Genet. 49: 664-668.

CHROMOSOMAL LOCATION

Genetic locus: DLG5 (human) mapping to 10q22.3; Dlg5 (mouse) mapping to 14 A3.

SOURCE

DLG5 (H-300) is a rabbit polyclonal antibody raised against amino acids 355-654 mapping within an internal region of DLG5 of human origin.

PRODUCT

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

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

DLG5 (H-300) is recommended for detection of DLG5 isoforms 1,2 and 4 and, to a lesser extent, isoform 3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

DLG5 (H-300) is also recommended for detection of DLG5 isoforms 1, 2 and 4 and, to a lesser extent, isoform 3 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for DLG5 siRNA (h): sc-60541, DLG5 siRNA (m): sc-60542, DLG5 shRNA Plasmid (h): sc-60541-SH, DLG5 shRNA Plasmid (m): sc-60542-SH, DLG5 shRNA (h) Lentiviral Particles: sc-60541-V and DLG5 shRNA (m) Lentiviral Particles: sc-60542-V.

Molecular Weight of DLG5: 200 kDa.

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.

RESEARCH USE

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



Try **DLG5 (E-11): sc-374493** or **DLG5 (A-11): sc-374594**, our highly recommended monoclonal alternatives to DLG5 (H-300).