

dlg (dC-16): sc-15795

BACKGROUND

Drosophila melanogaster is a proven and effective model for studying developmental and cellular processes common to higher eukaryotes. Approximately 13,600 genes have been elucidated from more than 120 megabases of euchromatin, and they are organized among the chromosomes 2, 3, 4, X and Y, with the Y chromosome being predominately heterochromatic. *Drosophila* genes can be categorized based on the type of protein for which they encode and are represented by six major classifications, which include intracellular signaling proteins, transmembrane proteins, RNA binding proteins, secreted factors, transcription regulators (basic helix-loop-helix, homeodomain containing, zinc finger containing, and chromatin associated) or other functional proteins. Among these proteins, discs large-1 (dlg) is a membrane-associated guanylate kinase homolog (MAGUK) that is required for cell polarity and proliferation control in *Drosophila* epithelia, and influences the formation of septate junctions in epithelial cells and synaptic junctions in neurons.

REFERENCES

1. Woods, D.F. and Bryant, P.J. 1991. The discs-large tumor suppressor gene of *Drosophila* encodes a guanylate kinase homolog localized at septate junctions. *Cell* 66: 451-464.
2. Woods, D.F., Hough, C., Peel, D., Callaini, G. and Bryant, P.J. 1996. Dlg protein is required for junction structure, cell polarity, and proliferation control in *Drosophila* epithelia. *J. Cell Biol.* 134: 1469-1482.
3. Hough, C.D., Woods, D.F., Park, S. and Bryant, P.J. 1997. Organizing a functional junctional complex requires specific domains of the *Drosophila* MAGUK Discs large. *Genes Dev.* 11: 3242-3253.
4. Adams, M.D., Celniker, S.E., Holt, R.A., Evans, C.A., Gocayne, J.D., Amanatides, P., et al. 2000. The genome sequence of *Drosophila melanogaster*. *Science* 287: 2185-2195.
5. The Interactive Fly. <http://www.sdbonline.org/fly/aimain/1aahome.htm>.
<http://www.sdbonline.org/fly/newgene/disclrg1.htm>
6. LocusLink Report (LocusID: 32083). <http://www.ncbi.nlm.nih.gov/LocusLink/>

SOURCE

dlg (dC-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of dlg of *Drosophila melanogaster* origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-15795 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

PROTOCOLS

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

APPLICATIONS

dlg (dC-16) is recommended for detection of dlg of *Drosophila melanogaster* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.