SANTA CRUZ BIOTECHNOLOGY, INC.

fringe (dV-19): sc-15782

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 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 numerous proteins, fringe (D-Fng, flag) is a secreted signaling protein that is expressed in dorsal cells and is necessary during oogenesis for the formation of the egg chamber and for epithelial morphogenesis.

REFERENCES

1. Irvine, K.D. and Wieschaus, E. 1994. Fringe, a boundary specific signaling molecule, mediates interactions between dorsal and ventral cells during *Drosophila* wing development. Cell 79: 595-606.
2. 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.
3. Correia, T., Papayannopoulos, V., Panin, V., Woronoff, P., Jiang, J., Vogt, T.F., and Irvine, K.D. 2003. Molecular genetic analysis of the glycosyltransferase fringe in *Drosophila*. Proc. Natl. Acad. Sci. USA 100: 6404-6419.
4. Althauser, C., Jordan, K.C., Deng, W.M., and Ruohola-Baker, H. 2005. Fringe-dependent notch activation and tramtrack function are required for specification of the polar cells in *Drosophila* oogenesis. Dev. Dyn. 232: 1013-1020.
5. LocusLink Report. (LocusID: 40314). http://www.ncbi.nlm.nih.gov/LocusLink/
6. The Interactive Fly. http://sdb.bio.purdue.edu/fly/aimain/1aahome.htm. http://sdb.bio.purdue.edu/fly/newgene/fringe.htm

SOURCE

fringe (dV-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of fringe 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-15782 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

fringe (dV-19) is recommended for detection of fringe 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.

RESEARCH USE

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

PROTOCOLS

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