SANTA CRUZ BIOTECHNOLOGY, INC.

sevenless (dR-15): sc-15742

BACKGROUND

Drosophila melanogaster is a proven and effective model for studying develop-mental 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. They 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, sevenless (Sev) is a plasma membrane associated receptor tyrosine kinase that mediates proper differentiation of photoreceptor cells during development of the *Drosophila* compound eye.

REFERENCES

1. Bonini, N.M., et al. 1993. The eyes absent gene: genetic control of cell survival and differentiation in the developing *Drosophila* eye. Cell 72: 379-395.
2. Boyle, M., et al. 1997. Expression and function of clift in the development of somatic gonadal precursors within the *Drosophila* mesoderm. Development 124: 971-982.
3. Zimmerman, J.E., et al. 2000. Molecular genetic analysis of *Drosophila* eyes absent mutants reveals an eye enhancer element. Genetics 154: 237-246.
4. Adams, M.D., et al. 2000. The genome sequence of *Drosophila melanogaster*. Science 287: 2185-2195.
5. LocusLink Report. http://www.ncbi.nlm.nih.gov/LocusLink/ (LocusID:32039)
6. The Interactive Fly. http://sdb.bio.purdue.edu/fly/aimain/1aahome.htm. http://sdb.bio.purdue.edu/fly/newgene/sevnles1.htm

SOURCE

sevenless (dR-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of sevenless 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-15742 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.

RESEARCH USE

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

APPLICATIONS

sevenless (dR-15) is recommended for detection of sevenless 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.

PROTOCOLS

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