SANTA CRUZ BIOTECHNOLOGY, INC.

oskar (dC-12): sc-26874

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. Oskar is a maternal determinant that localizes to the posterior pole of the oocyte where it provides positional information for pole plasm formation and development of the abdomen and germ line.

REFERENCES

1. Breitwieser, W., Markussen, F.H., Horstmann, H. and Ephrussi, A. 1996. Oskar protein interaction with Vasa represents an essential step in polar granule assembly. Genes Dev. 10: 2179-2188.
2. Ephrussi, A. and Lehmann, R. 1992. Induction of germ cell formation by oskar. Nature 358: 387-392.
3. Adams, M.D., Celniker, S.E., Holt, R.A., Evans, C.A., Gocayne, J.D., Amanatides, P.G., Scherer, S.E., Li, P.W., Hoskins, R.A., Galle, R.F., George, R.A., Lewis, S.E., Richards, S., Ashburner, M., Henderson, S.N., et al. 2000. The genome sequence of *Drosophila melanogaster*. Science 287: 2185-2195.
4. Vanzo, N.F. and Ephrussi, A. 2002. Oskar anchoring restricts pole plasm formation to the posterior of the *Drosophila* oocyte. Development 129: 3705-3714.
5. Society for Developmental Biology. 2003. The Interactive Fly. http://sdb.bio.purdue.edu/fly/aimain/1aahome.htm
6. LocusLink Report (LocusID: 41066). http://www.ncbi.nlm.nih.gov/LocusLink/

SOURCE

oskar (dC-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of oskar 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-26874 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

oskar (dC-12) is recommended for detection of oskar 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.