SANTA CRUZ BIOTECHNOLOGY, INC.

staufen (dN-16): sc-15823

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, staufen (Stau, dStau) is an RNA-binding protein that mediates mRNA transport during *Drosophila* oogenesis and zygotic development.

REFERENCES

1. St. Johnston, D., et al. 1991. Staufen, a gene required to localize maternal RNAs in the *Drosophila* egg. Cell 66: 51-63.
2. Li, P., et al. 1997. Inscuteable and staufen mediate asymmetric localization and segregation of prospero RNA during *Drosophila* neuroblast cell divisions. Cell 90: 437-447.
3. Matsuzaki, F., et al. 1998. Miranda localizes staufen and prospero asymmetrically in mitotic neuroblasts and epithelial cells in early *Drosophila* embryogenesis. Development 125: 4089-4098.
4. Adams, M.D., 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/segment/staufen1.htm
6. LocusLink Report (LocusID: 37065). http://www.ncbi.nlm.nih.gov/LocusLink/

SOURCE

staufen (dN-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of staufen 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-15823 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.

PROTOCOLS

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

APPLICATIONS

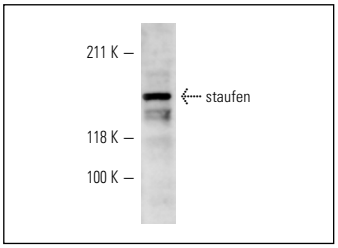
staufen (dN-16) is recommended for detection of staufen of *Drosophila melanogaster* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Positive Controls: Schneider' *Drosophila* Line 2 whole cell lysate: sc-364794.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



staufen (dN-16): sc-15823. Western blot analysis of staufen expression in Schneider's *Drosophila* line 2 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Johnson, E.M., et al. 2006. Role of Pur α in targeting mRNA to sites of translation in hippocampal neuronal dendrites. J. Neurosci. Res. 83: 929-943.
2. Baffet, A.D., et al. 2012. *Drosophila* tubulin-binding cofactor B is required for microtubule network formation and for cell polarity. Mol. Biol. Cell 23: 3591-3601.

RESEARCH USE

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