

Vasa (dN-13): sc-26875

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. Vasa is a DEAD-box protein that localizes to the perinuclear region of nurse cells during early oogenesis and later to the pole plasm at the posterior end of the oocyte. Vasa influences normal oocyte differentiation, anterior-posterior egg chamber patterning, dorsal-ventral follicle patterning, posterior embryonic patterning and pole cell specification.

REFERENCES

- Liang, L., Diehl-Jones, W. and Lasko, P. 1994. Localization of Vasa protein to the *Drosophila* pole plasm is independent of its RNA-binding and helicase activities. *Development* 120: 1201-1211.
- Styhler, S., Nakamura, A., Swan, A., Suter, B. and Lasko, P. 1998. Vasa is required for GURKEN accumulation in the oocyte, and is involved in oocyte differentiation and germline cyst development. *Development* 125: 1569-1578.
- 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: 2185-295.
- The Interactive Fly. <http://www.sdbonline.org/fly/aimain/1aahome.htm>.
<http://www.sdbonline.org/fly/aimain/6biochem.htm>.
- LocusLink Report (LocusID: 34884). <http://www.ncbi.nlm.nih.gov/LocusLink/>

SOURCE

Vasa (dN-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Vasa 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-26875 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

Vasa (dN-13) is recommended for detection of Vasa 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).

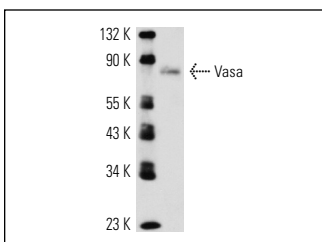
Molecular Weight of Vasa: 83 kDa.

Positive Controls: Schneider's *Drosophila* whole cell lysate.

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



Vasa (dN-13): sc-26875. Western blot analysis of Vasa expression in Schneider's *Drosophila* whole cell lysate.

RESEARCH USE

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



Try **Vasa (C-2): sc-514249**, our highly recommended monoclonal alternative to Vasa (dN-13). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Vasa (C-2): sc-514249**.