SANTA CRUZ BIOTECHNOLOGY, INC.

AbdA (dE-17): sc-27062

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 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. Morphogenesis and cell differentiation in *Drosophila* requires accurate control of cell division. The Hox/homeotic genes encode transcription factors that generate segmental diversity during *Drosophila* development. In *Drosophila*, the Ultrabithorax (Ubx) and abdominal A (AbdA, also abd-A) Hox proteins are expressed largely in the abdominal segments, where they suppress thoracic leg development during embryogenesis.

REFERENCES

1. Lehner, C.F. 1991. Pulling the string: cell cycle regulation during *Drosophila* development. Semin. Cell Biol. 2: 223-231.
2. Adams, M.D., et al. 2000. The genome sequence of *Drosophila melanogaster*. Science 287: 2185-2195.
3. Mata, J., et al. 2000. Tribbles coordinates mitosis and morphogenesis in *Drosophila* by regulating string/CDC25 proteolysis. Cell 101: 511-522.
4. Brodu, V., et al. 2002. abdominal A specifies one cell type in *Drosophila* by regulating one principal target gene. Development 129: 2957-2963.
5. Ronshaugen, M., et al. 2002. Hox protein mutation and macroevolution of the insect body plan. Nature 415: 914-917.
6. Society for Developmental Biology. 2003. The Interactive Fly. http://sdb.bio.purdue.edu/fly/aimain/1aahome.htm

SOURCE

AbdA (dE-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of AbdA of *Drosophila melano-gaster* 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-27062 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

AbdA (dE-17) is recommended for detection of AbdA 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.