SANTA CRUZ BIOTECHNOLOGY, INC.

Myb (dC-13): sc-26997

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. *Drosophila* possesses a single protein, Myb, that is the homologue of the vertebrate Myb oncoprotein family of transcription factors, which regulate cell proliferation, differentiation and apoptosis. *Drosophila* Myb promotes both S-phase and M-phase in all proliferating cells, and suppresses endoreduplication in endocycling cells.

REFERENCES

1. 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: 2185-2195.
2. Jackson, J., Ramsay, G., Sharkov, N.V., Lium, E., and Katzen, A.L. 2001. The role of transcriptional activation in the function of the *Drosophila* Myb gene. Blood Cells. Mol. Dis. 27: 446-455.
3. Sharkov, N.V., Ramsay, G., and Katzen, A.L. 2002. The DNA replication-related element-binding factor (DREF) is a transcriptional regulator of the *Drosophila* Myb gene. Gene 297: 209-219.
4. Fitzpatrick, C.A., Sharkov, N.V., Ramsay, G., and Katzen, A.L. 2002. *Drosophila* Myb exerts opposing effects on S-phase, promoting proliferation and suppressing endoreduplication. Development 129: 4497-4507.
5. Fung, S.M., Ramsay, G., and Katzen, A.L. 2002. Mutations in *Drosophila* Myb lead to centrosome amplification and genomic instability. Development 129: 347-359.
6. The Interactive Fly. http://www.sdbonline.org/fly/aimain/1aahome.htm. http://www.sdbonline.org/fly/aimain/6biochem.htm

SOURCE

Myb (dC-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Myb 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-26997 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

Myb (dC-13) is recommended for detection of Myb 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.