SANTA CRUZ BIOTECHNOLOGY, INC.

Myc1 (dN-20): sc-15832

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. Many of the proteins in *Drosophila* are structurally and functionally similar across species, as are the pathways involved in transducing intracellular signaling. Among these proteins, Myc (d-Myc, dMyc1) is a transcription factor that links patterning signals to cell division by regulating events coordinating cellular growth and metabolism.

REFERENCES

1. Gallant, P., Shiio, Y., Cheng, P.F., Parkhurst, S.M. and Eisenman, R.N. 1996. Myc and Max homologs in *Drosophila*. Science 274: 1523-1527.
2. Schreiber-Agus, N., Stein, D., Chen, K., Goltz, J.S., Stevens, L. and DePinho, R.A. 1997. *Drosophila* Myc is oncogenic in mammalian cells and plays a role in the diminutive phenotype. Proc. Natl. Acad. Sci. USA 94: 1235-1240.
3. Johnston, L.A., Prober, D.A., Edgar, B.A., Eisenman, R.N. and Gallant, P. 1999. *Drosophila* Myc regulates cellular growth during development. Cell 98: 779-790.
4. 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.
5. The Interactive Fly. http://www.sdbonline.org/fly/aimain/1aahome.htm. http://www.sdbonline.org/fly/dbzhnsky/myc1.htm
6. LocusLink Report (LocusID: 44842). http://www.ncbi.nlm.nih.gov/LocusLink/

SOURCE

Myc1 (dN-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Myc1 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-15832 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

Myc1 (dN-20) is recommended for detection of Myc1 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.

SELECT PRODUCT CITATIONS

1. Daneshvar, K., Khan, A. and Goodliffe, J.M. 2011. Myc localizes to histone locus bodies during replication in *Drosophila*. PLoS ONE 6: e23928.

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.