SANTA CRUZ BIOTECHNOLOGY, INC.

nemo (dN-20): sc-15840

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 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, nemo is a protein serine/threonine kinase that is expressed in photoreceptor cells during morphogenesis and mediates proper development of the redundant hexagonal array of photoreceptor cell clusters in the *Drosophila* eye.

REFERENCES

1. Choi, K.W. and Benzer, S. 1994. Rotation of photoreceptor clusters in the developing *Drosophila* eye requires the nemo gene. Cell 78: 125-136.
2. Liang, Z. and Biggin, M.D. 1998. Eve and ftz regulate a wide array of genes in blastoderm embryos: the selector homeoproteins directly or indirectly regulate most genes in *Drosophila*. Development 125: 4471-4482.
3. Adams, M.D., Celniker, S.E., Holt, R.A., Evans, C.A., Gocayne, J.D. and Amanatides, P., et al. 2000. The genome sequence of *Drosophila melanogaster*. Science 287: 2185-2195.
4. The Interactive Fly. http://www.sdbonline.org/fly/aimain/1aahome.htm. http://www.sdbonline.org/fly/aimain/6biochem.htm.
5. FlyBase (FlyBaseID: FBgn0011817). http://flybase.bio.indiana.edu/
6. LocusLink Report (LocusID: 38890). http://www.ncbi.nlm.nih.gov/LocusLink/

SOURCE

nemo (dN-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of nemo I 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-15840 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

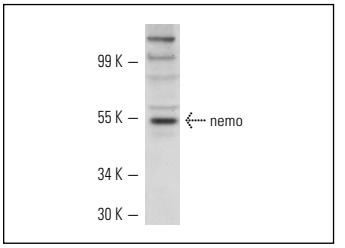
nemo (dN-20) is recommended for detection of nemo I and nemo II of *Drosophila melanogaster* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Positive Controls: Schneider's *Drosophila* line 2.

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



nemo (dN-20): sc-15840. Western blot analysis of nemo expression in Schneider's *Drosophila* line 2 whole cell lysate.

RESEARCH USE

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