SANTA CRUZ BIOTECHNOLOGY, INC.

Suppressor of Hairless (dR-21): sc-15811



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. Among these proteins, Suppressor of Hairless, Su(H), is a cytoplasmic protein that interacts with the activated Notch receptor, and subsequently localizes to the nucleus. Nuclear Su(H) functions as a transcription factor which targets the enhancer of split complex and elicits a neurogenic signal.

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. Morel, V., Lecourtois, M., Massiani, O., Maier, D., Preiss, A. and Schweisguth, F. 2001, Transcriptional repression by Suppressor of Hairless involves the binding of a Hairless-dCtBP complex in *Drosophila*. Curr. Biol. 11: 789-792.
- 3. Koelzer, S. and Klein, T. 2003. A Notch-independent function of Suppressor of Hairless during the development of the bristle sensory organ precursor cell of Drosophila. Development 130: 1973-1988.
- 4. Wesley, C.S. and Mok, L.P. 2003. Regulation of Notch signaling by a novel mechanism involving Suppressor of Hairless stability and carboxyl terminus-truncated Notch. Mol. Cell. Biol. 23: 5581-5593.
- 5. Le Gall, M. and Giniger, E. 2004. Identification of two binding regions for the Suppressor of Hairless protein within the intracellular domain of Drosophila Notch. J. Biol. Chem. 279: 29418-29426.
- 6. Hori, K., Fostier, M., Ito, M., Fuwa, T.J., Go, M.J., Okano, H., Baron, M. and Matsuno, K. 2004. Drosophila deltex mediates Suppressor of Hairless-independent and late-endosomal activation of Notch signaling. Development 131: 5527-5537.
- 7. The Interactive Fly. http://www.sdbonline.org/fly/aimain/1aahome.htm. http://www.sdbonline.org/fly/neural/suphair.htm
- 8. FlyBase (FlyBaseID: FBgn0004837). http://flybase.bio.indiana.edu/
- 9. LocusLink Report (LocusID: 34881). http://www.ncbi.nlm.nih.gov/LocusLink/

SOURCE

Suppressor of Hairless (dR-21) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Suppressor of Hairless of Drosophila melanogaster origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-15811 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Suppressor of Hairless (dR-21) is recommended for detection of Suppressor of Hairless 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).

Molecular Weight of Suppressor of Hairless: 74 kDa.

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.

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.

MONOS Satisfation Guaranteed

Try Suppressor of Hairless (C-9): sc-398453, our highly recommended monoclonal alternative to Suppressor of Hairless (dR-21).