

Suppressor of Hairless (dC-20): sc-15813

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

- Morel, V., et al. 2001. Transcriptional repression by Suppressor of Hairless involves the binding of a Hairless-dCtBP complex in *Drosophila*. *Curr. Biol.* 11: 789-792.
- Koelzer, S., et al. 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.

SOURCE

Suppressor of Hairless (dC-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Suppressor of Hairless 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-15813 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

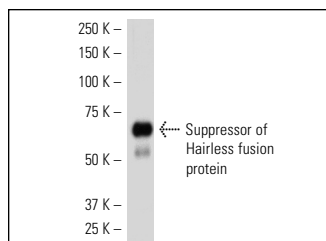
Suppressor of Hairless (dC-20) is recommended for detection of Suppressor of Hairless of *Drosophila melanogaster* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence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

Molecular Weight: 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) 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



Suppressor of Hairless (dC-20): sc-15813. Western blot analysis of human recombinant Suppressor of Hairless fusion protein.

SELECT PRODUCT CITATIONS

- Krejci, A., et al. 2007. Notch activation stimulates transient and selective binding of Su(H)/Csl to target enhancers. *Genes Dev.* 21: 1322-1327.
- Rand, M.D., et al. 2008. Methylmercury activates enhancer-of-split and bearded complex genes independent of the Notch receptor. *Toxicol. Sci.* 104: 163-176.
- Moshkin, Y.M., et al. 2009. Histone chaperones ASF1 and NAP1 differentially modulate removal of active histone marks by LID-RPD3 complexes during NOTCH silencing. *Mol. Cell* 35: 782-793.
- Cave, J.W., et al. 2011. Differential regulation of transcription through distinct Suppressor of Hairless DNA binding site architectures during Notch signaling in proneural clusters. *Mol. Cell. Biol.* 31: 22-29.
- Heck, B.W., et al. 2012. The transcriptional corepressor SMRTER influences both Notch and ecdysone signaling during *Drosophila* development. *Biol. Open* 1: 182-196.



Try **Suppressor of Hairless (C-9): sc-398453**, our highly recommended monoclonal alternative to Suppressor of Hairless (dC-20).