

Suppressor of Hairless (C-9): sc-398453

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, 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

- Adams, M.D., et al. 2000. The genome sequence of *Drosophila melanogaster*. *Science* 287: 2185-2195.
- 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.

SOURCE

Suppressor of Hairless (C-9) is a mouse monoclonal antibody raised against amino acids 259-594 of Suppressor of Hairless of *Drosophila melanogaster* origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Suppressor of Hairless (C-9) is available conjugated to agarose (sc-398453 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398453 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398453 PE), fluorescein (sc-398453 FITC), Alexa Fluor® 488 (sc-398453 AF488), Alexa Fluor® 546 (sc-398453 AF546), Alexa Fluor® 594 (sc-398453 AF594) or Alexa Fluor® 647 (sc-398453 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398453 AF680) or Alexa Fluor® 790 (sc-398453 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Suppressor of Hairless (C-9) is recommended for detection of Suppressor of Hairless of *Drosophila melanogaster* origin by Western Blotting (starting dilution 1:100, 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).

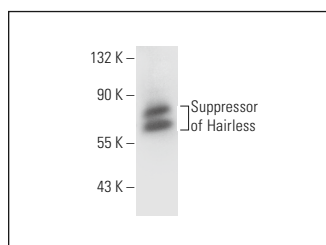
Molecular Weight of Suppressor of Hairless: 74 kDa.

Positive Controls: Schneider's *Drosophila* Line 2 whole cell lysate: sc-364794.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Suppressor of Hairless (C-9): sc-398453. Western blot analysis of Suppressor of Hairless expression in Schneider's *Drosophila* Line 2 whole cell lysate.

SELECT PRODUCT CITATIONS

- Zhao, W., et al. 2018. Molecular cloning and functional characterization of a homolog of the transcriptional regulator CSL in *Litopenaeus vannamei*. *Dev. Comp. Immunol.* 88: 152-160.
- Rosales-Vega, M., et al. 2023. TnaA, a trithorax group protein, modulates wingless expression in different regions of the *Drosophila* wing imaginal disc. *Sci. Rep.* 13: 15162.
- Rajan, A., et al. 2023. Low-level repressive histone marks fine-tune gene transcription in neural stem cells. *Elife* 12: e86127
- He, Q., et al. 2023. Juvenile hormone suppresses sensory organ precursor determination to block *Drosophila* adult abdomen morphogenesis. *Insect Biochem. Mol. Biol.* 157: 103957.
- Mo, D., et al. 2023. The mitochondrial ribosomal protein mRpl4 regulates Notch signaling. *EMBO Rep.* 24: e55764.

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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.