

Hop (C-15): sc-25146

BACKGROUND

Hop encodes a homeodomain-containing protein derived from several transcript splice variants. Nkx2.5-mediated Hop gene expression initiates early during cardiogenesis and continues in cardiomyocytes throughout embryonic and postnatal development. Hop associates with and inhibits trans-acting serum response factor (SRF)-dependent transcription, which regulates the opposing processes of proliferation and myogenesis. Hop modulation of SRF activity ensures a balance between cardiomyocyte proliferation and differentiation during cardiac morphogenesis.

REFERENCES

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2. Shin, C.H., et al. 2002. Modulation of cardiac growth and development by Hop, an unusual homeodomain protein. *Cell* 110: 725-735.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607275. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Torrado, M., et al. 2003. Myocardin mRNA is augmented in the failing myocardium: expression profiling in the porcine model and human dilated cardiomyopathy. *J. Mol. Med.* 81: 566-577.
5. Hamamori, Y., et al. 2003. HATs off to Hop: recruitment of a class I histone deacetylase incriminates a novel transcriptional pathway that opposes cardiac hypertrophy. *J. Clin. Invest.* 112: 824-826.
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8. Lemaire, F., et al. 2004. Loss of Hop tumour suppressor expression in head and neck squamous cell carcinoma. *Br. J. Cancer* 91: 258-261.
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CHROMOSOMAL LOCATION

Genetic locus: HOP (human) mapping to 4q11-q12; MGI:1916782 (mouse) mapping to 5 C3.3.

SOURCE

Hop (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Hop of human 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-25146 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Hop (C-15) is recommended for detection of Hop of mouse, rat and human 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).

Suitable for use as control antibody for Hop siRNA (h): sc-38671, Hop siRNA (m): sc-38672, Hop shRNA Plasmid (h): sc-38671-SH, Hop shRNA Plasmid (m): sc-38672-SH, Hop shRNA (h) Lentiviral Particles: sc-38671-V and Hop shRNA (m) Lentiviral Particles: sc-38672-V.

Molecular Weight of Hop: 9 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.

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.

MONOS
Satisfaction
Guaranteed

Try **Hop (E-1): sc-398703**, our highly recommended monoclonal alternative to Hop (C-15).