

# Dhh (H-85): sc-13089

## BACKGROUND

The *Drosophila* segment polarity gene hedgehog (hh) encodes a precursor protein which undergoes autocleavage to generate an amino- and a carboxy-terminal peptide. Both proteins are secreted and appear to function in embryonic and imaginal disc patterning. Several vertebrate homologs of *Drosophila* hh have been identified. These include Sonic hedgehog (Shh) (alternatively designated Vhh-1), Desert hedgehog (Dhh) and Indian hedgehog (Ihh). Each contain amino-terminal signal peptides and apparently function as secreted proteins involved in the mediation of various cell-cell interactions. Shh resembles *Drosophila* hh in that it is processed to generate an amino-terminal secreted peptide that is retained at or near the cell surface and a carboxy-terminal glycosylated more diffusible peptide.

## REFERENCES

1. Echelard, Y., et al. 1993. Sonic hedgehog, a member of a family of putative signaling molecules, is implicated in the regulation of CNS polarity. *Cell* 75: 1417-1430.
2. Li, W., et al. 1995. Function of protein kinase A in hedgehog signal transduction and *Drosophila* imaginal disc development. *Cell* 80: 553-562.

## CHROMOSOMAL LOCATION

Genetic locus: DHH (human) mapping to 12q13.12; Dhh (mouse) mapping to 15 F1.

## SOURCE

Dhh (H-85) is a rabbit polyclonal antibody raised against amino acids 227-311 of Dhh 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.

## APPLICATIONS

Dhh (H-85) is recommended for detection of Dhh of mouse, rat and human 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).

Dhh (H-85) is also recommended for detection of Dhh in additional species, including bovine.

Suitable for use as control antibody for Dhh siRNA (h): sc-37208, Dhh siRNA (m): sc-37209, Dhh shRNA Plasmid (h): sc-37208-SH, Dhh shRNA Plasmid (m): sc-37209-SH, Dhh shRNA (h) Lentiviral Particles: sc-37208-V and Dhh shRNA (m) Lentiviral Particles: sc-37209-V.

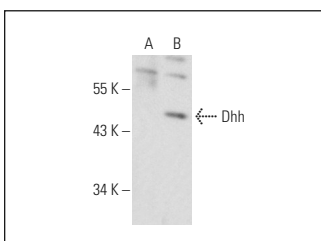
Molecular Weight of Dhh: 42 kDa.

Positive Controls: Dhh (h): 293T Lysate: sc-114457, HeLa nuclear extract: sc-2120 or NIH/3T3 whole cell lysate: sc-2210.

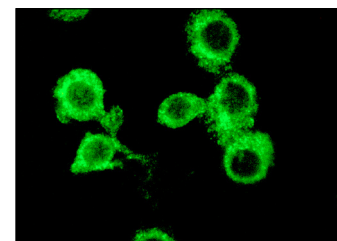
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Dhh (H-85): sc-13089. Western blot analysis of Dhh expression in non-transfected: sc-117752 (A) and human Dhh transfected: sc-114457 (B) 293T whole cell lysates.



Dhh (H-85): sc-13089. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization.

## SELECT PRODUCT CITATIONS

1. Feng, Y.Z., et al. 2007. Overexpression of hedgehog signaling molecules and its involvement in the proliferation of endometrial carcinoma cells. *Clin. Cancer Res.* 13: 1389-1398.
2. Chen, X., et al. 2007. Hedgehog signal pathway is activated in ovarian carcinomas, correlating with cell proliferation: its inhibition leads to growth suppression and apoptosis. *Cancer Sci.* 98: 68-76.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **Dhh (F-9): sc-271168** or **Dhh (G-9): sc-133116**, our highly recommended monoclonal alternatives to Dhh (H-85).