

# HDGF (H-48): sc-292798

## BACKGROUND

Hepatoma derived growth factor (HDGF) is the original member of a family of polypeptides designated HDGF-related proteins (HRPs). HDGF was initially characterized as a secreted mitogen from the Huh-7 human hepatoma cell line. This nuclear targeted vascular smooth muscle cell mitogen (VSM) is a heparin-binding protein that is highly expressed in tumor cells where it stimulates proliferation. HDGF is also reported to be involved in organ development and lung remodeling after injury by promoting proliferation of lung epithelial cells. During development, HDGF expression is high in the nucleus and cytoplasm of smooth muscle and endothelial cells. Expression declines after birth but increases during vascular injury.

## REFERENCES

1. Everett, A.D., et al. 2001. Nuclear targeting is required for hepatoma-derived growth factor-stimulated mitogenesis in vascular smooth muscle cells. *J. Biol. Chem.* 276: 37564-37568.
2. Dietz, F., et al. 2002. The family of hepatoma-derived growth factor proteins: characterization of a new member HRP-4 and classification of its subfamilies. *Biochem. J.* 366: 491-500.

## CHROMOSOMAL LOCATION

Genetic locus: HDGF (human) mapping to 1q23.1; Hdgf (mouse) mapping to 3 F1.

## SOURCE

HDGF (H-48) is a rabbit polyclonal antibody raised against amino acids 121-168 mapping within an internal region of HDGF 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

HDGF (H-48) is recommended for detection of HDGF 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).

HDGF (H-48) is also recommended for detection of HDGF in additional species, including bovine and porcine.

Suitable for use as control antibody for HDGF siRNA (h): sc-45878, HDGF siRNA (m): sc-45879, HDGF shRNA Plasmid (h): sc-45878-SH, HDGF shRNA Plasmid (m): sc-45879-SH, HDGF shRNA (h) Lentiviral Particles: sc-45878-V and HDGF shRNA (m) Lentiviral Particles: sc-45879-V.

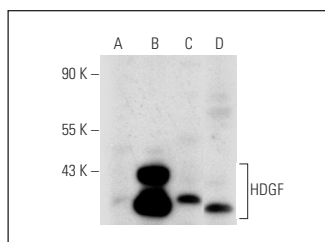
Molecular Weight of HDGF: 40 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, Hep G2 cell lysate: sc-2227 or HDGF (m): 293T Lysate: sc-120729.

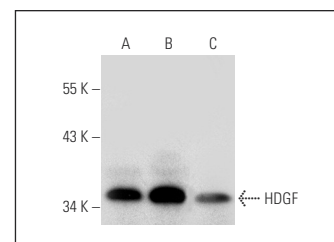
## RECOMMENDED SECONDARY REAGENTS

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



HDGF (H-48): sc-292798. Western blot analysis of HDGF expression in non-transfected 293T: sc-117752 (A), mouse HDGF transfected 293T: sc-120729 (B), A549 (C) and EOC 20 (D) whole cell lysates.



HDGF (H-48): sc-292798. Western blot analysis of HDGF expression in SK-BR-3 (A), MCF7 (B) and Hep G2 (C) whole cell lysates.

## 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.



Try **HDGF (E-7): sc-271344** or **HDGF (H-3): sc-398344**, our highly recommended monoclonal alternatives to HDGF (H-48).