

HDGF (N-15): sc-28062

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 (VSM) cell mitogen 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 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus 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.

Blocking peptide available for competition studies, sc-28062 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HDGF (N-15) is recommended for detection of HDGF of mouse, rat, human and 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 (N-15) is also recommended for detection of HDGF in additional species, including canine, 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.

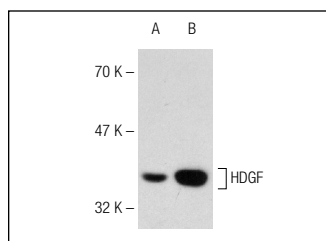
Molecular Weight of HDGF: 40 kDa.

Positive Controls: A549 cell lysate: sc-2413 or ECV304 cell lysate: sc-2269.

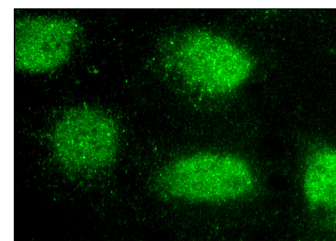
RECOMMENDED SECONDARY REAGENTS

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



HDGF (N-15): sc-28062. Western blot analysis of HDGF expression in ECV304 (A) and A549 (B) whole cell lysates.



HDGF (N-15): sc-28062. Immunofluorescence staining of formalin-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Li, Z., et al. 2006. Proteomic analysis of the E2F1 response in p53-negative cancer cells: new aspects in the regulation of cell survival and death. *Proteomics* 6: 5735-5745.
2. Borders, A.S., et al. 2007. Macrophage-mediated neuroprotection and neurogenesis in the olfactory epithelium. *Physiol. Genomics* 31: 531-543.

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 **HDGF (E-7): sc-271344** or **HDGF (H-3): sc-398344**, our highly recommended monoclonal alternatives to HDGF (N-15).