SANTA CRUZ BIOTECHNOLOGY, INC.

HDGFL1 (K-15): sc-47049



BACKGROUND

HDGFL1 (hepatoma-derived growth factor-like protein 1), also known as PWWP1 or PWWP domain-containing protein 1, is a 251 amino acid protein belonging to the HDGF family. 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. The HDGFL1 gene is located on human chromosome 6 and conserved in mouse, rat, chimpanzee, canine, bovine and more.

REFERENCES

- 1. Everett, A.D., et al. 2001. Nuclear targeting is required for hepatomaderived growth factor-stimulated mitogenesis in vascular smooth muscle cells. J. Biol. Chem. 276: 37564-37568.
- 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.
- 3. Everett, A.D. and Bushweller, J. 2003. Hepatoma derived growth factor is a nuclear targeted mitogen. Curr. Drug Target 4: 367-371.
- Ansermet, F., et al. 2010. Mild intellectual disability associated with a progeny of father-daughter incest: genetic and environmental considerations. J. Child Sex Abus. 19: 337-344.
- 5. Aschebrook-Kilfoy, B., et al. 2015. Genome-wide association study of parity in Bangladeshi women. PLoS ONE 10: e0118488.

CHROMOSOMAL LOCATION

Genetic locus: Hdgfl1 (mouse) mapping to 13 A3.1.

SOURCE

HDGFL1 (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of HDGFL1 of mouse 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-47049 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

HDGFL1 (K-15) is recommended for detection of HDGFL1 of mouse and rat 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).

Suitable for use as control antibody for HDGFL1 siRNA (m): sc-60815, HDGFL1 shRNA Plasmid (m): sc-60815-SH and HDGFL1 shRNA (m) Lentiviral Particles: sc-60815-V.

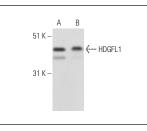
Molecular Weight of HDGFL1: 32 kDa.

Positive Controls: F9 cell lysate: sc-2245.

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



HDGFL1 (K-15): sc-47049. Western blot analysis of HDGFL1 expression in NTERA-2 cl.D1 (A) and F9 (B) whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

