



HDGFL1 (S-18): sc-74088

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 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.
3. Everett, A.D. and Bushweller, J. 2003. Hepatoma derived growth factor is a nuclear targeted mitogen. *Curr. Drug Target* 4: 367-371.
4. 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. Hung, Y.L., et al. 2015. The first residue of the PWWP motif modulates HATH domain binding, stability, and protein-protein interaction. *Biochemistry* 54: 4063-4074.
6. Aschebrook-Kilfoy, B., et al. 2015. Genome-wide association study of parity in Bangladeshi women. *PLoS ONE* 10: e0118488.
7. Guo, S., et al. 2015. Hepatoma-derived growth factor: a novel prognostic biomarker in intrahepatic cholangiocarcinoma. *Tumour Biol.* 36: 353-364.

CHROMOSOMAL LOCATION

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

SOURCE

HDGFL1 (S-18) is a rat monoclonal antibody raised against full length recombinant HDGFL1 of mouse origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} in 1.0 ml PBS with < 0.1% sodium azide and protein stabilizer.

STORAGE

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

APPLICATIONS

HDGFL1 (S-18) is recommended for detection of HDGFL1 of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) 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.

SELECT PRODUCT CITATIONS

1. Zhao, J., et al. 2015. Foxp1 regulates the proliferation of hair follicle stem cells in response to oxidative stress during hair cycling. *PLoS ONE* 10: e0131674.
2. Liu, Z., et al. 2016. Leukocyte infiltration triggers seizure recurrence in a rat model of temporal lobe epilepsy. *Inflammation* 39: 1090-1098.
3. Liu, J., et al. 2020. Spinal cord injury and its underlying mechanism in rats with temporal lobe epilepsy. *Exp. Ther. Med.* 19: 2103-2112.

RESEARCH USE

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

PROTOCOLS

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