

HEPN1 (P-15): sc-138338

BACKGROUND

HEPN1 (HEPACAM opposite strand 1) is a 88 amino acid cytoplasmic protein that plays a significant role in apoptosis. HEPN1 is ubiquitously expressed in normal liver samples, but is downregulated or completely absent in hepatocellular carcinoma (HCC) samples. When HEPN1 is expressed in HCC cell lines, it inhibits cell growth and leads to a reduction in cell colonies and number of cells in colony formation assays. This evidence suggests that loss of HEPN1 is involved in carcinogenesis of hepatocytes. Interestingly, HepaCAM, another protein that suppresses cellular proliferation specifically with regard to hepatocellular carcinoma, contains the full-length HEPN1 on its antisense strand in the 3'-noncoding region.

REFERENCES

1. Abou-Shady, M., et al. 1999. Molecular aspects of hepatocellular carcinoma. *Swiss Surg.* 5: 102-106.
2. Moh, M.C., et al. 2003. HEPN1, a novel gene that is frequently down-regulated in hepatocellular carcinoma, suppresses cell growth and induces apoptosis in HepG2 cells. *J. Hepatol.* 39: 580-586.
3. Moh, M.C., et al. 2005. Structural and functional analyses of a novel ig-like cell adhesion molecule, hepaCAM, in the human breast carcinoma MCF7 cells. *J. Biol. Chem.* 280: 27366-27374.
4. Chung Moh, M., et al. 2005. Cloning and characterization of hepaCAM, a novel Ig-like cell adhesion molecule suppressed in human hepatocellular carcinoma. *J. Hepatol.* 42: 833-841.
5. Online Mendelian Inheritance in Man, OMIM[™]. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 611641. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: HEPN1 (human) mapping to 11q24.2.

SOURCE

HEPN1 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of HEPN1 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-138338 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO 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

HEPN1 (P-15) is recommended for detection of HEPN1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 HEPN1 siRNA (h): sc-97043, HEPN1 shRNA Plasmid (h): sc-97043-SH and HEPN1 shRNA (h) Lentiviral Particles: sc-97043-V.

Molecular Weight of HEPN1: 10 kDa.

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) 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.

RESEARCH USE

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