SANTA CRUZ BIOTECHNOLOGY, INC.

HepaCAM (G-15): sc-168078



BACKGROUND

HepaCAM (hepatocyte cell adhesion molecule), also known as GlialCAM, is a 416 amino acid single-pass type I membrane protein that contains one Ig-like C2-type domain and one Ig-like V-type domain. Localized to the cytoplasmic side of the membrane, HepaCAM exists as a homodimer that is involved in regulating both cell-matrix interactions and cell motility. Additionally, HepaCAM is thought to suppress cellular proliferation, suggesting involvement in cell growth inhibition and tumor suppression, specifically with regard to hepatocellular carcinoma. Deletion of the cytoplasmic domain of HepaCAM results in diminished cell-matrix adhesion, implying that the cytoplasmic domain is a crucial component of HepaCAM function. Two isoforms of HepaCAM exist due to alternative splicing events.

REFERENCES

- Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611642. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Moh, M.C., et al. 2003. HEPN1, a novel gene that is frequently downregulated in hepatocellular carcinoma, suppresses cell growth and induces apoptosis in HepG2 cells. J. Hepatol. 39: 580-586.
- Moh, M.C., et al. 2005. Structural and functional analyses of a novel Iglike cell adhesion molecule, HepaCAM, in the human breast carcinoma MCF7 cells. J. Biol. Chem. 280: 27366-27374.
- 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. Moh, M.C., et al. 2008. Expression of HepaCAM is downregulated in cancers and induces senescence-like growth arrest via a p53/p21-dependent pathway in human breast cancer cells. Carcinogenesis 29: 2298-2305.
- Favre-Kontula, L., et al. 2008. GlialCAM, an immunoglobulin-like cell adhesion molecule is expressed in glial cells of the central nervous system. Glia 56: 633-645.
- 7. Gaudry, J.P., et al. 2008. Purification of the extracellular domain of the membrane protein GlialCAM expressed in Hek and CHO cells and comparison of the glycosylation. Protein Expr. Purif. 58: 94-102.

CHROMOSOMAL LOCATION

Genetic locus: HEPACAM (human) mapping to 11q24.2; Hepacam (mouse) mapping to 9 A4.

SOURCE

HepaCAM (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of HepaCAM of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168078 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HepaCAM (G-15) is recommended for detection of HepaCAM of mouse, rat and 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).

HepaCAM (G-15) is also recommended for detection of HepaCAM in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for HepaCAM siRNA (h): sc-96533, HepaCAM siRNA (m): sc-145940, HepaCAM shRNA Plasmid (h): sc-96533-SH, HepaCAM shRNA Plasmid (m): sc-145940-SH, HepaCAM shRNA (h) Lentiviral Particles: sc-96533-V and HepaCAM shRNA (m) Lentiviral Particles: sc-145940-V.

Molecular Weight of HepaCAM: 48 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) 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.

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 Satisfation Guaranteed

Try **HepaCAM (B-7): sc-515637**, our highly recommended monoclonal alternative to HepaCAM (G-15).