

MOB2 (N-14): sc-168058

BACKGROUND

HCCA2 (hepatocellular carcinoma-associated gene 2), also known as MOB2 (Mps one binder kinase activator-like 2), is a 467 amino acid protein that belongs to the MOB1/Phoecin family. HCCA2 is expressed in lung, spleen, brain and fetal liver. It is highly expressed in hepatocellular carcinoma. HCCA2 is localized in the perinuclear region of the cytoplasm in liver cancer tissues and colocalizes with MAD2L2 in the nucleus of HeLa cells. HCCA2 is characterized by two N-glycosylation sites, six N-myristoylation sites, two Src homology 3 (SH3), and several phosphorylation motifs which indicate that this protein may play a role in an intracellular signal transduction cascade. HCCA2 binds to and regulates the autophosphorylation of the related human serine/threonine kinase 38 (NDR1) and serine/threonine kinase 38L (NDR2). It has been shown that HCCA2 plays a critical role in cell cycle regulation. Overexpression of the protein during the G₀/G₁ phase inhibits cell proliferation causing cell cycle arrest.

REFERENCES

1. Wang, Z.X., Wang, H.Y. and Wu, M.C. 2001. Identification and characterization of a novel human hepatocellular carcinoma-associated gene. *Br. J. Cancer* 85: 1162-1167.
2. Wang, Z., Wang, H. and Chen, Z. 2002. Cloning of liver cancer-related gene HCCA2 and association of that gene with liver cancer. *Zhonghua Yi Xue Za Zhi* 81: 332-335.
3. Online Mendelian Inheritance in Man, OMIM. 2003. John Hopkins University, Baltimore, MD. MIM Number: 607860. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Devroe, E., Erdjument-Bromage, H., Tempst, P. and Silver, P.A. 2004. Human Mob proteins regulate the NDR1 and NDR2 serine-threonine kinases. *J. Biol. Chem.* 279: 24444-24451.
5. Li, L., Shi, Y., Wu, H., Wan, B., Li, P., Zhou, L., Shi, H. and Huo, K. 2007. Hepatocellular carcinoma-associated gene 2 interacts with MAD2L2. *Mol. Cell. Biochem.* 304: 297-304.

CHROMOSOMAL LOCATION

Genetic locus: MOB2 (human) mapping to 11p15.5; Mob2 (mouse) mapping to 7 F5.

SOURCE

MOB2 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MOB2 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-168058 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

MOB2 (N-14) is recommended for detection of MOB2 of mouse, rat and human 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 MOB2 siRNA (h): sc-96555, MOB2 siRNA (m): sc-108823, MOB2 shRNA Plasmid (h): sc-96555-SH, MOB2 shRNA Plasmid (m): sc-108823-SH, MOB2 shRNA (h) Lentiviral Particles: sc-96555-V and MOB2 shRNA (m) Lentiviral Particles: sc-108823-V.

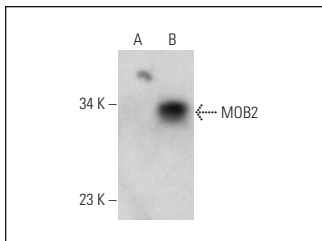
Molecular Weight of MOB2: 51 kDa.

Positive Controls: MOB2 (m): 293T Lysate: sc-126325.

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



MOB2 (N-14): sc-168058. Western blot analysis of MOB2 expression in non-transfected: sc-117752 (A) and mouse MOB2 transfected: sc-126325 (B) 293T whole cell lysates.

STORAGE

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

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Try **MOB2 (2400C3a): sc-81564**, our highly recommended monoclonal alternative to MOB2 (N-14).