

MOB2 (2400C3a): sc-81564

BACKGROUND

MOB2 (mops one binder kinase activator-like 2), also known as HCCA2 (hepatocellular carcinoma-associated gene 2), is a 268 amino acid protein that belongs to the MOB1/phoecin family. MOB2 is expressed in lung, spleen, brain, and fetal liver. It is highly expressed in hepatocellular carcinoma. MOB2 is localized in the perinuclear region of the cytoplasm in liver cancer tissues and colocalizes with MAD2L2 in the nucleus of HeLa cells. MOB2 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. MOB2 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 MOB2 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

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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.

SOURCE

MOB2 (2400C3a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to the N-terminal region of MOB2 of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

APPLICATIONS

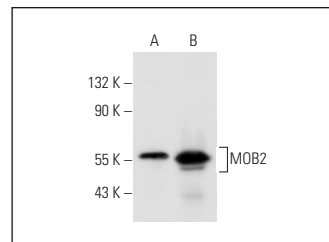
MOB2 (2400C3a) is recommended for detection of MOB2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for MOB2 siRNA (h): sc-96555, MOB2 shRNA Plasmid (h): sc-96555-SH and MOB2 shRNA (h) Lentiviral Particles: sc-96555-V.

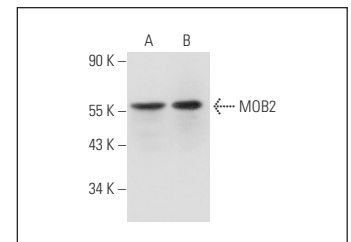
Molecular Weight of MOB2: 51 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat nuclear extract: sc-2132 or Hep G2 cell lysate: sc-2227.

DATA



MOB2 (2400C3a): sc-81564. Western blot analysis of MOB2 expression in HeLa whole cell lysate (A) and Jurkat nuclear extract (B).



MOB2 (2400C3a): sc-81564. Western blot analysis of MOB2 expression in Hep G2 (A) and KNRK (B) whole cell lysates.

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.