

Angiomotin-L2 (H-40): sc-292655

BACKGROUND

Angiomotin, also known as AMOT, is a 1,084 amino acid protein that belongs to the motin family of angiostatin binding proteins. Members of the motin family contain conserved coiled-coil domains and PDZ binding motifs at their C-termini. Expressed in skeletal muscle and placenta, Angiomotin localizes to the cell surface at tight junctions and is believed to be involved in tight junction maintenance. Angiomotin binds to angiostatin and plays a vital role in angiogenesis, promoting tubule formation and growth factor-induced migration of endothelial cells. This suggests that Angiomotin may be an important player in tumor angiogenesis and could serve as a potential therapeutic target in cancer. Angiomotin-L2, also known as AMOTL2 or LCCP, is a 779 amino acid protein that exists as multiple alternatively spliced isoforms and may function in a similar manner to Angiomotin.

REFERENCES

1. Kikuno, R., et al. 1999. Prediction of the coding sequences of unidentified human genes. XIV. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. DNA Res. 6: 197-205.
2. Troyanovsky, B., et al. 2001. Angiomotin: an angiostatin binding protein that regulates endothelial cell migration and tube formation. J. Cell Biol. 152: 1247-1254.
3. Bratt, A., et al. 2002. Angiomotin belongs to a novel protein family with conserved coiled-coil and PDZ binding domains. Gene 298: 69-77.
4. Wells, C.D., et al. 2006. A RICH1/AMOT complex regulates the Cdc42 GTPase and apical-polarity proteins in epithelial cells. Cell 125: 535-548.
5. Ernkvist, M., et al. 2006. p130-Angiomotin associates to Actin and controls endothelial cell shape. FEBS J. 273: 2000-2011.
6. Huang, H., et al. 2007. AMOTL2 is essential for cell movements in zebrafish embryo and regulates c-Src translocation. Development 134: 979-988.
7. Aase, K., et al. 2007. Angiomotin regulates endothelial cell migration during embryonic angiogenesis. Genes Dev. 21: 2055-2068.
8. Ernkvist, M., et al. 2008. Differential roles of p80- and p130-Angiomotin in the switch between migration and stabilization of endothelial cells. Biochim. Biophys. Acta 1783: 429-437.

CHROMOSOMAL LOCATION

Genetic locus: AMOTL2 (human) mapping to 3q22.2; Amotl2 (mouse) mapping to 9 F1.

SOURCE

Angiomotin-L2 (H-40) is a rabbit polyclonal antibody raised against amino acids 595-634 mapping within an internal region of Angiomotin-L2 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.

APPLICATIONS

Angiomotin-L2 (H-40) is recommended for detection of Angiomotin-L2 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).

Angiomotin-L2 (H-40) is also recommended for detection of Angiomotin-L2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Angiomotin-L2 siRNA (h): sc-72493, Angiomotin-L2 siRNA (m): sc-72494, Angiomotin-L2 shRNA Plasmid (h): sc-72493-SH, Angiomotin-L2 shRNA Plasmid (m): sc-72494-SH, Angiomotin-L2 shRNA (h) Lentiviral Particles: sc-72493-V and Angiomotin-L2 shRNA (m) Lentiviral Particles: sc-72494-V.

Molecular Weight of Angiomotin-L2: 86 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

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.



Try **Angiomotin-L2 (A-9): sc-398261**, our highly recommended monoclonal alternative to Angiomotin-L2 (H-40).