SANTA CRUZ BIOTECHNOLOGY, INC.

Angiomotin-L1 (C-19): sc-82495

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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-L1 (angiomotin like 1), also known as AMOTL1 or JEAP, is a 956 amino acid peripheral membrane protein that localizes to tight junctions and may help to control cellular permeability and to maintain cell polarity.

REFERENCES

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2. Troyanovsky, B., Levchenko, T., Mansson, G., Matvijenko, O. and Holmgren, L. 2001. Angiomotin: an angiostatin binding protein that regulates endothelial cell migration and tube formation. J. Cell Biol. 152: 1247-1254.
3. Bratt, A., Wilson, W.J., Troyanovsky, B., Aase, K., Kessler, R., Van Meir, E.G., Holmgren, L. and Meir, E.G. 2002. Angiomotin belongs to a novel protein family with conserved coiled-coil and PDZ binding domains. Gene 298: 69-77.
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5. Ernkvist, M., Aase, K., Ukomadu, C., Wohlschlegel, J., Blackman, R., Veitonmäki, N., Bratt, A., Dutta, A. and Holmgren, L. 2006. p130-Angiomotin associates to Actin and controls endothelial cell shape. FEBS J. 273: 2000-2011.

CHROMOSOMAL LOCATION

Genetic locus: AMOTL1 (human) mapping to 11q21; Amotl1 (mouse) mapping to 9 A1.

SOURCE

Angiomotin-L1 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Angiomotin-L1 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-82495 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Angiomotin-L1 (L-18) is recommended for detection of Angiomotin-L1 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); non cross-reactive with family members Angiomotin or Angiomotin-L2.

Angiomotin-L1 (C-19) is also recommended for detection of Angiomotin-L1 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for Angiomotin-L1 siRNA (h): sc-72491, Angiomotin-L1 siRNA (m): sc-72492, Angiomotin-L1 shRNA Plasmid (h): sc-72491-SH, Angiomotin-L1 shRNA Plasmid (m): sc-72492-SH, Angiomotin-L1 shRNA (h) Lentiviral Particles: sc-72491-V and Angiomotin-L1 shRNA (m) Lentiviral Particles: sc-72492-V.

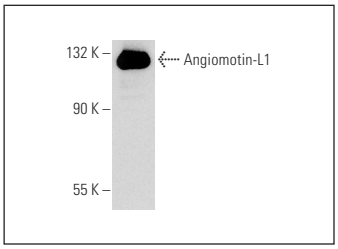
Molecular Weight of Angiomotin-L1: 105 kDa.

Positive Controls: U-251-MG whole cell lysate: sc-364176.

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



Angiomotin-L1 (C-19): sc-82495. Western blot analysis of Angiomotin-L1 expression in U-251-MG whole cell lysate.

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.