

Angiomotin (L-16): sc-82493

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. Due to alternative splicing events, two Angiomotin isoforms exist, namely p130 and p80. The p130 isoform exhibits a different expression pattern from the p80 isoform and is able to interact with F-Actin as well as induce Actin fiber formation.

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. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 300410. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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.

CHROMOSOMAL LOCATION

Genetic locus: AMOT (human) mapping to Xq23; Amot (mouse) mapping to X F2.

SOURCE

Angiomotin (L-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Angiomotin of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-82493 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Angiomotin (L-16) is recommended for detection of Angiomotin 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-L1 or Angiomotin-L2.

Suitable for use as control antibody for Angiomotin siRNA (h): sc-72489, Angiomotin siRNA (m): sc-72490, Angiomotin shRNA Plasmid (h): sc-72489-SH, Angiomotin shRNA Plasmid (m): sc-72490-SH, Angiomotin shRNA (h) Lentiviral Particles: sc-72489-V and Angiomotin shRNA (m) Lentiviral Particles: sc-72490-V.

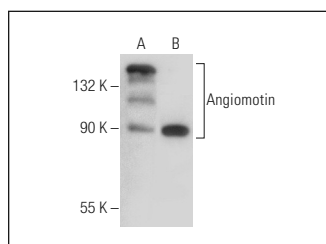
Molecular Weight of Angiomotin isoforms: 80/130 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206 or 293T whole cell lysate.

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 (L-16): sc-82493. Western blot analysis of Angiomotin expression in 293T (A) and MCF7 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Zhao, B., et al. 2011. Angiomotin is a novel Hippo pathway component that inhibits YAP oncoprotein. Genes Dev. 25: 51-63.

RESEARCH USE

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