

Angiomotin-L2 (A-9): sc-398261

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. Ernkqvist, M., et al. 2006. p130-angiomotin associates to Actin and controls endothelial cell shape. FEBS J. 273: 2000-2011.

CHROMOSOMAL LOCATION

Genetic locus: AMOTL2 (human) mapping to 3q22.2.

SOURCE

Angiomotin-L2 (A-9) is a mouse monoclonal antibody raised against amino acids 595-634 mapping within an internal region of Angiomotin-L2 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Angiomotin-L2 (A-9) is available conjugated to agarose (sc-398261 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398261 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398261 PE), fluorescein (sc-398261 FITC), Alexa Fluor® 488 (sc-398261 AF488), Alexa Fluor® 546 (sc-398261 AF546), Alexa Fluor® 594 (sc-398261 AF594) or Alexa Fluor® 647 (sc-398261 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398261 AF680) or Alexa Fluor® 790 (sc-398261 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Angiomotin-L2 (A-9) is recommended for detection of Angiomotin-L2 of human origin by Western Blotting (starting dilution 1:100, 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 (A-9) is also recommended for detection of Angiomotin-L2 in additional species, including canine and bovine.

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

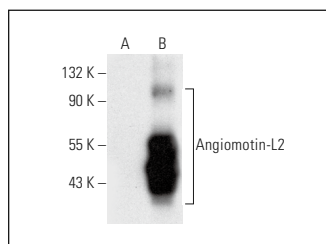
Molecular Weight of Angiomotin-L2: 86 kDa.

Positive Controls: Angiomotin-L2 (h): 293 Lysate: sc-111028.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Angiomotin-L2 (A-9): sc-398261. Western blot analysis of Angiomotin-L2 expression in non-transfected: sc-110760 (A) and human Angiomotin-L2 transfected: sc-111028 (B) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

1. Mygland, L., et al. 2021. Identification of response signatures for tankyrase inhibitor treatment in tumor cell lines. iScience 24: 102807.

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.