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Anti-AMOTL2 Picoband Antibody

Catalog # ABO13056

Product Information

Application	WB, E
Primary Accession	Q9Y2J4
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for AMOTL2 detection. Tested with WB, Direct ELISA in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	51421
Other Names	Angiomotin-like protein 2, Leman coiled-coil protein, LCCP, AMOTL2, KIAA0989
Calculated MW	85764
Application Details	Western blot, 0.1-0.5 □g/ml Direct ELISA, 0.1-0.5 □g/ml
Subcellular Localization	Recycling endosome.
Source	Eukaryota
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg NaN_3.
Immunogen	E. coli-derived human AMOTL2 recombinant protein (Position: A401-Q480).
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C; for one year. After r˚Constitution, at 4˚C; for one month. It˚Can also be aliquotted and stored frozen at -20˚C; for a longer time. Avoid repeated freezing and thawing.

Protein Information

Name	AMOTL2 (HGNC:17812)
Synonyms	KIAA0989

Function	Regulates the translocation of phosphorylated SRC to peripheral cell-matrix adhesion sites. Required for proper architecture of actin filaments. Plays a role in coupling actin fibers to cell junctions in endothelial cells and is therefore required for correct endothelial cell morphology via facilitating transcellular transmission of mechanical force resulting in endothelial cell elongation (By similarity). Required for the anchoring of radial actin fibers to CDH1 junction complexes at the cell membrane which facilitates organization of radial actin fiber structure and cellular response to contractile forces (PubMed:28842668). This contributes to maintenance of cell area, size, shape, epithelial sheet organization and trophectoderm cell properties that facilitate blastocyst zona hatching (PubMed:28842668). Inhibits the Wnt/beta-catenin signaling pathway, probably by recruiting CTNNB1 to recycling endosomes and hence preventing its translocation to the nucleus. Participates in angiogenesis. Activates the Hippo signaling pathway in response to cell contact inhibition via interaction with and ubiquitination by Crumbs complex-bound WWP1 (PubMed:34404733). Ubiquitinated AMOTL2 then interacts with LATS2 which in turn phosphorylates YAP1, excluding it from the nucleus and localizing it to the cytoplasm and tight junctions, therefore ultimately repressing YAP1-driven transcription of target genes (PubMed:17293535, PubMed:21205866, PubMed:26598551). Acts to inhibit WWTR1/TAZ transcriptional coactivator activity via sequestering WWTR1/TAZ in the cytoplasm and at tight junctions (PubMed:23911299). Regulates the size and protein composition of the podosome cortex and core at myofibril neuromuscular junctions (PubMed:23525008). Selectively promotes FGF-induced MAPK activation through SRC (PubMed:17293535). May play a role in the polarity, proliferation and migration of endothelial cells.
Cellular Location	Recycling endosome {ECO:0000250|UniProtKB:A1YB07}. Cytoplasm. Cell projection, podosome {ECO:0000250|UniProtKB:Q8K371}. Cell junction

Background

Angiomotin-like protein 2 is a protein that in humans is encoded by the AMOTL2 gene. Angiomotin is a protein that binds angiostatin, a circulating inhibitor of the formation of new blood vessels (angiogenesis). It mediates angiostatin inhibition of endothelial cell migration and tube formation in vitro. The protein encoded by this gene is related to angiomotin and is a member of the motin protein family. Alternative splicing results in multiple transcript variants of this gene.

Images

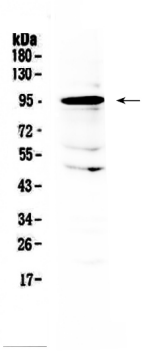


Figure 1. Western blot analysis of AMOTL2 using anti-AMOTL2 antibody (ABO13056).

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