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AMOTL2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8860C

Product Information

Application	WB, E
Primary Accession	Q9Y2J4
Other Accession	G3V735, Q8K371, F1MRK3
Reactivity	Human, Rat, Mouse
Predicted	Rat, Bovine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	85764
Antigen Region	126-152

Additional Information

Gene ID	51421
Other Names	Angiomotin-like protein 2, Leman coiled-coil protein, LCCP, AMOTL2, KIAA0989
Target/Specificity	This AMOTL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 126-152 amino acids from the Central region of human AMOTL2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	AMOTL2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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

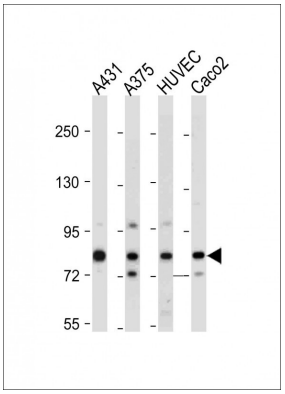
Background

AMOTL2 is a protein that binds angiostatin, a circulating inhibitor of the formation of new blood vessels (angiogenesis). Angiomotin 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 motins protein family.

References

Bratt,A.,et.al., Gene 298 (1), 69-77 (2002)

Images



All lanes : Anti-AMOTL2 Antibody (Center) at 1:2000 dilution Lane 1: A431 whole cell lysate Lane 2: A375 whole cell lysate Lane 3: HUVEC whole cell lysate Lane 4: Caco2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 86 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Citations

- Vestigial-like family member 3 (VGLL3), a cofactor for TEAD transcription factors, promotes cancer cell proliferation by activating the Hippo pathway
- Amotl2 interacts with LL5β, localizes to podosomes and regulates postsynaptic differentiation in muscle.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.