

AMOTL2 Antibody (Center) Blocking Peptide Synthetic peptide

Catalog # BP8860c

Specification

AMOTL2 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>Q9Y2J4</u>

AMOTL2 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 51421

Other Names Angiomotin-like protein 2, Leman coiled-coil protein, LCCP, AMOTL2, KIAA0989

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP8860c was selected from the Center region of human AMOTL2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

AMOTL2 Antibody (Center) Blocking Peptide - Protein Information

Name AMOTL2 (<u>HGNC:17812</u>)

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:<a href="http://www.uniprot.org/citations/28842668"



target=" blank">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

Cellular Location

Recycling endosome {ECO:0000250|UniProtKB:A1YB07}. Cytoplasm. Cell projection, podosome {ECO:0000250|UniProtKB:Q8K371}. Cell junction

AMOTL2 Antibody (Center) Blocking Peptide - Protocols

role in the polarity, proliferation and migration of endothelial cells.

Provided below are standard protocols that you may find useful for product applications.

<u>Blocking Peptides</u>

AMOTL2 Antibody (Center) Blocking Peptide - Images

AMOTL2 Antibody (Center) Blocking Peptide - 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.

AMOTL2 Antibody (Center) Blocking Peptide - References

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