

JMY Antibody(N-term) Blocking peptide
Synthetic peptide
Catalog # BP19367a**Specification**

JMY Antibody(N-term) Blocking peptide - Product InformationPrimary Accession [Q8N9B5](#)**JMY Antibody(N-term) Blocking peptide - Additional Information****Gene ID** 133746**Other Names**

Junction-mediating and -regulatory protein, JMY

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.

JMY Antibody(N-term) Blocking peptide - Protein Information**Name** JMY**Function**

Acts both as a nuclear p53/TP53-cofactor and a cytoplasmic regulator of actin dynamics depending on conditions (PubMed:30420355). In nucleus, acts as a cofactor that increases p53/TP53 response via its interaction with p300/EP300. Increases p53/TP53-dependent transcription and apoptosis, suggesting an important role in p53/TP53 stress response such as DNA damage. In cytoplasm, acts as a nucleation-promoting factor for both branched and unbranched actin filaments (PubMed:30420355). Activates the Arp2/3 complex to induce branched actin filament networks. Also catalyzes actin polymerization in the absence of Arp2/3, creating unbranched filaments (PubMed:30420355). Contributes to cell motility by controlling actin dynamics. May promote the rapid formation of a branched actin network by first nucleating new mother filaments and then activating Arp2/3 to branch off these filaments. Upon nutrient stress, directly recruited by MAP1LC3B to the phagophore membrane surfaces to promote actin assembly during autophagy (PubMed:30420355). The p53/TP53-cofactor and actin activator activities are regulated via its subcellular location (By similarity).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q9QXM1}. Cytoplasmic vesicle. Cytoplasm, cytoskeleton. Endomembrane system; Lipid-anchor Cytoplasmic vesicle, autophagosome membrane.

Note=Localizes to the nucleus in most cell types. Accumulates in nucleus under DNA damage conditions, increasing p53/TP53 transcription response and reducing its influence on cell motility (By similarity). In primary neutrophils, it colocalizes with actin filaments at the leading edge and is excluded from the nucleus. Localization correlates with motility, because it moves from the nucleus to the cytoplasmic compartment when cells are differentiated from nonmotile cells into highly motile neutrophil-like cells. Localizes to cytoplasmic vesicles which associate with actin filament and autophagosomal membranes upon starvation-induced autophagy (PubMed:30420355). {ECO:0000250, ECO:0000269|PubMed:30420355}

JMY Antibody(N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

JMY Antibody(N-term) Blocking peptide - Images**JMY Antibody(N-term) Blocking peptide - Background**

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JMY Antibody(N-term) Blocking peptide - References

Coutts, A.S., et al. Proc. Natl. Acad. Sci. U.S.A. 106(47):19872-19877(2009)Zuchero, J.B., et al. Nat. Cell Biol. 11(4):451-459(2009)Nordgard, S.H., et al. Genes Chromosomes Cancer 47(8):680-696(2008)Coutts, A.S., et al. EMBO Rep. 8(1):84-90(2007)Shikama, N., et al. Mol. Cell 4(3):365-376(1999)