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JMY Antibody(N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19367a

Specification

JMY Antibody(N-term) - Product Information

Application	**WB,E**
Primary Accession	Q8N9B5
Other Accession	Q9QXM1, NP_689618.4
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**111445**
Antigen Region	**2-29**

JMY Antibody(N-term) - Additional Information

Gene ID 133746

Other Names
Junction-mediating and -regulatory protein, JMY

Target/Specificity
This JMY antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 2-29 amino acids from the N-terminal region of human JMY.

Dilution
WB~~1:1000

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
JMY Antibody(N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

JMY Antibody(N-term) - 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).

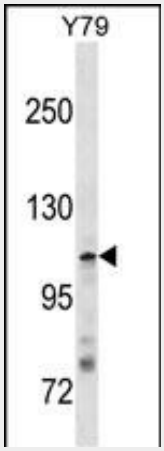
Cellular Location
Nucleus {ECO:0000250|UniProtKB:Q9QXM1}. Cytoplasmic vesicle. Cytoplasm, cytoskeleton. Endomembrane system; Lipid-anchor Cytoplasmic vesicle, autophagosome membrane. Note=Localizes to the nucleus in most cell types. Accumulates in nucleus under DNA damage conditions, increasing p53/TP53 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) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

JMY Antibody(N-term) - Images



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JMY Antibody (N-term)(Cat. #AP19367a) western blot analysis in Y79 cell line lysates (35ug/lane).This demonstrates the JMY antibody detected the JMY protein (arrow).

JMY Antibody(N-term) - Background

JMY acts both as a nuclear p53/TP53-cofactor and a cytoplasmic regulator of actin dynamics depending on conditions. 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. Activates the Arp2/3 complex to induce branched actin filament networks. Also catalyzes actin polymerization in the absence of Arp2/3, creating unbranched filaments. 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. The p53/TP53-cofactor and actin activator activities are regulated via its subcellular location (By similarity).

JMY Antibody(N-term) - References

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