

**JMY Polyclonal Antibody**  
**Catalog # AP70621****Specification**

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**JMY Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q8N9B5</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal

**JMY Polyclonal Antibody - Additional Information****Gene ID** 133746**Other Names**

JMY; Junction-mediating and -regulatory protein

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**JMY Polyclonal Antibody - Protein Information****Name** JMY**Function**

Acts both as a nuclear p53/TP53-cofactor and a cytoplasmic regulator of actin dynamics depending on conditions (PubMed:<a href="http://www.uniprot.org/citations/30420355" target="\_blank">30420355</a>). 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:<a href="http://www.uniprot.org/citations/30420355" target="\_blank">30420355</a>). 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:<a href="http://www.uniprot.org/citations/30420355" target="\_blank">30420355</a>). 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:<a href="http://www.uniprot.org/citations/30420355" target="\_blank">30420355</a>). 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.

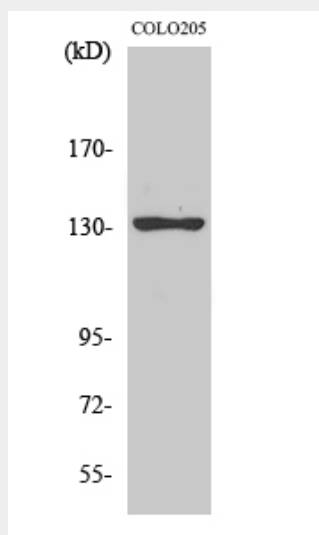
Note=Localizes to the nucleus in most cell types. Accumulates in nucleus under DNA damage conditions, increasing p53/TP53 transcription response and reducing its influence on cell motility (By similarity). In primary neutrophils, it colocalizes with actin filaments at the leading edge and is excluded 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}

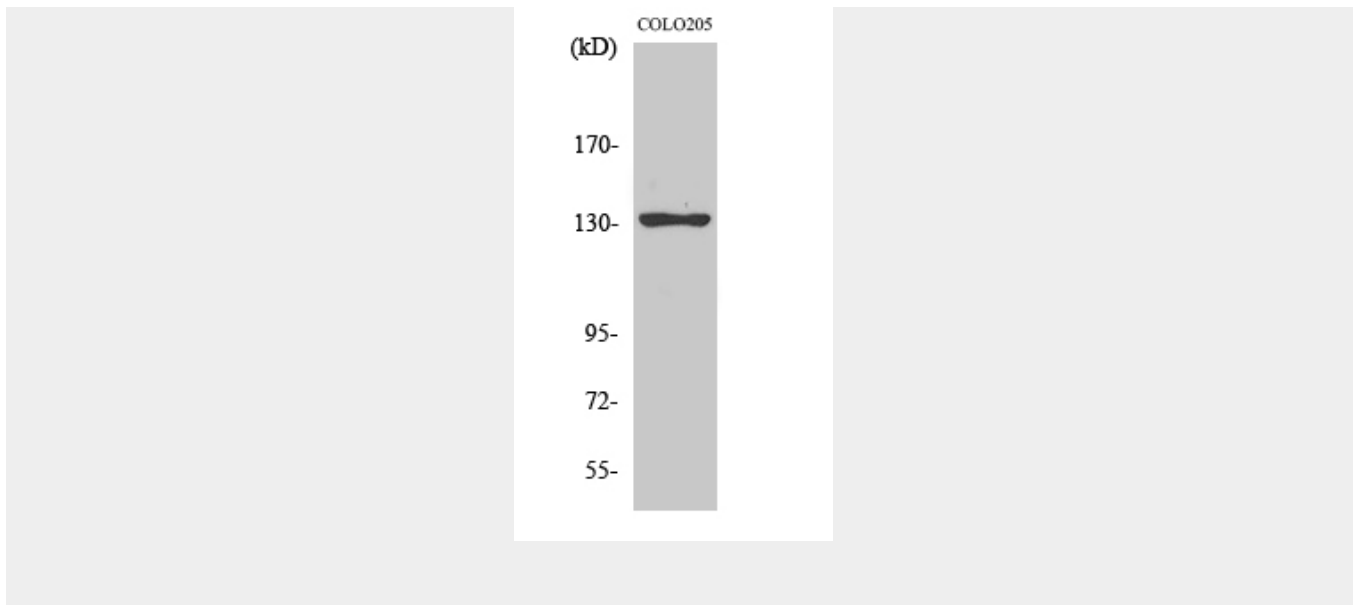
#### JMY Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### JMY Polyclonal Antibody - Images





### JMY Polyclonal Antibody - Background

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).