

MYOZAP Antibody
Catalog # ASC11294**Specification**

MYOZAP Antibody - Product Information

Application	WB, IHC, IF
Primary Accession	PQCAP1
Other Accession	NP_001018110 , 70166414
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	MYOZAP antibody can be used for detection of MYOZAP by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.

MYOZAP Antibody - Additional InformationGene ID **145781****Target/Specificity**

GCOM1; Multiple isoforms of MYOZAP are known to exist.

Reconstitution & Storage

MYOZAP antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

MYOZAP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MYOZAP Antibody - Protein Information**Name** MYZAP**Synonyms** MYOZAP**Function**

Plays a role in cellular signaling via Rho-related GTP- binding proteins and subsequent activation of transcription factor SRF (By similarity). Targets TJP1 to cell junctions. In cortical neurons, may play a role in glutamatergic signal transduction through interaction with the NMDA receptor subunit GRIN1 (By similarity).

Cellular Location

Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q5EB94}. Cell membrane {ECO:0000250|UniProtKB:Q5EB94}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q5EB94}; Cytoplasmic side {ECO:0000250|UniProtKB:Q5EB94}.

Cytoplasm, myofibril, sarcomere, I band {ECO:0000250|UniProtKB:Q5EB94}. Cytoplasm, myofibril, sarcomere, Z line {ECO:0000250|UniProtKB:Q5EB94}. Cell junction Note=Detected predominantly at the intercalated disk in cardiomyocytes, and at low levels on sarcomeric Z disks. Colocalizes with F-actin Colocalizes with cortical actin. {ECO:0000250|UniProtKB:Q5EB94}

Tissue Location

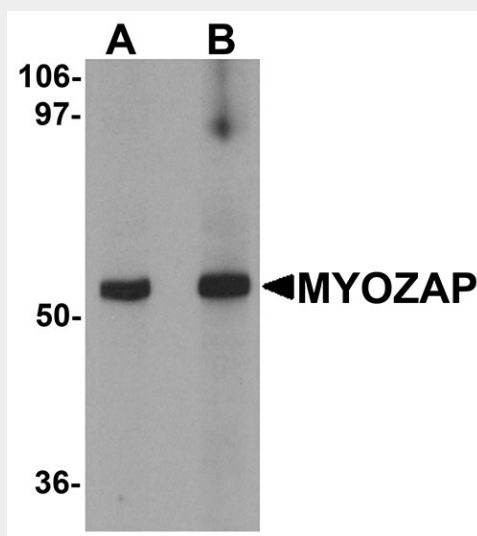
Detected in heart, liver, skeletal muscle, placenta, small intestine, lung, prostate and testis. Expressed in arrector pili muscle (at protein level) (PubMed:29034528)

MYOZAP Antibody - Protocols

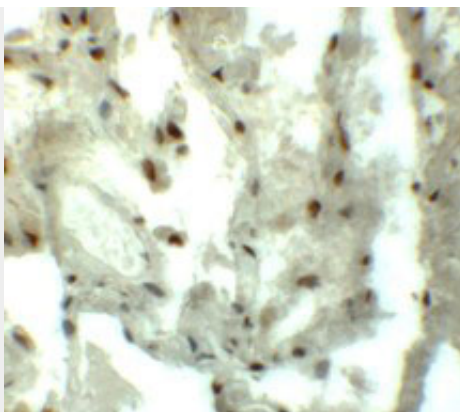
Provided below are standard protocols that you may find useful for product applications.

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

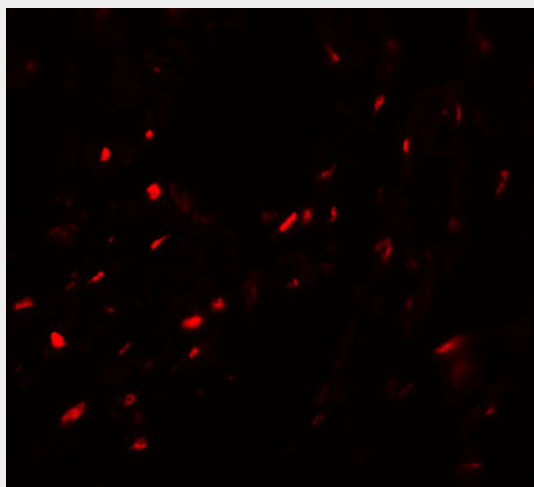
MYOZAP Antibody - Images



Western blot analysis of MYOZAP in rat kidney tissue lysate with MYOZAP antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of MYOZAP in human lung tissue with MYOZAP antibody at 5 µg/mL.



Immunofluorescence of MYOZAP in human lung tissue with MYOZAP antibody at 20 µg/mL.

MYOZAP Antibody - Background

MYOZAP Antibody: MYOZAP, also known as GRINL1A, is a 54 kDa highly conserved cardiac protein. It is strongly expressed in the heart and lung and is a novel component of intercalated disc. MYOZAP interacts with myosin phosphatase-RhoA interacting protein (MRIP) and acts as an activator of Rho-dependent SRF signaling. Knockdown study in zebrafish results in cardiomyopathy with severe dysfunction. The MYOZAP gene is part of a complex transcript unit that includes the gene for glutamate receptor, ionotropic, N-methyl D-aspartate-like 1A (GRINL1A). Transcription of this gene occurs at an upstream promoter, with two different groups of alternatively spliced variants: Gup for GRINL1A upstream transcripts and Gcom for GRINL1A combined transcripts.

MYOZAP Antibody - References

Van Tintelen JP, Hofstra RM, Wiesfeld AC, et al. Molecular genetics of arrhythmogenic right ventricular cardiomyopathy: emerging horizon? *Curr. Opin. Cardiol.* 2007; 22:185-92.

Seeger TS, Frank D, Rohr C, et al. Myozap, a novel intercalated disc protein, activates serum response factor-dependent signaling and is required to maintain cardiac function in vivo. *Circ. Res.* 2010; 106:880-90.

Roginski RS, Mohan Raj BK, Birditt B, et al. The human GRINL1A gene defines a complex transcription unit, an unusual form of gene organization in eukaryotes. *Genomics* 2004; 84:265-76.