

MYO1C Antibody (ascites) Mouse Monoclonal Antibody (Mab) Catalog # AM1905a

## Specification

## **MYO1C Antibody (ascites) - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW WB,E <u>O00159</u> <u>O27966</u>, <u>NP\_203693.3</u>, <u>NP\_001074248.1</u> Human Bovine Mouse Monoclonal IgM,k 121682

## MYO1C Antibody (ascites) - Additional Information

Gene ID 4641

Other Names Unconventional myosin-Ic, Myosin I beta, MMI-beta, MMIb, MYO1C

Target/Specificity

This MYO1C monoclonal antibody is generated from mouse immunized with MYO1C recombinant protein.

**Dilution** WB~~1:500~1000 E~~Use at an assay dependent concentration.

**Format** Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliguots to prevent freeze-thaw cycles.

**Precautions** MYO1C Antibody (ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

# MYO1C Antibody (ascites) - Protein Information

Name MYO1C

**Function** Myosins are actin-based motor molecules with ATPase activity. Unconventional myosins serve in intracellular movements. Their highly divergent tails are presumed to bind to



membranous compartments, which would be moved relative to actin filaments. Involved in glucose transporter recycling in response to insulin by regulating movement of intracellular GLUT4-containing vesicles to the plasma membrane. Component of the hair cell's (the sensory cells of the inner ear) adaptation-motor complex. Acts as a mediator of adaptation of mechanoelectrical transduction in stereocilia of vestibular hair cells. Binds phosphoinositides and links the actin cytoskeleton to cellular membranes.

#### **Cellular Location**

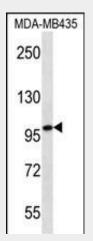
Cytoplasm. Nucleus. Cytoplasm, cell cortex {ECO:0000250|UniProtKB:Q9WTI7}. Cell projection, stereocilium membrane {ECO:0000250|UniProtKB:Q92002}. Cytoplasmic vesicle {ECO:0000250|UniProtKB:Q9WTI7}. Cell projection, ruffle membrane. Note=Colocalizes with CABP1 and CIB1 at cell margin, membrane ruffles and punctate regions on the cell membrane (By similarity). Colocalizes in adipocytes with GLUT4 at actin-based membranes (By similarity). Colocalizes with GLUT4 at insulin-induced ruffles at the cell membrane (By similarity). Localizes transiently at cell membrane to region known to be enriched in PIP2 (By similarity) Activation of phospholipase C results in its redistribution to the cytoplasm (By similarity). Colocalizes with RNA polymerase II (PubMed:22736583). Translocates to nuclear speckles upon exposure to inhibitors of RNA polymerase II transcription (PubMed:22736583) {ECO:0000250|UniProtKB:Q9WTI7, ECO:0000269|PubMed:22736583}

## MYO1C Antibody (ascites) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### MYO1C Antibody (ascites) - Images



MYO1C (Cat. #AM1905a) western blot analysis in MDA-MB435 cell line lysates (35µg/lane). This demonstrates the MYO1C antibody detected the MYO1C protein (arrow).

### MYO1C Antibody (ascites) - Background



This gene encodes a member of the unconventional myosin protein family, which are actin-based molecular motors. The protein is found in the cytoplasm, and one isoform with a unique N-terminus is also found in the nucleus. The nuclear isoform associates with RNA polymerase I and II and functions in transcription initiation. The mouse ortholog of this protein also functions in intracellular vesicle transport to the plasma membrane. Multiple transcript variants encoding different isoforms have been found for this gene. The related gene myosin IE has been referred to as myosin IC in the literature, but it is a distinct locus on chromosome 19. [provided by RefSeq].

## MYO1C Antibody (ascites) - References

Obrdlik, A., et al. FASEB J. 24(1):146-157(2010) Zadro, C., et al. Biochim. Biophys. Acta 1792(1):27-32(2009) Laakso, J.M., et al. Science 321(5885):133-136(2008) Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) : Olsen, J.V., et al. Cell 127(3):635-648(2006)