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Goat Anti-Myosin IXB Antibody
Peptide-affinity purified goat antibody
Catalog # AF1704a

Specification

Goat Anti-Myosin IXB Antibody - Product Information

Application	**WB**
Primary Accession	Q13459
Other Accession	NP_004136, 4650
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**243401**

Goat Anti-Myosin IXB Antibody - Additional Information

Gene ID 4650

Other Names
Unconventional myosin-IXb, Unconventional myosin-9b, MYO9B, MYR5

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-Myosin IXB Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Myosin IXB Antibody - Protein Information

Name MYO9B

Synonyms MYR5

Function
Myosins are actin-based motor molecules with ATPase activity. Unconventional myosins serve in intracellular movements. Binds actin with high affinity both in the absence and presence of ATP and its mechanochemical activity is inhibited by calcium ions (PubMed:9490638). Also acts as a GTPase activator for RHOA (PubMed:<a href="http://www.uniprot.org/citations/9490638"

target="_blank">9490638, PubMed:26529257). Plays a role in the regulation of cell migration via its role as RHOA GTPase activator. This is regulated by its interaction with the SLIT2 receptor ROBO1; interaction with ROBO1 impairs interaction with RHOA and subsequent activation of RHOA GTPase activity, and thereby leads to increased levels of active, GTP-bound RHOA (PubMed:26529257).

Cellular Location
Cytoplasm, cell cortex. Cytoplasm, perinuclear region. Cytoplasm, cytoskeleton. Note=In undifferentiated cells colocalizes with F-actin in the cell periphery while in differentiated cells its localization is cytoplasmic with the highest levels in the perinuclear region.

Tissue Location
Detected in peripheral blood leukocytes (at protein level) (PubMed:9490638). Expressed predominantly in peripheral blood leukocytes and at lower levels, in thymus, spleen, testis, prostate, ovary, brain, small intestine and lung.

Goat Anti-Myosin IXB 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 Cytomety
- Cell Culture

Goat Anti-Myosin IXB Antibody - Images

AF1704a (2 µg/ml) staining of Human Liver lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-Myosin IXB Antibody - Background

This gene encodes a member of the myosin family of actin-based molecular motor heavy chain proteins. The protein has four IQ motifs located in the neck domain that bind calmodulin, which serves as a light chain. The protein complex has a single-headed structure and exhibits processive movement on actin filaments toward the minus-end. The protein also has rho-GTPase activity. Polymorphisms in this gene are associated with celiac disease and ulcerative colitis susceptibility.

Multiple transcript variants encoding different isoforms have been found for this gene.

Goat Anti-Myosin IXB Antibody - References

Association analysis of myosin IXB and type 1 diabetes. Persengiev S, et al. Hum Immunol, 2010 Jun. PMID 20303373.
Intestinal barrier gene variants may not explain the increased levels of antigliadin antibodies, suggesting other mechanisms than altered permeability. Wolters VM, et al. Hum Immunol, 2010 Apr. PMID 20096742.
Mutation of ARHGAP9 in patients with coronary spastic angina. Takefuji M, et al. J Hum Genet, 2010 Jan. PMID 19911011.
Association between genetic variants in myosin IXB and Crohn's disease. Cooney R, et al. Inflamm Bowel Dis, 2009 Jul. PMID 19235913.
MYO9B polymorphisms in multiple sclerosis. Kemppinen A, et al. Eur J Hum Genet, 2009 Jun. PMID 19142207.