



Myosin IXb Monoclonal Antibody

Catalog No	YP-mAb-03165
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	MYO9B
Immunogen	The antiserum was produced against synthesized peptide derived from human MYO9B. AA range:304-353
Specificity	Myosin IXb Monoclonal Antibody detects endogenous levels of Myosin IXb protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Unconventional myosin-IXb;Unconventional myosin-9b;MYR5;myosin IXB; MYO9B variant protein;MYO9B
Observed Band	250kD
Calculated Molecular Weight	250kD
Cell Pathway	Cytoplasm, cell cortex . Cytoplasm, perinuclear region . Cytoplasm, cytoskeleton . 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 Specificity	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.
Function	disease:Genetic variation in MYO9B is the cause of susceptibility to celiac disease 4 (CELIAC4) [MIM:609753]. Celiac disease [MIM:212750] is a multifactorial disorder of the small intestine that is influenced by both environmental and genetic factors. It is characterized by malabsorption resulting from inflammatory injury to the mucosa of the small intestine after the ingestion of wheat gluten or related rye and barley proteins. In its classic form, celiac



disease is characterized in children by malabsorption and failure to thrive.,
function:Myosins are actin-based motor molecules with ATPase activity.
Unconventional myosins serve in intracellular movements. May be involved in
the remodeling of the actin cytoskeleton. Binds actin with high affinity both in the
absence and presence of ATP and its mechanochemical activity is inhibited by
calcium ions. Also acts as a GTPase activating protei

Background

This gene encodes a member of the myosin family of actin-based molecular motor heavy chain proteins. The protein represents an unconventional myosin; it should not be confused with the conventional non-muscle myosin-9 (MYH9). 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. [provided by RefSeq, Dec 2011],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images