

Product name:	Myosin IXb Rabbit Polyclonal Antibody
Cat number:	ABN14343
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human MYO9B. AA range:304-353
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:50-1:300,ELISA 1:2000-1:20000
Molecular Weight:	250kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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],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 protein on Rho.,online information:MYO9B entry,sequence caution:Chimera. The C-terminal sequence from position 1917 onwards is probably a chimera.,similarity:Contains 1 myosin head-like domain.,similarity:Contains 1 phorbol-ester/DAG-type zinc finger.,similarity:Contains 1 Ras-associating domain.,similarity:Contains 1 Rho-GAP domain.,similarity:Contains 4 IQ domains.,subcellular location: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:Expressed predominantly in peripheral blood leukocytes and at lower levels, in thymus, spleen, testis, prostate, ovary, brain, small intestine and lung.,