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MYH9 Antibody (N-term Y158)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16804a

Product Information

Application	WB, FC, E
Primary Accession	P35579
Other Accession	Q62812, Q8VDD5, P14105, NP_002464.1
Reactivity	Human, Mouse
Predicted	Chicken, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36361
Calculated MW	226532
Antigen Region	134-165

Additional Information

Gene ID	4627
Other Names	Myosin-9, Cellular myosin heavy chain, type A, Myosin heavy chain 9, Myosin heavy chain, non-muscle IIa, Non-muscle myosin heavy chain A, NMMHC-A, Non-muscle myosin heavy chain IIa, NMMHC II-a, NMMHC-IIA, MYH9
Target/Specificity	This MYH9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 134-165 amino acids from the N-terminal region of human MYH9.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MYH9 Antibody (N-term Y158) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MYH9
Function	Cellular myosin that appears to play a role in cytokinesis, cell shape, and

	specialized functions such as secretion and capping. Required for cortical actin clearance prior to oocyte exocytosis (By similarity). Promotes cell motility in conjunction with S100A4 (PubMed:16707441). During cell spreading, plays an important role in cytoskeleton reorganization, focal contact formation (in the margins but not the central part of spreading cells), and lamellipodial retraction; this function is mechanically antagonized by MYH10 (PubMed:20052411).
Cellular Location	Cytoplasm, cytoskeleton. Cytoplasm, cell cortex {ECO:0000250|UniProtKB:Q8VDD5}. Cytoplasmic vesicle, secretory vesicle, Cortical granule {ECO:0000250|UniProtKB:Q8VDD5}. Cell membrane Note=Colocalizes with actin filaments at lamellipodia margins and at the leading edge of migrating cells (PubMed:20052411). In retinal pigment epithelial cells, predominantly localized to stress fiber-like structures with some localization to cytoplasmic puncta (PubMed:27331610).
Tissue Location	In the kidney, expressed in the glomeruli. Also expressed in leukocytes.

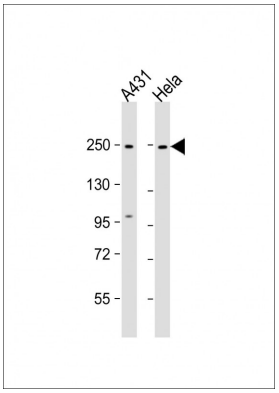
Background

This gene encodes a myosin IIA heavy chain that contains an IQ domain and a myosin head-like domain. The protein is involved in several important functions, including cytokinesis, cell motility and maintenance of cell shape. Defects in MYH9 are the cause of non-syndromic sensorineural deafness autosomal dominant type 17, Epstein syndrome, Alport syndrome with macrothrombocytopenia, Sebastian syndrome, Fechtner syndrome and macrothrombocytopenia with progressive sensorineural deafness.

References

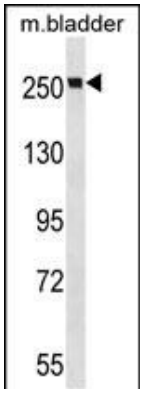
Arii, J., et al. Nature 467(7317):859-862(2010)
Genovese, G., et al. Kidney Int. 78(7):698-704(2010)
Tzur, S., et al. Hum. Genet. 128(3):345-350(2010)
Bostrom, M.A., et al. Hum. Genet. 128(2):195-204(2010)
Oleksyk, T.K., et al. PLoS ONE 5 (7), E11474 (2010) :

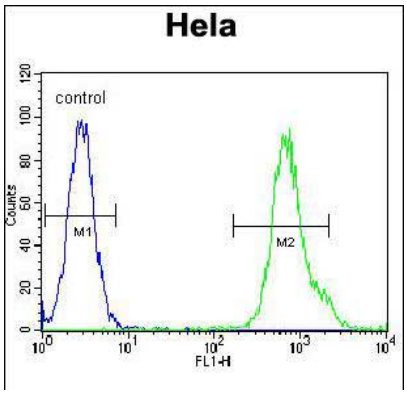
Images



All lanes : Anti-MYH9 Antibody (N-term Y158) at 1:1000 dilution Lane 1: A431 whole cell lysate Lane 2: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 227 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

MYH9 Antibody (N-term Y158) (Cat. #AP16804a) western blot analysis in mouse bladder tissue lysates (35ug/lane).This demonstrates the MYH9 antibody detected the MYH9 protein (arrow).





MYH9 Antibody (N-term Y158) (Cat. #AP16804a) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.