

Rabbit Anti-non-muscle Myosin IIA/Biotin Conjugated antibody

SL8564R-Bio

Product Name	Anti-non-muscle Myosin IIA/Biotin
Chinese Name	生物素标记的非平滑肌肌球蛋白 2A 抗体
Alias	non-muscle Iia; type A; Cellular myosin heavy chain; Cellular myosin heavy chain type A; DFNA 17; DFNA17; EPSTS; FTNS; MHA; MYH 2A; MYH 9; MYH2A; MYH9; MYH9_HUMAN; MYHas8; MyHC 2A; MyHC Iia; MyHC2A; MyHCIIa; MYHSA 2; MYHSA2; Myosin 9; Myosin heavy chain 9; Myosin heavy chain 9 non muscle; Myosin heavy chain; Myosin heavy chain non muscle Iia; Myosin heavy chain nonmuscle Iia; Myosin heavy polypeptide 2; Myosin heavy polypeptide 9 non muscle; Myosin-9; Myosin9; NMHC II A; NMMHC A; NMMHC II a; NMMHC II-a; NMMHC IIA; NMMHC-A; NMMHC-IIA; NMMHCA; Non muscle myosin heavy chain A; Non muscle myosin heavy chain; Non muscle myosin heavy chain II A; Non muscle myosin heavy polypeptide 9; Non-muscle myosin heavy chain A; Non-muscle myosin heavy chain Iia; Nonmuscle myosin heavy chain A; Nonmuscle myosin heavy chain II A.
Research Area	Cell biology Signal transduction Extracellular matrix
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human(predicted:Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit) ELISA=1:500-5000
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	216kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human non-muscle Myosin IIA
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

background:

This gene encodes a conventional non-muscle myosin; this protein should not be confused with the unconventional myosin-9a or 9b (MYO9A or MYO9B). The encoded protein is a myosin IIA heavy chain that contains an IQ domain and a myosin head-like domain which is involved in several important functions, including cytokinesis, cell motility and maintenance of cell shape. Defects in this gene have been associated with non-syndromic sensorineural deafness autosomal dominant type 17, Epstein syndrome, Alport syndrome with macrothrombocytopenia, Sebastian syndrome, Fechtner syndrome and macrothrombocytopenia with progressive sensorineural deafness. [provided by RefSeq, Dec 2011]

Function:

Cellular myosin that appears to play a role in cytokinesis, cell shape, and specialized functions such as secretion and capping.

Subunit:

Interacts with PDLIM2. Interacts with SLC6A4. Myosin is a hexameric protein that consists of 2 heavy chain subunits (MHC), 2 alkali light chain subunits (MLC) and 2 regulatory light chain subunits (MLC-2). Interacts with RASIP1. Interacts with DDR1. Interacts with SVIL and HTRA3.

Product Detail

Subcellular Location:

Cytoplasm, cytoskeleton. Cytoplasm, cell cortex. Note=Colocalizes with actin filaments at lamellipodia margins and at the leading edge of migrating cells.

Tissue Specificity:

In the kidney, expressed in the glomeruli. Also expressed in leukocytes.

DISEASE:

Defects in MYH9 are the cause of May-Hegglin anomaly (MHA). MHA is an autosomal dominant macrothrombocytopenia characterized by thrombocytopenia, giant platelets and leukocyte inclusions appearing as highly parallel paracrystalline bodies.

Defects in MYH9 are the cause of Sebastian syndrome (SBS). SBS is an autosomal dominant macrothrombocytopenia characterized by thrombocytopenia, giant platelets and leukocyte inclusions that are smaller and less organized than in May-Hegglin anomaly.

Defects in MYH9 are the cause of Fechtner syndrome (FTNS). FTNS is an

autosomal dominant macrothrombocytopenia characterized by thrombocytopenia, giant platelets and leukocyte inclusions that are small and poorly organized. Additionally, FTNS is distinguished by Alport-like clinical features of sensorineural deafness, cataracts and nephritis. Defects in MYH9 are the cause of Alport syndrome with macrothrombocytopenia (APSM) . APSM is an autosomal dominant disorder characterized by the association of ocular lesions, sensorineural hearing loss and nephritis (Alport syndrome) with platelet defects.

Similarity:

Contains 1 IQ domain.

Contains 1 myosin head-like domain.

Database links:

[Entrez Gene: 404108](#) Cow

[Entrez Gene: 4627](#) Human

[Entrez Gene: 17886](#) Mouse

[Entrez Gene: 25745](#) Rat

[Omim: 160775](#) Human

[SwissProt: P35579](#) Human

[SwissProt: Q8VDD5](#) Mouse

[SwissProt: Q62812](#) Rat

[Unigene: 474751](#) Human

[Unigene: 29677](#) Mouse

[Unigene: 11385](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.