10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Phospho-MYH9(Y158) Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3775a

Specification

Phospho-MYH9(Y158) Antibody - Product Information

Application	**DB,E**
Primary Accession	P35579
Other Accession	Q62812, Q8VDD5, P14105, NP_002464.1
Reactivity	**Human**
Predicted	**Chicken, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**

Phospho-MYH9(Y158) Antibody - 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 phosphopeptide corresponding to amino acid residues surrounding Y158 of human MYH9.

Dilution
DB~~1:500
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
Phospho-MYH9(Y158) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-MYH9(Y158) Antibody - 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).

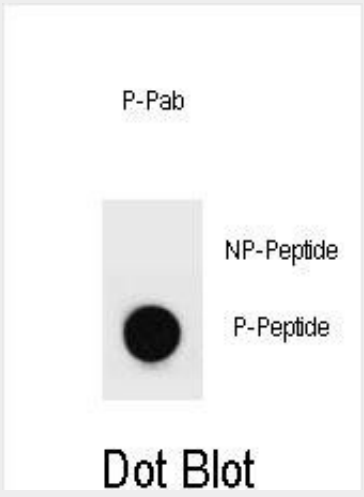
Tissue Location
In the kidney, expressed in the glomeruli. Also expressed in leukocytes.

Phospho-MYH9(Y158) 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

Phospho-MYH9(Y158) Antibody - Images



Dot blot analysis of Phospho-MYH9-Y158 Antibody Phospho-specific Pab (Cat. #AP3775a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.6ug per ml.

Phospho-MYH9(Y158) Antibody - 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.

Phospho-MYH9(Y158) Antibody - 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) :

Phospho-MYH9(Y158) Antibody - Citations

- Src-dependent Tyrosine Phosphorylation of Non-muscle Myosin Heavy Chain-IIA Restricts Listeria monocytogenes Cellular Infection.