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# Phospho-MYH9(Y158) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3775a

## Product Information

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| **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 |
| **Clone Names** | RB36361 |
| **Calculated MW** | 226532 |

## Additional Information

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| **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. |

## Protein Information

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| **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 |

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| | 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. |

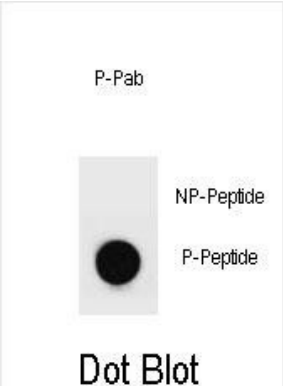
## Background

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




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.

## Citations

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