

Phospho-MYH9(Y158) Blocking Peptide
Synthetic peptide
Catalog # BP3775a**Specification**

Phospho-MYH9(Y158) Blocking Peptide - Product Information

Primary Accession [P35579](#)
Other Accession [Q62812](#), [Q8VDD5](#), [P14105](#), [NP_002464.1](#)

Phospho-MYH9(Y158) Blocking Peptide - 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

The synthetic peptide sequence is selected from aa 149-165 of HUMAN MYH9

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-MYH9(Y158) Blocking Peptide - 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) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

Phospho-MYH9(Y158) Blocking Peptide - Images**Phospho-MYH9(Y158) Blocking Peptide - 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) Blocking Peptide - 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) :