

C-Fragment of Nonmuscle Myosin Heavy Chain 9

Human, Recombinant, His-tagged (rHucNMHC)

Expressed in *E. coli*

Cat. No. CRP0854

Lot. No. (See product label)

PRODUCT INFORMATION

Description: Myosin interacts with actin in muscle and nonmuscle cells. Myosin molecules consist of two major regions: tails and heads. C-fragment is myosin tails domain. C-fragment of nonmuscle myosin heavy chain 9 is expressed in *E. coli*.

M. W. : 25,000 Da

Recombinant: Expressed in *E. coli*

Purity: >95% as determined by SDS-PAGE.

Storage buffer: Liquid. In Tris-HCl Buffer (pH 7.4).

REFERENCES

1. Starr R, Offer G. The interaction of C-protein with heavy meromyosin and subfragment-2. *Biochem. J.* 1978; 171 (3): 813–816.
2. Lee CL, Atassi MZ. Enzymic and immunochemical properties of lysozyme. Accurate definition of the antigenic site around the disulphide bridge 30-115 (site 3) by 'surface-simulation' synthesis. *Biochem. J.* 1978; 167 (3): 571–581.
3. Tweed WA, Phua WT, Chong KY, et al. Large tidal volume ventilation improves pulmonary gas exchange during lower abdominal surgery in Trendelenburg's position. *Canadian journal of anaesthesia = Journal canadien d'anesthésie* 1992; 38 (8): 989–995.
4. Simons M, Wang M, McBride OW, et al. Human nonmuscle myosin heavy chains are encoded by two genes located on different chromosomes. *Circ. Res.* 1991; 69 (2): 530–539.

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GENE INFORMATION

Gene Name: [MYH9](#)

Summary: The gene is expressed in the kidney, glomeruli. Also expressed in leukocytes. Cellular myosin appears to play a role in cytokinesis, cell shape, and specialized functions such as secretion and capping. 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). The rodlike tail sequence is highly repetitive, showing cycles of a 28-residue repeat pattern composed of 4 heptapeptides, characteristic for alpha-helical coiled coils.

Synonyms: RP1-68O2.1; DFNA17; EPSTS; FTNS; MGC104539; MHA; NMHC-II-A; NMMHCA; NMMHC-IIA; OTTHUMP00000028706; Myosin-9; Cellular myosin heavy chain, type A; Myosin heavy chain 9; Myosin heavy chain, non-muscle IIA; Non-muscle myosin heavy chain IIA; Non-muscle myosin heavy chain-A; deafness, autosomal dominant 17; myosin, heavy chain 9, non-muscle; myosin, heavy polypeptide 9, non-muscle; non-muscle myosin heavy chain; non-muscle myosin heavy polypeptide 9; nonmuscle myosin heavy chain II-A

mRNA Refseq: [NM_002473.3](#)

Protein Refseq: [NP_002464.1](#)

MIM: [160775](#)

GeneID: [4627](#)

Uniprot ID: [P35579](#)

Chromosome Location: 22q13.1

Pathway: Regulation of actin cytoskeleton, Tight junction

Function: ATP binding, ATPase activity, actin binding, actin filament binding, actin-dependent ATPase activity, calmodulin binding, microfilament motor activity, motor activity, nucleotide binding, protein anchor, protein homodimerization activity.

Process: actin cytoskeleton reorganization, actin filament-based movement, angiogenesis, blood vessel endothelial cell migration, cytokinesis, integrin-mediated signaling pathway, leukocyte migration, membrane protein ectodomain proteolysis.

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