

## Active Recombinant Human MYLPF

**Cat. No.** MYLPF-574H    **Lot. No.** (See product label)

### SPECIFICATION

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b>                    | Recombinant HumanNon-Muscle Myosin-II Regulatory Light Chain was expressed in <i>E. Coli</i> .                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Species</b>                             | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Source</b>                              | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Description</b>                         | Non muscle Myosins are required for cytokinesis at the end of cell division, when a contractile ring near the plasmalemma divides the cytoplasm of the daughter cells, They are involved in cytoplasmic streaming movements in tissues, and especially in activation of motile cells such as fibroblasts and macrophages, Activation of non-muscle myosin-II is achieved by phosphorylation of Ser33 in the motif KKRPQRATSN by a dedicated, Ca <sup>+2</sup> Calmodulin regulated light chain kinase (MLCK). |
| <b>Formulation</b>                         | 100μpurified human NMM protein at 0.2mg/ml in 20mM HEPES-KOH, pH7, 50mM NaCl, 1mM EDTA and 1mM DTT.                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Application And Suggested Dilutions</b> | ELISA • Inhibition Assays • Western Blotting.                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Activity</b>                            | Assayed for phosphorilation by MLCK.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Storage &amp; Stability</b>             | Store vial at -20°C to -80°C. When stored at the recommended temperature, this protein is stable for 12 months.                                                                                                                                                                                                                                                                                                                                                                                               |

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## GENE INFORMATION

|                            |                                                                                                                                                                                                                                                                                              |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>           | myosin light chain, phosphorylatable, fast skeletal muscle [Homo sapiens]                                                                                                                                                                                                                    |
| <b>Synonyms</b>            | myosin light chain, phosphorylatable, fast skeletal muscle; MRLC2; MYL11; HUMMLC2B; MGC13450; DKFZp779C0757; MYLPF; myosin light chain 2; myosin regulatory light chain 2; fast skeletal myosin light chain 2; myosin, light chain 11, regulatory; MLC2B; Fast skeletal myosin light chain 2 |
| <b>Gene ID</b>             | 29895                                                                                                                                                                                                                                                                                        |
| <b>mRNA Refseq</b>         | NM_013292                                                                                                                                                                                                                                                                                    |
| <b>Protein Refseq</b>      | NP_037424                                                                                                                                                                                                                                                                                    |
| <b>UniProt ID</b>          | Q96A32                                                                                                                                                                                                                                                                                       |
| <b>Chromosome Location</b> | 16p11.2                                                                                                                                                                                                                                                                                      |
| <b>Pathway</b>             | Focal adhesion; Leukocyte transendothelial migration; Regulation of actin cytoskeleton; Tight junction                                                                                                                                                                                       |
| <b>Function</b>            | structural constituent of muscle; calcium ion binding; motor activity                                                                                                                                                                                                                        |

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