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Product Information

LC20, GST-tagged, mouse
recombinant, expressed in *E. coli* cells

Catalog Number **SRP5203**
Storage Temperature –70 °C

Synonyms: MYL9, MGC3505, MLC2, MRLC1, MYRL2

Product Description

LC20 is the myosin light chain that may regulate muscle contraction by modulating the ATPase activity of myosin heads.[1] LC20 protein binds calcium and is activated by myosin light chain kinase. Two transcript variants encoding different isoforms have been found for LC20 and the deduced 172-amino acid protein is highly conserved, with only 3 differences between the human and chicken proteins. Light chain phosphorylation causes the folded monomeric form of myosin to extend and assemble into filaments. This observation established the involvement of the LC20 in conformational transitions of smooth muscle myosin.[2]

Recombinant, full-length, mouse LC20 was expressed in *E. coli* cells using an N-terminal GST tag. The gene accession number is BC055439. Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~45 kDa

Purity: 70–95% (SDS-PAGE, see Figure 1)

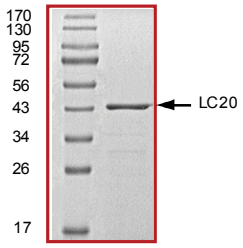
Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at –70 °C is recommended. After opening, aliquot into smaller quantities and store at –70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.
SDS-PAGE Gel of Typical Lot
70–95% (densitometry)



References

1. Wagner, P.D. et al., Regulation of the actin-activated ATPase of aorta smooth muscle myosin. J. Biol. Chem., **261**(17), 7778-83 (1986).
2. Trybus, K.M. et al., The regulatory light chain is required for folding of smooth muscle myosin. J. Biol. Chem., **263**(31), 16485-92 (1988).

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