

Recombinant Human MYL9 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50689

Size: 10ug, 100ug

Protein Name: Myosin regulatory light polypeptide 9 (20 kDa myosin light chain) (LC20) (MLC-2C) (Myosin RLC) (Myosin regulatory light chain 2, smooth muscle isoform) (Myosin regulatory light chain 9) (Myosin regulatory light chain MRLC1)

Synonym: MYL9, MLC2, MRLC1, MYRL2

UniProt ID: P24844

UniProt Link: www.uniprot.org/uniprotkb/P24844/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 172 AA

Molecular Weight: 20 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MSSKRAKAKTTKKRPQRATSNVFMFDQSQIQEFKEAFNMIDQNRDGFIDKEDLHDMLASLGKNPT
DEYLEGMMSEAPGPINFTMFLTMFGEKLNKGTDPEDVIRNAFACFDEEASGFIHEDHLRELLTTMGDR
FTDEEVDEMYREAPIDKKGNFNYVEFTRILKHGAKDKDD

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Myosin regulatory light polypeptide 9 (20 kDa myosin light chain) (LC20) (MLC-2C) (Myosin RLC) (Myosin regulatory light chain 2, smooth muscle isoform) (Myosin regulatory light chain 9) (Myosin regulatory light chain MRLC1) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Myosin regulatory subunit that plays an important role in regulation of both smooth muscle and nonmuscle cell contractile activity via its phosphorylation (PubMed:11942626, PubMed:2526655). Implicated in cytokinesis, receptor capping, and cell locomotion (PubMed:11942626, PubMed:2526655). In myoblasts, may regulate PIEZO1-dependent cortical actomyosin assembly involved in myotube formation (By similarity).

Subcellular Localization: Cytoplasm, cytoskeleton . Cytoplasm, cell cortex . Note=Colocalizes with F-actin, MYH9 and PIEZO1 at the actomyosin cortex in myoblasts.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.