## PRODUCT INFORMATION

## Expression system

E.coli

## Domain

1-172aa

## UniProt No.

P24844

## NCBI Accession No.

NP_006088

## Alternative Names

Myosin light chain 9, 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, MLC2, MYRL2

## PRODUCT SPECIFICATION

## Molecular Weight

21.9 kDa (192aa) confirmed by MALDI-TOF

## Concentration

$0.5 \mathrm{mg} / \mathrm{ml}$ (determined by Bradford assay)

## Formulation

Liquid in. 20 mM Tris- HCl buffer (pH 8.0) containing $0.1 \mathrm{M} \mathrm{NaCl}, 1 \mathrm{mM} \mathrm{DTT,10} \mathrm{\%} \mathrm{glycerol}$

## Purity

> 90\% by SDS-PAGE

## Tag

His-Tag

## Application

SDS-PAGE

## Storage Condition

Can be stored at +2 C to +8 C for 1 week. For long term storage, aliquot and store at -20 C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

## Description

MYL9, also known as MLC2, is one of the numerous regulatory myosin light chains. Regulatory myosin light chains regulate contraction in smooth muscle and non-muscle cells via phosphorylation by myosin light chain kinase (MLCK). Phosphorylation of regulatory myosin light chains is catalyzed by MLCK in the presence of calcium and calmodulin and it increases the actin-activated myosin ATPase activity, thereby regulates the
contractile activity. Recombinant human MYL9 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

## Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH> MSSKRAKAKT TKKRPQRATS NVFAMFDQSQ IQEFKEAFNM IDQNRDGFID KEDLHDMLAS LGKNPTDEYL EGMMSEAPGP INFTMFLTMF GEKLNGTDPE DVIRNAFACF DEEASGFIHE DHLRELLTTM GDRFTDEEVD EMYREAPIDK KGNFNYVEFT RILKHGAKDK DD

## General References

Gilles L., et al. (2009) Blood. 114(19):4221-32.
Medjkane S., et al. (2009) Nat Cell Biol. 11(3):257-68.

## DATA

## SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

