

Recombinant human MYL12B protein

Catalog Number: ATGP1577

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-172aa

UniProt No.

O14950

NCBI Accession No.

NP_001138417

Alternative Names

Myosin light chain 12B regulatory, Myosin, light chain 12B regulatory, MLC-B, MRLC2

PRODUCT SPECIFICATION

Molecular Weight

22.3 kDa (196aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.2M NaCl, 40% glycerol, 2mM DTT

Purity

> 90% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

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

BACKGROUND

Description

Myosin, light chain 12B, regulatory, also known as MYL12B, is a hexameric ATPase cellular motor protein. Myosin is composed of two heavy chains, two nonphosphorylatable alkali light chains, and two phosphorylatable regulatory light chains. MYL12B regulates contraction in smooth muscle and non-muscle cells via phosphorylation by myosin light chain kinase (MLCK). Phosphorylation of myosin regulatory light chains, catalyzed by MLCK in the presence of calcium and calmodulin, increases Actin-activated myosin ATPase activity, thereby regulating contractile activity. Recombinant human MYL12B protein, fused to His-tag at N-terminus, was

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expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGSH>MSSKKA KTKTTKRPQ RATSNVFAMF DQSQIQEFKE AFNMIDQNRD
GFIDKEDLHD MLASLGKNPT DAYLDAMMNE APGPINFTMF LTMFGEKLNQ TDPEDVIRNA FACFDEEATG TIQEDYLREL
LTTMGRFTD EEVDLYREA PIDKKGNFNY IEFTRILKHG AKDKDD

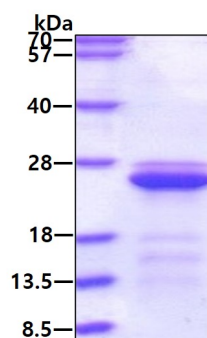
General References

Kumar C C., et al. (1989) Biochemistry. 28:4027-4035.

Kolodney M S., et al. (1999) J Physiol. 515: 87-92.

DATA

SDS-PAGE



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