Recombinant human MYLPF protein

Catalog Number: ATGP1097

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-169aa

UniProt No.
Q96A32

NCBI Accession No.
NP_037424

Alternative Names
Myosin regulatory light chain 2 skeletal muscle isoform, Myosin regulatory light chain 2, skeletal muscle isoform, MRLC2, MYL11, Fast skeletal myosin light chain 2, MLC2B

PRODUCT SPECIFICATION

Molecular Weight
21.2 kDa (189aa) confirmed by MALDI-TOF

Concentration
0.25mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 100mM NaCl

Purity
> 85% 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 regulatory light chains, including MRCL3, MYLPF and MYL9, regulate 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 the actin-activated myosin ATPase activity, thereby regulating the contractile activity. MYLPF is critically important for fast and slow skeletal muscle development. Recombinant human MYLPF protein, fused to His-tag at N-terminus, was expressed in E.

coli and purified by using conventional chromatography techniques.

Amino acid Sequence

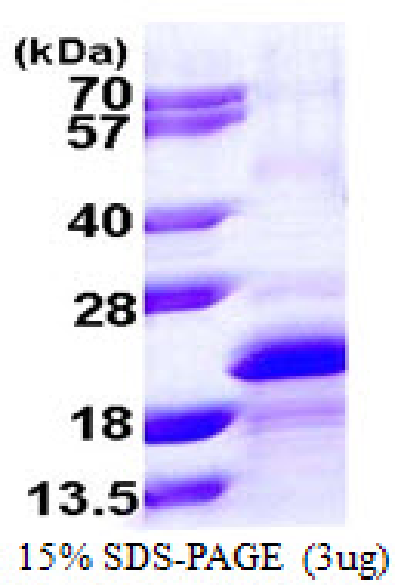
MGSSHHHHHH SSGLVPRGSH MAPKRAKRRT VEGGSSSVFS MFDQTQIQEF KEAFTVIDQN RDGIIDKEDL RDTFAAMGRL NVKNEELDAM MKEASGPINF TVFLTMFGEK LKGADPEDVI TGAFKVLDPE GKGTIKKKFL EELLTTQCDR FSQEEIKNMW AAFPPDVGGN VDYKNICYVI THGDAKDQE

General References

Wang Y, et al. (2007) FASEB J. 21(9):2205-14.
Gittings W, et al. (2011) J Muscle Res Cell Motil. 31(5-6):337-48.

DATA

SDS-PAGE



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