Recombinant human MYL6B protein
Catalog Number: ATGP1206

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-208aa

UniProt No.
P14649

NCBI Accession No.
NP_002466

Alternative Names
Myosin light chain 6B, MLC1SA

PRODUCT SPECIFICATION

Molecular Weight
25.2 kDa (231aa) confirmed by MALDI-TOF

Concentration
1mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 2mM DTT

Purity
> 95% 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
MYL6B is a heavy chain regulator found in smooth muscle and non-muscle Myosin complexes. Contractile activity in smooth muscle is regulated by the calcium/calmodulin-dependent phosphorylation of Myosin light chain by Myosin light chain kinase. MYL6B does not bind calcium during contraction. It is primarily found in a hexamer consisting of four light chains and two heavy chains. It most commonly interacts with Myosin Va, an Actin based motor that can move in large steps. MYL6B is expressed in most tissues with neurons and smooth muscle tissue having the highest expression. Recombinant human MYL6B protein, fused to His-tag at N-

NKMAX

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

Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MGSMPPKKDV PVKKPAGPSI SKPAAKPAAA GAPPAKTKAE PAVPQAPQKT QEPPVDLSKV VIEFNKDQLE EFKEAFELFD RVGDGKILYS QCGDVMRALG QNPTNAEVLK VLGNPKSDEL KSRRVDFETF LPMLQAVAKN RGQGTYEDYL EGFRVFDKEG NGKVMGAELR HVLTTLGEKM TEEEVETVLA GHEDSNGCIN YEAFLKHILS V
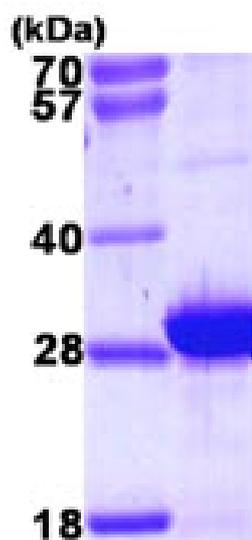
General References

Mitsui T., et al. (1992) J Biol Chem. 267(23):16727-35.
Takeya K., et al. (2008) Am J Physiol Renal Physiol. 294(6):1487-92.

DATA

SDS-PAGE

15% SDS-PAGE (3ug)

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