abcam

Product datasheet

Recombinant human Myosin light chain kinase/MLCK protein ab55674

1 References 3 图像

描述

产品名称 重组人Myosin light chain kinase/MLCK蛋白

生物活性 Specific Activity: 200nm/min/mg.

纯**度** > 95 % Densitometry.

Affinity purified.

表达系统 Insect cells

蛋白长度 Protein fragment

无动物成分 No

性质 Recombinant

种属 Human

氨基酸 1425 to 1776

标签 GST tag N-Terminus

技术指标

Our **Abpromise guarantee** covers the use of **ab55674** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用 SDS-PAGE

Functional Studies

形式 Liquid

补充说明 ab60014 (Mouse MYL9 full length protein) can be utilized as a substrate for assessing Kinase

activity

Previously labelled as Myosin light chain kinase.

制备和贮存

稳定性和存储 Shipped on dry ice. Upon delivery aliquot and store at -80℃. Avoid freeze / thaw cycles.

pH: 7.50

Constituents: 0.0038% EGTA, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 0.00292%

1

This product is an active protein and may elicit a biological response in vivo, handle with caution.

常规信息

功能

Calcium/calmodulin-dependent enzyme implicated in smooth muscle contraction via phosphorylation of myosin light chains (MLC). Also regulates actin-myosin interaction through a non-kinase activty (By similarity). Implicated in the regulation of endothelial as well as vascular permeability. In the nervous system it has been shown to control the growth initiation of astrocytic processes in culture and to participate in transmitter release at synapses formed between cultured sympathetic ganglion cells. Critical participant in signaling sequences that result in fibroblast apoptosis.

组织特异性

Smooth muscle and non-muscle isozymes are expressed in a wide variety of adult and fetal tissues and in cultured endothelium with qualitative expression appearing to be neither tissue- nor development-specific. Non-muscle isoform 2 is the dominant splice variant expressed in various tissues. Telokin has been found in a wide variety of adult and fetal tissues.

序列相似性

Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family.

Contains 1 fibronectin type-III domain.

Contains 9 lg-like C2-type (immunoglobulin-like) domains.

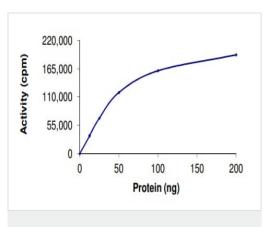
Contains 1 protein kinase domain.

翻译后修饰

MLCK is probably down-regulated by phosphorylation.

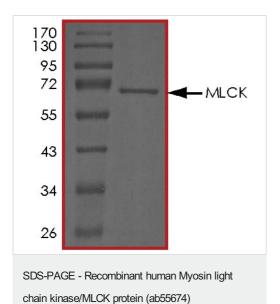
The C-terminus is deglutamylated by AGTPBP1/ CCP1, AGBL1/CCP4 and AGBL4/CCP6, leading to the formation of Myosin light chain kinase, smooth muscle, deglutamylated form. The consequences of C-terminal deglutamylation are unknown.

图片

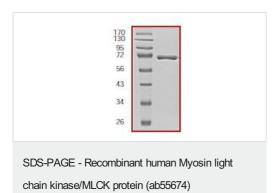


Functional Studies - Recombinant human Myosin light chain kinase/MLCK protein (ab55674)

The specific activity of Myosin light chain kinase/MLCK (ab55674) was determined to be 180 nmol/min/mg as per activity assay protocol



SDS PAGE analysis of ab55674



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.cn/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors