abcam

Product datasheet

Recombinant human Myosin light chain kinase/MLCK protein ab55674

1 References 画像数 3

製品の詳細

製品名 Recombinant human Myosin light chain kinase/MLCK protein

生理活性 Specific Activity: 200nm/min/mg.

精製度 > 95 % Densitometry.

Affinity purified.

発現系 Insect cells

タンパク質長 Protein fragment

Animal free No

由来 Recombinant

生物種 Human

領域 1425 to 1776

タグ GST tag N-Terminus

特性

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.

アプリケーション SDS-PAGE

Functional Studies

製品の状態 Liquid

備考 <u>ab60014</u> (Mouse MYL9 full length protein) can be utilized as a substrate for assessing Kinase

activity

Previously labelled as Myosin light chain kinase.

前処理および保存

保存方法および安定性 Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 7.50

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

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

関連情報

機能

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.

組織特異性

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.

配列類似性

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.

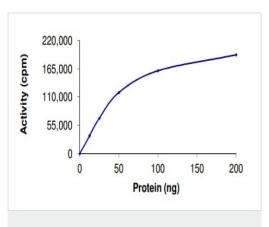
Contains 1 protein kinase domain.

翻訳後修飾

MLCK is probably down-regulated by phosphorylation.

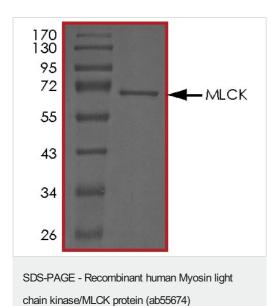
The C-terminus is deglutamylated by AGTPBP1/ CCP1, AGBL1/CCP4 and AGBL4/CCP6, leading to the formation of Myosin light chain kinase, smooth muscle, deglutamylated form. The consequences of C-terminal deglutamylation are unknown.

画像

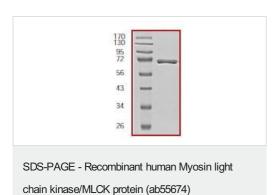


The specific activity of Myosin light chain kinase/MLCK (ab55674) was determined to be 180 nmol/min/mg as per activity assay protocol

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



SDS PAGE analysis of ab55674



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