abcam

## Product datasheet

# Recombinant Chicken Myosin light chain kinase/MLCK protein (Tagged) ab235864

1 Image

### Description

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|---|---|
| **Product name** | Recombinant Chicken Myosin light chain kinase/MLCK protein (Tagged) |
| **Purity** | > 90 % SDS-PAGE. |
| **Expression system** | Escherichia coli |
| **Accession** | P11799 |
| **Protein length** | Protein fragment |
| **Animal free** | No |
| **Nature** | Recombinant |
| **Species** | Chicken |
| **Sequence** | EVNYRTVTINTEQKVSDVYNIEERLGSGKFGQVFRLVEKKT GKVWAGKFF KAYSAKEKENIRDEISIMNCLHHPKLVQCVDAFEEKANIVM VLEMVSGGE LFERIIDEDFELTERECIKYMRQISEGVEYIHKQGIVHLDLKP ENIMCVN KTGTSIKLIDFGLARRLESAGSLKVLFGTPEFVAPEVINYEPI GYETDMW SIGVICYILVSGLSPFMGDNDNETLANVTSATWDFDDEAF DEISDDAKDF ISNLLKKDMKSRLNCTQCLQHPWLQKDTKNMEAKKLSK |
| **Predicted molecular weight** | 211 kDa |
| **Amino acids** | 1435 to 1722 |
| **Tags** | His tag N-Terminus |
| **Additional sequence information** | N-terminal 10xHis-SUMO-tagged and C-terminal MYC-tagged. |

### Specifications

Our Abpromise guarantee covers the use of **ab235864** in the following tested applications.

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

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| **Applications** | SDS-PAGE |

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| | Mass Spectrometry |
| **Form** | Liquid |
| **Additional notes** | Previously labelled as Myosin light chain kinase. |

## Preparation and Storage

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| **Stability and Storage** | Shipped at 4°C. Store at -20°C or -80°C. Avoid freeze / thaw cycle.<br>Constituents: 50% Glycerol (glycerin, glycerine), Tris buffer |

## General Info

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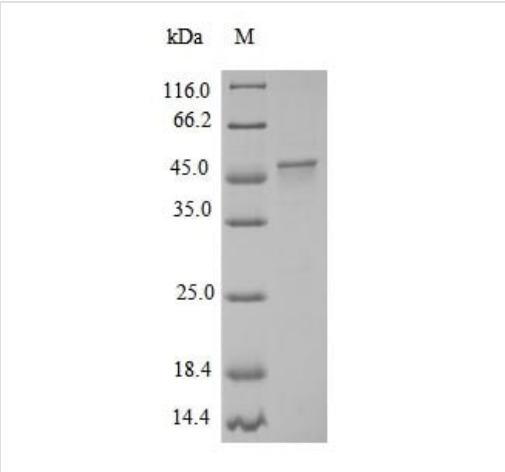
| **Function** | Calcium/calmodulin-dependent enzyme implicated in smooth muscle contraction via phosphorylation of myosin light chains (MLC). Also regulates actin-myosin interaction through a non-kinase activty (By similarity). Implicated in the regulation of endothelial as well as vascular permeability. 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. |
| **Tissue specificity** | 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. |
| **Sequence similarities** | Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family.<br>Contains 1 fibronectin type-III domain.<br>Contains 9 Ig-like C2-type (immunoglobulin-like) domains.<br>Contains 1 protein kinase domain. |
| **Post-translational modifications** | MLCK is probably down-regulated by phosphorylation.<br>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. |

## Images




SDS-PAGE - Recombinant Chicken Myosin light chain kinase/MLCK protein (Tagged) (ab235864)

(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel of ab235864.



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