



# Rabbit Anti-MYLK monoclonal antibody, clone TV51-17 (CABT-L656)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Target</b>	Myosin light chain kinase
<b>Immunogen</b>	Recombinant protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Clone</b>	TV51-17
<b>Purification</b>	Protein A purified.
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, ICC/IF, IHC, FC
<b>Molecular Weight</b>	110 kDa
<b>Cellular Localization</b>	Cytoplasm, Cell projection, Cleavage furrow.
<b>Positive Control</b>	L6, NIH/3T3, Hela, SH-SY-5Y, human lung tissue, mouse smooth muscle tissue, rat smooth muscle tissue, human colon cancer tissue.
<b>Format</b>	Liquid
<b>Size</b>	100 µl
<b>Buffer</b>	1×TBS (pH7.4), 1% BSA, 40% Glycerol.

<b>Preservative</b>	0.05% Sodium Azide
<b>Storage</b>	Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

## BACKGROUND

<b>Introduction</b>	MLCK, a member of the Ser/Thr protein kinase family, is a calcium/calmodulin-dependent enzyme responsible for smooth muscle contraction via phosphorylation of a specific serine in the N-terminus of myosin light chains (MLC), an event that facilitates myosin interaction with actin filaments. It is a central determinant in the development of vascular permeability and tissue edema formation. 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. MLCK acts as a critical participant in signaling sequences that result in fibroblast apoptosis. Smooth muscle and non-muscle isoforms 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. The Telokin isoform, which binds calmodulin, has been found in a wide variety of adult and fetal tissues. MLCK is probably down-regulated by phosphorylation. The protein contains 1 fibronectin type III domain and 9 immunoglobulin-like C2-type domains.
<b>Keywords</b>	deglutamylated form;DKFZp686I10125;EC 2.7.11.18;FLJ12216;Kinase related protein;Kinase-related protein;KRP;MLCK;MLCK1;MLCK108;MLCK210;MSTP083;MYLK;MYLK_HUMAN;MYLK1;Myosin light chain kinase;Myosin light polypeptide kinase;OTTHUMP00000180642;OTTHUMP00000180643;smMLCK;smooth muscle;Smooth muscle myosin light chain kinase;Telokin antibody