

MLCK (Human) Recombinant Protein (Q01)

Catalog # H00091807-Q01 Size 25 ug, 10 ug

Applications



Specification	
Product Description	Human MLCK partial ORF (NP_872299.1, 1 a.a 100 a.a.) recombinant protein with GST-tag at N-t erminal.
Sequence	MDTKLNMLNEKVDQLLHFQEDVTEKLQSMCRDMGHLERGLHRLEASRAPGPGGADGVPHIDTQ AGWPEVLELVRAMQQDAAQHGARLEALFRMVAAVDRA
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	36.74
Interspecies Antigen Sequence	Mouse (69); Rat (68)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCI, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.



Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — MYLK3	
Entrez GenelD	<u>91807</u>
GeneBank Accession#	<u>NM_182493</u>
Protein Accession#	<u>NP_872299.1</u>
Gene Name	MYLK3
Gene Alias	MGC126319, MGC126320, MLCK, MLCK2, caMLCK
Gene Description	myosin light chain kinase 3
Gene Ontology	Hyperlink
Gene Summary	Phosphorylation of cardiac myosin heavy chains (see MYH7B, MIM 609928) and light chains (see MYL2, MIM 160781) by a kinase, such as MYLK3, potentiates the force and rate of cross-bridge r ecruitment in cardiac myocytes (Chan et al., 2008 [PubMed 18202317]).[supplied by OMIM
Other Designations	MLC kinase cardiac-MyBP-C associated Ca/CaM kinase

Pathway

- <u>Calcium signaling pathway</u>
- Focal adhesion
- Regulation of actin cytoskeleton
- <u>Vascular smooth muscle contraction</u>