



# Recombinant Sheep Myosin light chain kinase, smooth muscle (MYLK)

<b>Product Code</b>	CSB-MP015320SH
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	O02827
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Ovis aries (Sheep)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	FRLVEKKTGK VWAGKFFKAY SAKEKENIRQ EISIMNCLHH PKLVQCVDFAF EEKANIVMVL EIVSGGELFE RIIDEDFELT ERECIKYMKQ ISEGVEYIHK QGIVHLDLKP ENIMCVNKTG TRIKLIDFGL ARRLNAGSL KVLFGTPEFV APEVINYEPI GYATDMWSIG VICYILVSGL SPFMGDNDNE TLANVTSATW DFDDEAFDEI SDDAKDFISN LLKKDIKNRL NCTQCLQHPW LXXXTKNMEA KKLSKHRMKK YMARRKWQKT GNAVRAIGRL SSMAMISGLS GRKSSTGSPT SPLNAEKLES EEDVSQAFLE AVAEEKPHVK PYFSKTIRDL EVVEGSAARF DCKIEGYDPD EVVWFKDDQS IRESRHFQID YQEDGNCSLI ISDVCGDDDA KYTCKAVNSL GEATCTAELI VETMEEGE GE GEEEEEE
<b>Source</b>	Mammalian cell
<b>Target Names</b>	MYLK
<b>Protein Names</b>	Recommended name: Myosin light chain kinase, smooth muscle Short name= MLCK Short name= smMLCK EC= 2.7.11.18 Alternative name(s): Telokin Cleaved into the following chain: 1. Myosin light chain kinase, smooth muscle, deglu
<b>Expression Region</b>	1-438
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full length protein
<b>Target Details</b>	This gene, a muscle member of the immunoglobulin gene superfamily, encodes myosin light chain kinase which is a calcium/calmodulin dependent enzyme. This kinase phosphorylates myosin regulatory light chains to facilitate myosin interaction with actin filaments to produce contractile activity. This gene encodes both smooth muscle and nonmuscle isoforms. In addition, using a separate promoter in an intron in the 3 region, it encodes telokin, a small protein identical in sequence to the C-terminus of myosin light chain kinase, that is independently expressed in smooth muscle and functions to stabilize unphosphorylated myosin filaments. A pseudogene is located on the p arm of chromosome 3. Four transcript variants that produce four isoforms of the calcium/calmodulin dependent enzyme have been identified as well as two transcripts that produce two isoforms of telokin. Additional variants have been identified but lack full



length transcripts.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.