

## Human Myosin Light Chain Kinase (MLCK) ELISA Kit | MLCK elisa kit

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CATALOG #  
AAA331597

REACTIVITY  
Human

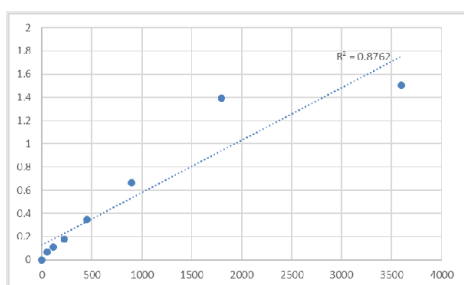
### PRODUCT SYNONYMS

Myosin Light Chain Kinase (MLCK); Human Myosin Light Chain Kinase (MLCK) ELISA Kit; MYLK; DKFZp686I10125; FLJ12216; KRP; MLCK; MLCK1; MLCK108; MLCK210; MSTP083; MYLK1; smMLCK; OTTHUMP00000180642; myosin; light polypeptide kinase; smooth muscle myosin light chain kinase; MLCK elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| Reactivity              | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Specificity             | Human Myosin light chain kinase (MLCK) ELISA Kit has high sensitivity and excellent specificity for detection of Human MYLK. No significant cross-reactivity or interference between Human MYLK and analogues was observed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Sequence Length         | 1914                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Assay Type              | Sandwich ELISA (Quantitative)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Samples                 | Cell Culture Supernatants, Serum, Plasma, Other Biological Fluids                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Detection Method        | Colorimetric                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Usage Notes             | <ul style="list-style-type: none"> <li>* Do not mix components from different kit lots or use reagents beyond the kit expiration date.</li> <li>* Allow all reagents to warm to room temperature for at least 30 minutes before opening.</li> <li>* Pre-rinse the pipet tip with reagent, use fresh pipet tips for each sample, standard and reagent to avoid contamination.</li> <li>* Unused wells must be kept desiccated at 4 degree C in the sealed bag provided.</li> <li>* Mix Thoroughly is very important for the result. It is recommended using low frequency oscillator or slight hand shaking every 10 minutes.</li> <li>* It is recommended that all samples and standards be assayed in duplicate or triplicate.</li> </ul> |
| Preparation and Storage | Store at 2-8 degree C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

### IMAGES



**Standard Curve (Sample)**

Fig.1. Human Myosin light chain kinase (MLCK) Standard Curve.

ADDITIONAL INFORMATION

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| Related Product Information for MLCK elisa kit | <p>Description: This Human Myosin light chain kinase (MLCK) ELISA Kit employs a two-site sandwich ELISA to quantitate MYLK in samples. An antibody specific for MYLK has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any MYLK present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for MYLK is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of MYLK bound in the initial step. The color development is stopped and the intensity of the color is measured.</p> <p>Background: MLCK, 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. MLCK 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.</p> |
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NCBI AND UNIPROT INFORMATION

|                                  |                                                                  |
|----------------------------------|------------------------------------------------------------------|
| NCBI GI #                        | 116008192                                                        |
| NCBI GeneID                      | 4638                                                             |
| NCBI Accession #                 | NP_444253.3                                                      |
| NCBI GenBank Nucleotide #        | NP_444253.3                                                      |
| UniProt Accession #              | Q15746                                                           |
| NCBI Official Full Name          | myosin light chain kinase, smooth muscle isoform 1               |
| NCBI Official Synonym Full Names | myosin light chain kinase                                        |
| NCBI Official Symbol             | MYLK                                                             |
| NCBI Official Synonym Symbols    | KRP; AAT7; MLCK; MLCK1; MYLK1; smMLCK; MLCK108; MLCK210; MSTP083 |
| NCBI Protein Information         | myosin light chain kinase, smooth muscle                         |
| UniProt Protein Name             | Myosin light chain kinase, smooth muscle                         |
| UniProt Gene Name                | MYLK                                                             |
| UniProt Synonym Gene Names       | MLCK; MLCK1; MYLK1; MLCK; smMLCK; KRP                            |
| UniProt Entry Name               | MYLK_HUMAN                                                       |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.