



# Recombinant Human LIM domain kinase 2 (LIMK2)

<b>Product Code</b>	CSB-BP012953HU
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P53671
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	MSALAGEDVW RCPGCGDHIA PSQIWYRTVN ETWHGSCFRC SECQDSLTNW YYEKDGKLYC PKDYWGKFGF FCHGCSSLMT GPFMVAGEFK YHPECFACMS CKVIIEDGDA YALVQHATLY CGKCHNEVVL APMFERLSTE SVQEQLPYSV TLISMPATTE GRRGFSVSVE SACSNYATTV QVKEVNRMH I SPNNRNAIHP GDRILEINGT PVRTL RVEEV EDAISQTSQT LQLLIEHDPV SQRLDQLRLE ARLAPHMQNA GHPHALSTLD TKENLEGLTLR RRSLRRSNSI SKSPGPSSPK EPLLF SRDIS RSESLRCSSS YSQQIFRPCD LIHGEVLGKG FFGQAIKVTH KATGKVMVMK ELIRCDEETQ KFTLFEVKVM RSLDHPNVLK FIGVLYKDKK LNLLEYIEG GTLKDFLRSM DPFPWQQKVR FAKGIASGMA YLHSMCIHR DLNSHNCLIK LDKTVVADF GLSRLIVEER KRAPMEKATT KKRTL RKNDR KKRYTVVGNP YWMAPEMLNG KSYDETVDIF SFGIVLCEII GQVYADPDCL PRTLDFGLNV KLFWEK FVPT DCPPAFFPLA AICCRLEPES RPAFSKLEDS FEALS LYLGE LGIPLPAELE ELDHTVSMQY GLTRDSPP
<b>Source</b>	Baculovirus
<b>Target Names</b>	LIMK2
<b>Protein Names</b>	Recommended name: LIM domain kinase 2 Short name= LIMK-2 EC= 2.7.11.1
<b>Expression Region</b>	1-638
<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>	There are approximately 40 known eukaryotic LIM proteins, so named for the LIM domains they contain. LIM domains are highly conserved cysteine-rich structures containing 2 zinc fingers. Although zinc fingers usually function by binding to DNA or RNA, the LIM motif probably mediates protein-protein interactions. LIM kinase-1 and LIM kinase-2 belong to a small subfamily with a unique combination of 2 N-terminal LIM motifs and a C-terminal protein kinase domain. This protein is phosphorylated and activated by ROCK, a downstream effector of Rho, and the encoded protein, in turn, phosphorylates cofilin, inhibiting its actin-depolymerizing activity. It is thought that this pathway contributes to Rho-induced reorganization of the actin cytoskeleton. At least



three transcript variants encoding different isoforms have been found for this gene.

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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.