

## ProQinase™ MKK7 (non activated)

mitogen-activated protein kinase kinase 7

Recombinant Human Protein Kinase

HGNC Symbol: MAP2K7

Synonyms: MAPKK7, MEK7, PRKMK7

Product No.: 0689-0000-1

Lot: 001

**Description:** Human MKK7, full length, amino acids M<sub>1</sub>-R<sub>419</sub> (as in NCBI/Protein entry NP\_660186.1), non activated, N-terminal HIS6- fusion protein with a Thrombin cleavage site, expressed in Sf9 insect cells

**Theoretical MW<sub>Protein</sub>:** 51,601 Da

**Expression:** Baculovirus infected Sf9 cells

**Activation:** No special measures were taken to activate this kinase

**Purification:** Immobilized Metal Affinity Chromatography

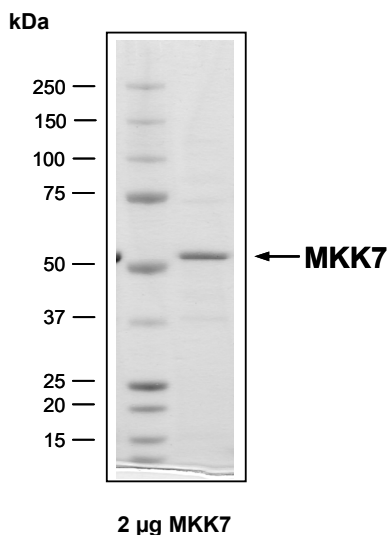
**Storage buffer:** 50 mM HEPES pH 7.5, 100 mM NaCl, 5 mM DTT, 20% glycerol

**Storage temperature:** -80°C

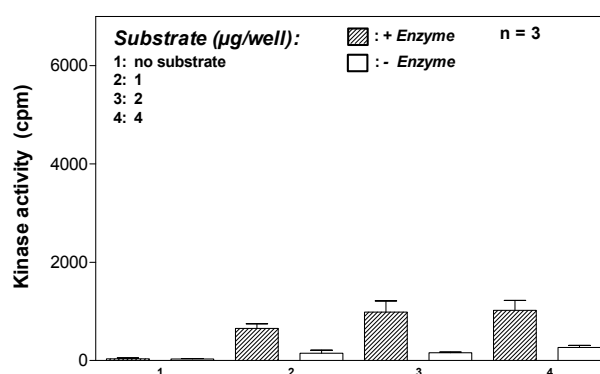
For complete recovery, mix well and spin before use. Product must not be stored in diluted solutions, aliquots below 10µl are not advisable. Avoid repeated freeze-thaw cycles!

**Protein concentration:** 1.130 µg/µl  
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

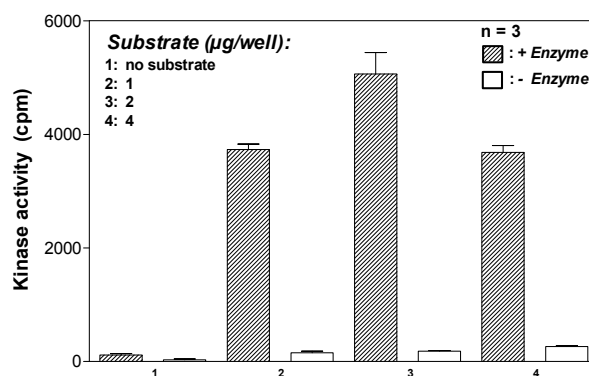
**MKK7 (non activated) Lot 001:**  
Coomassie stain



### Kinase activity MKK7 (non activated) vs MKK7 (activated):



MKK7 (non activated) Lot 001



MKK7 (activated)

#### Final assay concentrations:

- 60 mM HEPES-NaOH, pH 7.5
- 3 mM MgCl<sub>2</sub>
- 3 mM MnCl<sub>2</sub>
- 3 µM Na-orthovanadate
- 1.2 mM DTT
- 50 µg / ml PEG<sub>20,000</sub>
- 1 µM ATP
- Substrate: JNK1 K55R/K56R [0/20/40/80µg/ml]
- Kinase: MKK7 (non activated) or MKK7 (activated) [1µg/ml]

Assay: <sup>33</sup>PanQinase® Assay

## ProQinase™ MKK7 (non activated)

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MKK7 Recombinant Fusion Protein Amino Acid Sequence											
1	MG	HHHHHH	GR	RRASVAAGI	L	VPRGS	PGLDG	IYARGIQASM	AASSLEQKLS	RLEAKLKQEN	60
61	REARRRIDLN	LDISPQRPRP	TLQLPLANDG	GSRSPSSESS	PQHPTPPARP	RHMLGLPSTL	120				
121	FTPRSMESIE	IDQKLQEIMK	QTGYLTIGGQ	RYQAEINDLE	NLGEMGSGTC	GQVWKMRFRK	180				
181	TGHVIAVKQM	RRSGNKEENK	RILMDLDVVL	KSHDCPYIVQ	CFGTFITNTD	VFIAMELMGT	240				
241	CAEKLKCRMQ	GPIPERILGK	MTVAIVKALY	YLKEKHGVIH	RDVKPSNILL	DERGQIKLCD	300				
301	FGISGRLVDS	KAKTRSAGCA	AYMAPERIDP	PDPTKPDYDI	RADVWSLGIS	LVELATGQFP	360				
361	YKNCKTDFEV	LTKVLQEEPP	LLPGHMGFSG	DFQSFVKDCL	TKDHRKRPKY	NKLEHSFIK	420				
421	RYETLEVDVA	SWFKDVMAKT	ESPRTSGLS	QPHLPFFR			480				

Red: HIS6 tag Pink: Thrombin cleavage site blue: MKK7

MKK7 wt <sup>1</sup> Amino Acid Sequence							
1	MAASSLEQKL	SRLEAKLKQE	NREARRRIDL	NLDISPQRPR	PTLQLPLAND	GSRSPSSES	60
61	SPQHPTPPAR	PRHMLGLPST	LFTPRSMESI	EIDQKLQEIM	KQTYLTIGG	QRYQAEINDL	120
121	ENLGEMSGT	CGQVWKMRFR	KTGHVIAVKQ	MRRSGNKEEN	KRILMDLDVV	LKSHDCPYIV	180
181	QCFGTFITNT	DVFIAMELMG	TCAEKLKCRM	QGPIPERILG	KMTVAIVKAL	YYLKEKHGVI	240
241	HRDVKPSNIL	LDERGQIKLC	DFGISGRLVD	SKAKTRSAGC	AAYMAPERID	PPDPTKPDYD	300
301	IRADVWSLGI	SLVELATGQF	PYKNCKTDFE	VLTQVLQEEP	PLLPGHMGFS	GDFQSFVKDC	360
361	LTKDHRKRPK	YNKLEHSFI	KRYETLEVDV	ASWFKDVMAK	TESPRTSGLV	SQPHLPFFR	420

blue: MKK7 sequence expressed in fusionprotein

<sup>1</sup>NCBI/Protein accession number NP\_660186.1