



# Recombinant Rat Dual specificity mitogen-activated protein kinase kinase 2 (Map2k2)

<b>Product Code</b>	CSB-EP013411RA
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P36506
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	MLARRKPVLP ALTINPTIAE GPSPTSEGAS EAHLVDLQKK LEELDLDEQQ RKRLEAFLTQ KAKVGELKDD DFERISELGA GNGGVVTKAR HRPSGLIMAR KLIHLEIKPA VRNQIIRELQ VLHECNSPYI VGFYGAFYSD GEISICMEHM DGGSLDQVLK EAKRIPEDIL GKVSIIVLRG LAYLREKHQI MHRDVKPSNI LVNSRGEIKL CDFGVSGQLI DSMANSFVGT RSYMSPERLQ GTHYSVQSDI WSMGLSLVEL AIGRYPIPPP DAKELEASFG RPVVDGADGE PHSVSPRPRP PGRPISGHGM DSRPAMAIFE LLDYIVNEPP PKLPSGVFSS DFQEFVNKCL IKNPAERADL KLLTNHAFIK RSEGEDVDFA GWLCRTLRLK QPSTPTRTAV
<b>Source</b>	E.coli
<b>Target Names</b>	Map2k2
<b>Protein Names</b>	Recommended name: Dual specificity mitogen-activated protein kinase kinase 2 Short name= MAP kinase kinase 2 Short name= MAPKK 2 EC= 2.7.12.2 Alternative name(s): ERK activator kinase 2 MAPK/ERK kinase 2 Short name=
<b>Expression Region</b>	1-400
<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 protein is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase is known to play a critical role in mitogen growth factor signal transduction. It phosphorylates and thus activates MAPK1/ERK2 and MAPK2/ERK3. The activation of this kinase itself is dependent on the Ser/Thr phosphorylation by MAP kinase kinase kinases. Mutations in this gene cause cardiofaciocutaneous syndrome (CFC syndrome), a disease characterized by heart defects, mental retardation, and distinctive facial features similar to those found in Noonan syndrome. The inhibition or degradation of this kinase is also found to be involved in the pathogenesis of Yersinia and anthrax. A pseudogene, which is located on chromosome 7, has been identified for this gene.
<b>Reconstitution</b>	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.

### 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.