

## **Product datasheet for TP517131**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## Map4k2 (NM\_009006) Mouse Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Purified recombinant protein of Mouse mitogen-activated protein kinase kinase kinase kinase

2 (Map4k2), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

**Expression Host:** HEK293T

**Expression cDNA Clone** >MR217131 representing NM\_009006 or AA Sequence: Red=Cloning site Green=Tags(s)

MALLRDVSLQDPRDRFELLQRVGAGTYGDVYKARDTVTSELAAVKIVKLDPGDDISSLQQEITILRECRH PNVVAYIGSYLRNDRLWICMEFCGGGSLQEIYHATGPLEERQIAYVCREALKGLHHLHSQGKIHRDIKGA NLLLTLQGDVKLADFGVSGELTASVAKRRSFIGTPYWMAPEVAAVERKGGYNELCDVWALGITAIELGEL QPPLFHLHPMRALMLMSKSSFQPPKLRDKTRWTQNFHHFLKLALTKNPKKRPTAERLLQHPFTTQHLPPA LLTQLLDKASDPHLGTLSPEDSELETHDMFPDTIHSRSHHGPAERTPSEIQFHQVKFGAPRRKETDPLNE PWEEEWTLLGKEELSGSLLQSVQEALEERSLTIRPALELQELDSPDDAIGTIKRAPFLGLPHTESTSGDN AQSCSPGTLSAPPAGPGSPALLPTAWATLKQQEDRERSSCHGLPPTPKVHMGACFSKVFNGCPLQIHAAV TWVHPVTRDQFLVVGAEEGIYTLNLHELHEDTMEKLISQRCSWLYCVNNVLLSLSGKSTHIWAHDLPGLF EQRRLQHQAPLSIPTNRITQRIIPRRFALSTKIPDTKGCLQCRVVRNPYTGSTFLLAALPASLLLLQWYE PLQKFLLKNFSSPLPSPAGMLEPLVLDGKELPQVCVGAEGPEGPGCRVLFHVLPLEAGLTPDILIPPEG IPGSAQQVIQVDRDTVLVSFERCVRIVNLQGEPTAALAPELTFDFTIETVVCLQDSVLAFWSHGMQGRSL

DTNEVTQEITDETRIFRVLGAHRDIILESIPTDNPGAHSNLYILTGHQSSY

**SGPTRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

Tag: C-MYC/DDK
Predicted MW: 91.7 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

**Storage:** Store at -80°C after receiving vials.





## Map4k2 (NM\_009006) Mouse Recombinant Protein - TP517131

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 033032

 Locus ID:
 26412

 UniProt ID:
 Q61161

 RefSeq Size:
 2466

 Cytogenetics:
 19 A

 RefSeq ORF:
 2463

Synonyms: Al385662; BL44; GCK; Rab8ip

**Summary:** Serine/threonine-protein kinase which acts as an essential component of the MAP kinase

signal transduction pathway (PubMed:8643544). Acts as a MAPK kinase kinase kinase (MAP4K) and is an upstream activator of the stress-activated protein kinase/c-Jun N-terminal kinase (SAP/JNK) signaling pathway and to a lesser extent of the p38 MAPKs signaling pathway (By similarity). Required for the efficient activation of JNKs by TRAF6-dependent stimuli, including pathogen-associated molecular patterns (PAMPs) such as polyinosine-polycytidine (poly(IC)), lipopolysaccharides (LPS), lipid A, peptidoglycan (PGN), or bacterial flagellin (By similarity). To a lesser degree, IL-1 and engagement of CD40 also stimulate MAP4K2-mediated JNKs activation (By similarity). The requirement for MAP4K2/GCK is most pronounced for LPS signaling, and extends to LPS stimulation of c-Jun phosphorylation and induction of IL-8 (By similarity). Enhances MAP3K1 oligomerization, which may relieve N-terminal mediated MAP3K1 autoinhibition and lead to activation following autophosphorylation (By similarity). Mediates also the SAP/JNK signaling pathway and the p38 MAPKs signaling pathway through activation of the MAP3KS MAP3K10/MLK2 and MAP3K11/MLK3 (By similarity). May play a role in the regulation of vesicle targeting or fusion (By similarity).[UniProtKB/Swiss-Prot Function]