

# MAP2K1 Human

*Mitogen-Activated Protein Kinase Kinase 1 Human Recombinant*  
ENZ0796

## Product Overview

Name MAP2K1 Human

### Description

Mitogen-Activated Protein Kinase Kinase 1 Human Recombinant

Accession (Primary) [Q02750](#)

### Synonyms

Dual specificity mitogen-activated protein kinase kinase 2, MAP kinase kinase 2, MAPKK 2, ERK activator kinase 2, MAPK/ERK kinase 2, MEK 2, MAP2K2, MEK2, MKK2, PRKMK2, MAPKK2.

### Introduction

Mitogen-Activated Protein Kinase Kinase 2 (MAP2K2) is a dual specificity protein kinase, which is a member of the STE grouping of kinases and the MAP kinase kinase family. MAP2K2 is activated by a wide range of growth factors and cytokines and also by membrane depolarization and calcium influx. The MAP2K2 kinase is known for its vital role in mitogen growth factor signal transduction. MAP2K2 phosphorylates and consequently activates MAPK1/ERK2 and MAPK2/ERK3. The activation of the MAP2K2 kinase itself is dependent on the Ser/Thr phosphorylation by MAP kinase kinases. The inhibition or degradation of the MAP2K2 kinase is also found to be involved in the pathogenesis of Yersinia and anthrax. MAP2K2 gene mutations cause cardiofaciocutaneous syndrome (CFC syndrome).

### Source

Escherichia Coli.

### Physical Appearance

Sterile filtered colorless solution.

### Formulation

MAP2K2 protein solution (0.25mg/ml) containing 20mM Tris-HCl buffer (pH 8.0), 0.1M NaCl and 10% glycerol.

### Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

### Purity

Greater than 90.0% as determined by SDS-PAGE.

### Amino acid sequence

MGSSHHHHHH SSSLVPRGSH MGS MLARRK PVLPAITNP TIAEGPSPTS EGASEANLVD LQKKLEEL

DEQQKKRLEA FLTQKAKVGE LKDDDFERIS ELGAGNGGVV TKVQHRPSGL IMARKLIHLE IKPAIRNQII  
RELQVLHECN SPYIVGFYGA FYSDGEISIC MEHMDGGSLD QVLKEAKRIP EEILGKVSIA VLRGLAYLRE  
KHQIMHRDVK PSNILVNSRG EIKLCDFGVS GQLIDSMANS FVGTRSYMAP ERLQGTHYSV QSDIWSMGLS  
LVELAVGRYP IPPPDAKELE AIFGRPVDG EEGEPHSISP RPRPPGRPVS GHGMDSRPAM AIFELLDYIV  
NEPPPKLPNG VFTPDFQEFV NKCLIKNPAE RADLKMLTNH TFIKRSEVEE VDFAGWLCKT LRLNQPGTPT RTAV.

#### Precautions

MAP2K1 Human is for research use only and not for use in diagnostic or therapeutic procedures.

**Target Information:** ( [Q02750](#) )