# Active Recombinant Human MAP2K1, His-tagged

**Cat. No.** MAP2K1-2568H **Lot. No.** (See product label)

## SPECIFICATION

| | |
|---|---|
| **Product Overview** | Recombinant human mitogen-activated protein kinase kinase 1 (MAP2K1/MEK1) produced in Sf9 cells is a single polypeptide chain with a 6His tag at the N-terminus. It contains 405 (12+393) amino acids, and having a predicted molecular mass of approximately 44.7kD, but migrates in SDS-PAGE with an apparent molecular mass of 50kD. |
| **Species** | Human |
| **Source** | Insect Cells |
| **Description** | The protein encoded by this gene is a member of the dual-specificity protein kinase family that acts as a mitogen-activated protein (MAP) kinase kinase. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals. This protein kinase lies upstream of MAP kinases and stimulates the enzymatic activity of MAP kinases upon activation by a wide variety of extra- and intracellular signals. As an essential component of the MAP kinase signal transduction pathway, this kinase is involved in many cellular processes such as proliferation, differentiation, transcription regulation and development. |
| **Form** | 20mM Tris-Cl (pH7.9), 20% Glycerol, 100mM NaCl, 1mM DTT and 0.5mM EDTA |
| **Bio-activity** | In addition to being a member of the dual specificity protein kinase family, MAP2K1 also acts as an integration point for multiple biochemical signals in signal tansduction pathway. Recombinant human MAP2K1 (or MEK1) protein is ideal for the studies of |

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

| | |
|---|---|
| | protein phosphorylation and other related function assays. |
| **AA Sequence** | MAHHHHHHASGGMPKKKPTPIQLNPAPDGSAVNGTSSAETNLEALQKKLEELELDE QQRKRLEAFLTQKQKVGE LKDDDFEKISELGAGNGGVVFKVSHKPSGLVMARKLIH LEIKPAIRNQIIRELQVLHECNSPYIVGFYGAFYSD GEISICMEHMDGGSLDQVLKKA GRIPEQILGKVSIAVIKGLTYLREKHKIMHRDVKPSNILVNSRGEIKLCDF GVSGQLID SMANSFVGTRSYMSPERLQGTHYSVQSDIWSMGLSLVEMAVGRYPIPPPDAKELEL MFGCQVEGDA AETPPRPRTPGRPLSSYGMDSRPPMAIFELLDYIVNEPPPKLPSGV FSLEFQDFVNKCLIKNPAERADLKQLM VHAFIKRSDAEEVDFAGWLCSTIGLNQPST PTHAAGV |
| **Purity** | ≥90%, as determined by SDS-PAGE |
| **Usage** | FOR RESEARCH ONLY |
| **Storage** | The protein sample can be stored under sterile conditions at 2- 8 centigrade for one month or at -70 centigrade for three months without detectable loss of activity. Avoid repeated freeze-thaw cycles. |

## GENE INFORMATION

| | |
|---|---|
| **Gene Name** | MAP2K1 mitogen-activated protein kinase kinase 1 [ Homo sapiens ] |
| **Official Symbol** | MAP2K1 |
| **Synonyms** | CFC3; MEK1; MKK1; MAPKK1; PRKMK1; dual specificity mitogen-activated protein kinase kinase 1; ERK activator kinase 1; MAPK/ERK kinase 1; MAPKK 1; MEK 1; protein kinase, mitogen-activated, kinase 1 (MAP kinase kinase 1) |
| **Gene ID** | 5604 |

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

| | |
|---|---|
| **mRNA Refseq** | NM_002755 |
| **Protein Refseq** | NP_002746 |
| **MIM** | 176872 |
| **UniProt ID** | Q02750 |
| **Chromosome Location** | 15q22.1-q22.33 |
| **Pathway** | AGE/RAGE pathway, organism-specific biosystem; ARMS-mediated activation, organism-specific biosystem; Acute myeloid leukemia, organism-specific biosystem |
| **Function** | ATP binding; MAP kinase kinase activity; Ras GTPase binding |

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA