

## Recombinant Human MAPK3, His-tagged

**Cat. No.** MAPK3-2787H    **Lot. No.** (See product label)

### SPECIFICATION

**Product Overview**      Recombinant human MAPK3 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

**Species**                      Human

**Source**                        E.coli

**Description**                MAPK3 is a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act in a signaling cascade that regulates various cellular processes such as proliferation, differentiation, and cell cycle progression in response to a variety of extracellular signals. This protein is activated by upstream kinases, resulting in its translocation to the nucleus where it phosphorylates nuclear targets.

**Sequences**                    MGSSHHHHH SSSLVPRGSH MAAAAAQGGG GGEPRRTEGV GPGVPGEVEM  
 VKGQPFDVGP RYTQLQYIGE GAYGMVSSAY DHVRKTRVAIKKISPFEHQ  
 YCQRTLREIQ ILLRFRHENV IGIRDILRAS TLEAMRDVYI VQDLMETDLY  
 KLLKSQQLSN DHICYFLYQI LRGLKYIHSANVLHRDLKPS NLLINTTCDL  
 KICDFGLARI ADPEHDHTGF LTEYVATRWY RAPEIMLNSK GYTKSIDIWS  
 VGCILAEMLS NRPIFPGKHYLDQLNHILGI LGSPSQEDLN CIINMKARNY  
 LQSLPSKTKV AWAKLFPKSD SKALDLLDRM LTFNPNKRIT VEEALAHPYL  
 EQYYDPTDEPVAEEPFTFAM ELDDLPKERL KELIFQETAR FQPGVLEAP.

**Form**                            Liquid. In 20 mM Tris-HCl buffer (pH8.0) containing 0.1M NaCl, 1mM DTT.

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Molecular Weight</b>	45.2 kDa (399aa), confirmed by MALDI-TOF.
<b>Purity</b>	> 90% by SDS – PAGE.
<b>Concentration</b>	0.5 mg/ml (determined by Bradford assay).
<b>Storage</b>	Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">MAPK3 mitogen-activated protein kinase 3 [ Homo sapiens ]</a>
<b>Synonyms</b>	MAPK3; mitogen-activated protein kinase 3; ERK1; PRKM3; P44ERK1; P44MAPK; HS44KDAP; HUMKER1A; MGC20180; EC 2.7.11.24; Extracellular signal-regulated kinase 1; Insulin-stimulated MAP2 kinase; MAP kinase 1; Microtubule-associated protein 2 kinas; OTTHUMP00000174538; OTTHUMP00000174540; Microtubule-associated protein 2 kinase; mitogen-activated protein kinase 3
<b>Gene ID</b>	<a href="#">5595</a>
<b>mRNA Refseq</b>	<a href="#">NM_001040056</a>
<b>Protein Refseq</b>	<a href="#">NP_001035145</a>
<b>MIM</b>	<a href="#">601795</a>
<b>UniProt ID</b>	<a href="#">P27361</a>
<b>Pathway</b>	Acute myeloid leukemia; Adherens junction; Alzheimer"s disease; Alzheimer"s disease; B cell receptor signaling pathway; Bladder cancer; Chronic myeloid

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

leukemia; Chemokine signaling pathway; Colorectal cancer; Dorso-ventral axis formation; Endometrial cancer; ErbB signaling pathway; Fc epsilon RI signaling pathway; Fc gamma R-mediated phagocytosis; Gap junction; Glioma; GnRH signaling pathway; Insulin signaling pathway; Long-term potentiation; Long-term depression; MAPK signaling pathway; Melanogenesis; Melanoma; Natural killer cell mediated cytotoxicity; Neurotrophin signaling pathway; Non-small cell lung cancer; Pancreatic cancer; Pathways in cancer; Prion diseases; Regulation of actin cytoskeleton; Renal cell carcinoma; Renal cell carcinoma

**Function**

ATP binding; MAP kinase activity; nucleotide binding; protein binding; protein serine/threonine kinase activity; transferase activity

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA