

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 SSGLVPRGSH MAAAAAQGGG GGEPRRTEGV GPGVPGEVEM VKGQPFDVGP RYTQLQYIGE GAYGMVSSAY DHVRKTRVAIKKISPFEHQ T 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.

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Molecular Weight	45.2 kDa (399aa), confirmed by MALDI-TOF.
Purity	> 90% by SDS – PAGE.
Concentration	0.5 mg/ml (determined by Bradford assay).
Storage	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

Gene Name	MAPK3 mitogen-activated protein kinase 3 [Homo sapiens]
Synonyms	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
Gene ID	5595
mRNA Refseq	NM_001040056
Protein Refseq	NP_001035145
MIM	601795
UniProt ID	P27361
Pathway	Acute myeloid leukemia; Adherens junction; Alzheimer"s disease; Alzheimer"s disease; B cell receptor signaling pathway; Bladder cancer; Chronic myeloid

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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

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