Recombinant Full Length Human MAPK1 Protein, C-Flag-tagged

Cat. No. MAPK1-304HFL **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Full Length Human MAPK1 Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.
Species	Human
Source	Mammalian Cells
Description	This gene encodes a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. The activation of this kinase requires its phosphorylation by upstream kinases. Upon activation, this kinase translocates to the nucleus of the stimulated cells, where it phosphorylates nuclear targets. One study also suggests that this protein acts as a transcriptional repressor independent of its kinase activity. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Two alternatively spliced transcript variants encoding the same protein, but differing in the UTRs, have been reported for this gene.
Form	25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.
Molecular Mass	41.2 kDa
AA Sequence	MAAAAAAGAGPEMVRGQVFDVGPRYTNLSYIGEGAYGMVCSAYDNVNKVRVAIKKI

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

	SPFEHQTYCQRTLR EIKILLRSRHENIIGINDIIRAPTIEQMKDVYIVQDLMETDLYKLL KTQHLSNDHICYFLYQILRGLKYI HSANVLHRDLKPSNLLLNTTCDLEICDFGLARVA DPDHDHTGFLTEYVATRWYRAPEIMLNSKGYTKSID IWSVGCILAEMLSNRPIFPGK HYLDQLNHILGILGSPSQEDLNCIINLKARNYLLSLPHKNKVPWNRLFP NADSKALDL LDKMLTFNPHKRIEVEQALAHPYLEQYYDPSDEPIAEAPFKFDMELDDLPKEKLKELI FEE TARFQPGYRSTRTRPLEQKLISEEDLAANDILDYKDDDDKV
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining.
Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Storage	Store at -80 centigrade.
Concentration	>50 ug/mL as determined by microplate BCA method.
Preparation	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Protein Families	Druggable Genome, Protein Kinase
Protein Pathways	Acute myeloid leukemia, Adherens junction, Alzheimer's disease, Axon guidance, B cell receptor signaling pathway, Bladder cancer, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Dorso-ventral axis formation, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Gap junction, Glioma, GnRH signaling pathway, Insulin signaling pathway, Long-term depression, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Melanoma, mTOR signaling pathway, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway,

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	NOD-like receptor signaling pathway, Non-small cell lung cancer, Oocyte meiosis, Pancreatic cancer, Pathways in cancer, Prion diseases, Progesterone-mediated oocyte maturation, Prostate cancer, Regulation of actin cytoskeleton, Renal cell carcinoma, T cell receptor signaling pathway, TGF-beta signaling pathway, Thyroid cancer, Toll-like receptor signaling pathway, Type II diabetes mellitus, Vascular smooth muscle contraction, VEGF signaling pathway
Full Length	Full L.

GENE INFORMATION

Gene Name	MAPK1 mitogen-activated protein kinase 1 [Homo sapiens (human)]
Official Symbol	MAPK1
Synonyms	ERK; p38; p40; p41; ERK2; ERT1; NS13; ERK-2; MAPK2; PRKM1; PRKM2; P42MAPK; p41mapk; p42-MAPK
Gene ID	5594
mRNA Refseq	NM_002745.5
Protein Refseq	NP_002736.3
MIM	176948
UniProt ID	P28482

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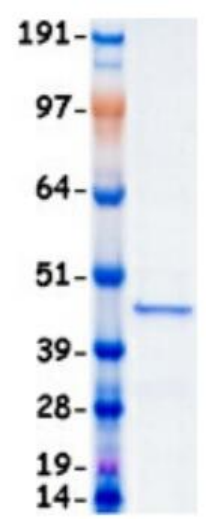

Coomassie blue staining of purified MAPK1 protein.

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