Recombinant Human MAPK7

Cat. No. MAPK7-26231TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant fragment corresponding to amino acids 561-677 of Human ERK5 with an N terminal proprietary tag; Predicted MWt 38.5 kDa.
Species	Human
Source	Wheat Germ
ProteinLength	561-677 a.a.
Description	The protein encoded by this gene is a member of the MAP kinase family. MAP kinases 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. This kinase is specifically activated by mitogen-activated protein kinase kinase 5 (MAP2K5/MEK5). It is involved in the downstream signaling processes of various receptor molecules including receptor type kinases, and G protein-coupled receptors. In response to extracelluar signals, this kinase translocates to cell nucleus, where it regulates gene expression by phosphorylating, and activating different transcription factors. Four alternatively spliced transcript variants of this gene encoding two distinct isoforms have been reported.
Molecular Weight	38.500kDa inclusive of tags
Tissue specificity	Expressed in many adult tissues. Abundant in heart, placenta, lung, kidney and skeletal muscle. Not detectable in liver.

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

Form	Liquid
Purity	Proprietary Purification
Storage buffer	pH: 8.00Constituents:0.79% Tris HCl, 0.3% Glutathione
Storage	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
Sequences of amino acids	PQSSMSESPDVNLVTQQLSKSQVEDPLPPVFSGTPKGSGA GYGVGFDLEEFLNQS FDMGVADGPQDGQADSASLSASLLA DWLEGHGMNPADIESLQREIQMDSPMLLAD LPDLQDP
Sequence Similarities	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.Contains 1 protein kinase domain.

GENE INFORMATION

Gene Name	MAPK7 mitogen-activated protein kinase 7 [Homo sapiens]
Official Symbol	MAPK7
Synonyms	MAPK7; mitogen-activated protein kinase 7; PRKM7; BMK1; BMK1 kinase; ERK5; extracellular signal regulated kinase 5;
Gene ID	5598
mRNA Refseq	NM_002749
Protein Refseq	NP_002740

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MIM	602521
Uniprot ID	Q13164
Chromosome Location	17p11.2
Pathway	Activated TLR4 signalling, organism-specific biosystem; EGFR1 Signaling Pathway, organism-specific biosystem; ERK/MAPK targets, organism-specific biosystem; ERKs are inactivated, organism-specific biosystem; ErbB1 downstream signaling, organism-specific biosystem;
Function	ATP binding; MAP kinase activity; nucleotide binding; protein binding; protein serine/threonine kinase activity;

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