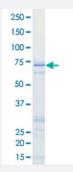


Bioactive

# MAPK7 (Human) Recombinant Protein

Catalog # P5672 Size 50 ug

# **Applications**



### Result of activity analysis

Result of activity analysis

Specification	
Product Description	Human MAPK7 (NP_002740.2, 1 a.a 398 a.a.) partial recombinant protein with GST tag expresse d in <i>Escherichia coli</i> .
Host	Escherichia coli
Theoretical MW (kDa)	73
Form	Liquid
Preparation Method	Escherichia coli expression system
Purification	Glutathione sepharose chromatography
Purity	45 % by SDS-PAGE/CBB staining



### **Product Information**

Activity	The activity was determined by ELISA. The enzyme was incubated with biotinylated substrate protein , and after stopping kinase reaction by EDTA, the reaction solution was transferred into streptavidin-coated plate. Phosphorylation was detected by anti-phospho antibody and HRP-labeled anti-rabbit lg G. Substrate: MBP. ATP: 100 uM.
Quality Control Testing	Loading 1 ug protein in SDS-PAGE
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.05% Brij35, 1 mM DTT, 10% glycerol)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

## **Applications**

- Functional Study
- SDS-PAGE

Gene Info — MAPK7	
Entrez GenelD	<u>5598</u>
Protein Accession#	NP_002740.2
Gene Name	MAPK7
Gene Alias	BMK1, ERK4, ERK5, PRKM7
Gene Description	mitogen-activated protein kinase 7
Omim ID	602521
Gene Ontology	<u>Hyperlink</u>
Gene Summary	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 transloc ates 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. [provided by RefSeq



### **Product Information**

**Other Designations** 

BMK1 kinase|OTTHUMP00000065906|big MAP kinase 1|extracellular-signal-regulated kinase 5

## Pathway

- Gap junction
- GnRH signaling pathway
- MAPK signaling pathway
- Neurotrophin signaling pathway

### Disease

- Cardiovascular Diseases
- Diabetes Mellitus
- Edema