

Bioactive

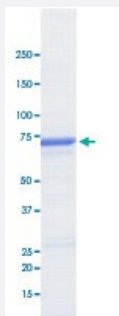
Full-Length

# MAPK10 (Human) Recombinant Protein

Catalog # P5786

Size 5 ug

## Applications



## Result of activity analysis

Result of activity analysis

□

## Specification

Product Description	Human MAPK10 (NP_620446.1, 1 a.a - 426 a.a.) full-length recombinant protein with GST tag expressed in <i>Escherichia coli</i> .
Host	<i>Escherichia coli</i>
Theoretical MW (kDa)	75
Form	Liquid
Preparation Method	<i>Escherichia coli</i> expression system
Purification	Glutathione sepharose chromatography
Purity	86 % by SDS-PAGE/CBB staining

<b>Activity</b>	The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluorescence-labeled substrate and Mg(or Mn)/ATP. The phosphorylated and unphosphorylated substrates were separated and detected by LabChip3000. Substrate : Modified Erktide. ATP: 1000 $\mu$ M.
<b>Quality Control Testing</b>	SDS-PAGE Stained with Coomassie Blue
<b>Storage Buffer</b>	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.05% Brij35, 1 mM DTT, 10% glycerol)
<b>Storage Instruction</b>	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
<b>Note</b>	Result of activity analysis Result of activity analysis

## Applications

- Functional Study
- SDS-PAGE

## Gene Info — MAPK10

<b>Entrez GeneID</b>	<a href="#">5602</a>
<b>Protein Accession#</b>	<a href="#">NP_620446.1</a>
<b>Gene Name</b>	MAPK10
<b>Gene Alias</b>	FLJ12099, FLJ33785, JNK3, JNK3A, MGC50974, PRKM10, p493F12, p54bSAPK
<b>Gene Description</b>	mitogen-activated protein kinase 10
<b>Omim ID</b>	<a href="#">602897</a> <a href="#">606369</a>
<b>Gene Ontology</b>	<a href="#">Hyperlink</a>

## 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 protein is a neuronal-specific form of c-Jun N-terminal kinases (JNKs). Through its phosphorylation and nuclear localization, this kinase plays regulatory roles in the signaling pathways during neuronal apoptosis. Beta-arrestin 2, a receptor-regulated MAP kinase scaffold protein, is found to interact with, and stimulate the phosphorylation of this kinase by MAP kinase kinase 4 (MKK4). Cyclin-dependent kinase 5 can phosphorylate, and inhibit the activity of this kinase, which may be important in preventing neuronal apoptosis. Four alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq]

## Other Designations

JNK3 alpha protein kinase|MAP kinase|OTTHUMP00000161180|OTTHUMP00000161182|OTTHUMP00000161183|c-Jun N-terminal kinase 3|c-Jun kinase 3|stress activated protein kinase JNK3|stress activated protein kinase beta

## Pathway

- [Adipocytokine signaling pathway](#)
- [Colorectal cancer](#)
- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [ErbB signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Focal adhesion](#)
- [GnRH signaling pathway](#)
- [Insulin signaling pathway](#)
- [MAPK signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Toll-like receptor signaling pathway](#)
- [Type II diabetes mellitus](#)
- [Wnt signaling pathway](#)

## Disease

- [HIV Infections](#)