

Bioactive

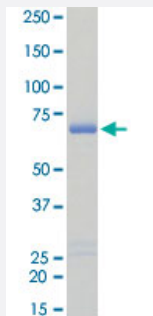
Full-Length

# MAPK3 (Human) Recombinant Protein

Catalog # P5772

Size 5 ug

## Applications



## Result of activity analysis

Result of activity analysis

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## Specification

Product Description	Human MAPK3 (NP_002737.1, 1 a.a. - 379 a.a.) full length recombinant protein with GST tag expressed in <i>Escherichia coli</i> .
Theoretical MW (kDa)	70
Form	Liquid
Preparation Method	<i>Escherichia coli</i> expression system
Purification	Glutathione sepharose chromatography
Purity	90 % by SDS-PAGE/CBB staining

Activity	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 LabChip™3000. Substrate : Modified Erktide. ATP: 100 µM.
Quality Control Testing	SDS-PAGE Stained with Coomassie Blue
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 — MAPK3

Entrez GeneID	<a href="#">5595</a>
Protein Accession#	<a href="#">NP_002737.1</a>
Gene Name	MAPK3
Gene Alias	ERK1, HS44KDAP, HUMKER1A, MGC20180, P44ERK1, P44MAPK, PRKM3
Gene Description	mitogen-activated protein kinase 3
Omim ID	<a href="#">601795</a>
Gene Ontology	<a href="#">Hyperlink</a>
Gene Summary	The protein encoded by this gene 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 kinase is activated by upstream kinases, resulting in its translocation to the nucleus where it phosphorylates nuclear targets. Alternatively spliced transcript variants encoding different protein isoforms have been described. [provided by RefSeq]
Other Designations	OTTHUMP00000174538 OTTHUMP00000174540 extracellular signal-regulated kinase 1 extracellular signal-related kinase 1

## Pathway

- [Acute myeloid leukemia](#)
- [Adherens junction](#)
- [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](#)
- [Non-small cell lung cancer](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Prion diseases](#)
- [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](#)

## Disease

- [Asthma](#)
- [Autistic Disorder](#)
- [Disease Models](#)
- [Genetic Predisposition to Disease](#)