

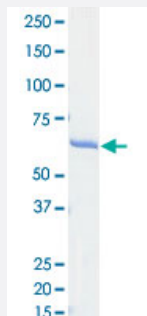
Bioactive

MAPK14 (K53M) (Human) Recombinant Protein

Catalog # P5682

Size 50 ug

Applications



Result of activity analysis

Result of activity analysis

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Specification

Product Description	Human MAPK14 (NP_620581.1, 9 a.a. - 352 a.a.) K53M mutant partial recombinant protein with GS T tag expressed in <i>Escherichia coli</i> .
Host	<i>Escherichia coli</i>
Theoretical MW (kDa)	66
Form	Liquid
Preparation Method	<i>Escherichia coli</i> expression system
Purification	Glutathione sepharose chromatography
Purity	98 % by SDS-PAGE/CBB staining

Activity	The activity was determined by IMAPTM assay. The enzyme was incubated with fluorescein labeled peptide and phosphorylation was detected by IMAPTM technology (fluorescence polarization). Substrate: Erktide. ATP: 15 uM.
Quality Control Testing	Loading 1 ug protein in SDS-PAGE
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.1% CHAPS, 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 — MAPK14

Entrez GeneID	1432
Protein Accession#	NP_620581.1
Gene Name	MAPK14
Gene Alias	CSBP1, CSBP2, CSPB1, EXIP, Mxi2, PRKM14, PRKM15, RK, SAPK2A, p38, p38ALPHA
Gene Description	mitogen-activated protein kinase 14
Omim ID	600289
Gene Ontology	Hyperlink
Gene Summary	<p>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 activated by various environmental stresses and proinflammatory cytokines. The activation requires its phosphorylation by MAP kinase kinases (MKKs), or its autophosphorylation triggered by the interaction of MAP3K7IP1/TAB1 protein with this kinase. The substrates of this kinase include transcription regulator ATF2, MEF2C, and MAX, cell cycle regulator CDC25B, and tumor suppressor p53, which suggest the roles of this kinase in stress related transcription and cell cycle regulation, as well as in genotoxic stress response. Four alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq]</p>

Other Designations

Csais binding protein|MAP kinase Mxi2|MAX-interacting protein 2|cytokine suppressive anti-inflammatory drug binding protein|p38 MAP kinase|p38 mitogen activated protein kinase|p38alpha Exip|stress-activated protein kinase 2A

Pathway

- [Amyotrophic lateral sclerosis \(ALS\)](#)
- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [Fc epsilon RI signaling pathway](#)
- [GnRH signaling pathway](#)
- [Leukocyte transendothelial migration](#)
- [MAPK signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [T cell receptor signaling pathway](#)
- [Toll-like receptor signaling pathway](#)
- [VEGF signaling pathway](#)

Disease

- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Disease Models](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [HIV Infections](#)
- [Narcolepsy](#)
- [Obesity](#)
- [Ovarian Failure](#)

- [Polycystic Ovary Syndrome](#)
- [Puberty](#)
- [Schizophrenia](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)