

Bioactive

MAP3K5 (Human) Recombinant Protein

Catalog # P6519

Size 5 ug

Applications

Result of activity analysis

Result of activity analysis

Specification

Product Description	Human MAP3K5 (NP_005914.1, 654 a.a. - 971 a.a.) partial recombinant protein with GST-tag at N-terminal using baculovirus expression system.
Host	Viruses
Form	Liquid
Preparation Method	Baculovirus expression system.
Purification	Glutathione sepharose chromatography.
Purity	0.99
Activity	The activity was determined by ELISA. The enzyme was incubated with GST-fused substrate protein, and after stopping kinase reaction by EDTA, the reaction solution was transferred into glutathione-coated plate. Phosphorylation was detected by anti-phospho antibody and HRP-labeled anti-rabbit IgG (or HRP-labeled anti-mouse IgG). Substrate: MAP2K7 [inactive mutant], ATP: 100 uM.
Quality Control Testing	The purity was assessed by SDS-PAGE/CBB staining.
Storage Buffer	50 mM Tris-HCl, 150 mM NaCl, 0.05% Brij35, 1 mM DTT, 10% glycerol, pH7.5
Storage Instruction	Stored at -80°C. Aliquot to avoid repeated freezing and thawing.

Note	Result of activity analysis
	Result of activity analysis

Applications

- Functional Study

Gene Info — MAP3K5

Entrez GeneID [4217](#)

Protein Accession# [NP_005914.1](#)

Gene Name MAP3K5

Gene Alias ASK1, MAPKKK5, MEKK5

Gene Description mitogen-activated protein kinase kinase kinase 5

Omim ID [602448](#)

Gene Ontology [Hyperlink](#)

Gene Summary

Mitogen-activated protein kinase (MAPK) signaling cascades include MAPK or extracellular signal-regulated kinase (ERK), MAPK kinase (MKK or MEK), and MAPK kinase kinase (MAPKKK or MEKK). MAPKK kinase/MEKK phosphorylates and activates its downstream protein kinase, MAPK kinase/MEK, which in turn activates MAPK. The kinases of these signaling cascades are highly conserved, and homologs exist in yeast, Drosophila, and mammalian cells. MAPKKK5 contains 1,374 amino acids with all 11 kinase subdomains. Northern blot analysis shows that MAPKKK5 transcript is abundantly expressed in human heart and pancreas. The MAPKKK5 protein phosphorylates and activates MKK4 (aliases SERK1, MAPKK4) in vitro, and activates c-Jun N-terminal kinase (JNK)/stress-activated protein kinase (SAPK) during transient expression in COS and 293 cells; MAPKKK5 does not activate MAPK/ERK. [provided by RefSeq]

Other Designations MAP/ERK kinase kinase 5|MAPK/ERK kinase kinase 5|OTTHUMP00000017275|apoptosis signal regulating kinase

Pathway

- [Amyotrophic lateral sclerosis \(ALS\)](#)
- [MAPK signaling pathway](#)

- [Neurotrophin signaling pathway](#)

Disease

- [Asthma](#)
- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Hypersensitivity](#)
- [Inflammation](#)
- [Insulin Resistance](#)
- [Lymphoma](#)
- [Tobacco Use Disorder](#)