Bioactive Full-Length

MAP2K1 (Human) Recombinant Protein

Catalog # P6516 Size 5 ug

Applications

Result of activity analysis

Result of activity analysis

Specification

Product Description	Human MAP2K1 (NP_002746.1, 1 a.a. - 393 a.a.) full length 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 and Ni-NTA affinity chromatography.
Purity	0.9
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: Erk2 [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 — MAP2K1

Entrez GeneID	5604
Protein Accession#	NP_002746.1
Gene Name	MAP2K1
Gene Alias	MAPKK1, MEK1, MKK1, PRKMK1
Gene Description	mitogen-activated protein kinase kinase 1
Omim ID	176872
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a member of the dual specificity protein kinase family, which acts as a mitogen-activated protein (MAP) kinase kinase. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals. This protein kinase lies upstream of MAP kinases and stimulates the enzymatic activity of MAP kinases upon wide variety of extra- and intracellular signals. As an essential component of MAP kinase signal transduction pathway, this kinase is involved in many cellular processes such as proliferation, differentiation, transcription regulation and development. [provided by RefSeq
Other Designations	protein kinase, mitogen-activated, kinase 1 (MAP kinase kinase 1)

Pathway

- Acute myeloid leukemia
- 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
- 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
- Thyroid cancer
- Toll-like receptor signaling pathway
- Vascular smooth muscle contraction
- VEGF signaling pathway

Disease

- Abnormalities
- Adenocarcinoma
- Carcinoma
- Cognition Disorders
- Developmental Disabilities
- Ectodermal Dysplasia
- Genetic Predisposition to Disease
- Glioma
- Heart Defects
- LEOPARD Syndrome
- Lung Neoplasms
- Mental Retardation
- Noonan Syndrome
- Pancreatic Neoplasms
- Skin Abnormalities
- Syndrome