

Bioactive

Full-Length

MAP3K3 (Human) Recombinant Protein

Catalog # P5590 Size 5 ug

Applications



Result of activity analysis

Result of activity analysis

Specification	
Product Description	Human MAP3K3 (NP_002392.2, 1 a.a 626 a.a.) full-length recombinant protein with GST tag expre ssed in baculovirus infected Sf21 cells.
Host	insect
Theoretical MW (kDa)	97
Form	Liquid
Preparation Method	Baculovirus infected insect cell (Sf21) expression system
Purification	Glutathione sepharose chromatography
Purity	89 % by SDS-PAGE/CBB staining



Product Information

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-co ated plate. Phosphorylation was detected by anti-phospho antibody and HRP-labeled anti-rabbit lgG(or HRP-labeled anti-mouse lgG). Substrate: MAP2K7 [inactive mutant]. ATP: 100 uM
Quality Control Testing	Loading 1 ug protein in SDS-PAGE
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.05% 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 — MAP3K3	
Entrez GenelD	<u>4215</u>
Protein Accession#	NP_002392.2
Gene Name	MAP3K3
Gene Alias	MAPKKK3, MEKK3
Gene Description	mitogen-activated protein kinase kinase 3
Omim ID	602539
Gene Ontology	<u>Hyperlink</u>
Gene Summary	This gene product is a 626-amino acid polypeptide that is 96.5% identical to mouse Mekk3. Its ca talytic domain is closely related to those of several other kinases, including mouse Mekk2, tobacc o NPK, and yeast Ste11. Northern blot analysis revealed a 4.6-kb transcript that appears to be ub iquitously expressed. This protein directly regulates the stress-activated protein kinase (SAPK) a nd extracellular signal-regulated protein kinase (ERK) pathways by activating SEK and MEK1/2 r espectively; it does not regulate the p38 pathway. In cotransfection assays, it enhanced transcripti on from a nuclear factor kappa-B (NFKB)-dependent reporter gene, consistent with a role in the S APK pathway. Alternatively spliced transcript variants encoding distinct isoforms have been obser ved. [provided by RefSeq





Other Designations

MAP/ERK kinase kinase 3|MAPK/ERK kinase kinase 3

Pathway

- GnRH signaling pathway
- MAPK signaling pathway
- Neurotrophin signaling pathway

Disease

- Cardiovascular Diseases
- Diabetes Mellitus
- Edema