

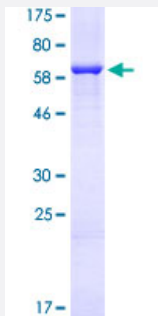
Full-Length

MAP2K2 (Human) Recombinant Protein (P02)

Catalog # H00005605-P02

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human MAP2K2 full-length ORF (NP_109587.1, 1 a.a. - 400 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MLARRKPVLPALTINPTIAEGPSPTSEGASEANLVDLQKKLEELDEQQKKRLEAFLTQKAKVGE
LKDDDFERISELGAGNGGVVTKVQHRPSGLIMARKLIHLEIKPAIRNQIIRELQVLHECNSPYVGFYG
AFYSDGEISICMEHMDGGSLDQVLKEAKRIPEEILGKVSIAVLRGLAYLREKHQIMHRDVKPSNILVN
SRGEIKLCDFGVSGQLIDSMANSFVGTRSYMAPERLQGTHYSVQSDIWSMGLSLVELAVGRYPI
PPDAKELEAIFGRPVDGEEGEPHSISPRPRPPGRPVS GHGMDSRPAMAIFELLDYVNEPPPKL
PNGVFTPDFQEFVNKCLIKNPAERADLKMLTNHTFIKRSEVEEVDFAGWLCKTLRLNQPGTPTRT
AV

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

70.8

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — MAP2K2

Entrez GeneID [5605](#)

GeneBank Accession# [NM_030662.2](#)

Protein Accession# [NP_109587.1](#)

Gene Name MAP2K2

Gene Alias FLJ26075, MAPKK2, MEK2, MKK2, PRKMK2

Gene Description mitogen-activated protein kinase kinase 2

Omim ID [115150 601263](#)

Gene Ontology [Hyperlink](#)

Gene Summary

The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP kinase family. This kinase is known to play a critical role in mitogen growth factor signal transduction. It phosphorylates and thus activates MAPK1/ERK2 and MAPK2/ERK3. The activation of this kinase itself is dependent on the Ser/Thr phosphorylation by MAP kinase kinase kinases. Mutations in this gene cause cardiofaciocutaneous syndrome (CFC syndrome), a disease characterized by heart defects, mental retardation, and distinctive facial features similar to those found in Noonan syndrome. The inhibition or degradation of this kinase is also found to be involved in the pathogenesis of Yersinia and anthrax. A pseudogene, which is located on chromosome 7, has been identified for this gene. [provided by RefSeq]

Other Designations

ERK activator kinase 2|MAP kinase kinase 2|MAPK/ERK kinase 2|dual specificity mitogen-activated protein kinase kinase 2|mitogen-activated protein kinase kinase 2, p45

Publication Reference

- [Copper is required for oncogenic BRAF signalling and tumorigenesis.](#)

Brady DC, Crowe MS, Turski ML, Hobbs GA, Yao X, Chaikuad A, Knapp S, Xiao K, Campbell SL, Thiele DJ, Counter CM.

Nature 2014 May; 509(7501):492.

Application: IP, Recombinant protein

Pathway

- [Acute myeloid leukemia](#)
- [B cell receptor signaling pathway](#)
- [Bladder cancer](#)
- [Chronic myeloid leukemia](#)
- [Endometrial cancer](#)
- [ErbB signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [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](#)
- [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](#)
- [Ectodermal Dysplasia](#)
- [Genetic Predisposition to Disease](#)
- [Glioma](#)
- [Heart Defects](#)
- [LEOPARD Syndrome](#)
- [Mental Retardation](#)
- [Noonan Syndrome](#)
- [Skin Abnormalities](#)
- [Syndrome](#)