

Product datasheet for PH318460

OriGene Technologies, Inc.

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MEK1 (MAP2K1) (NM_002755) Human Mass Spec Standard

Product data:

Product Type: Mass Spec Standards

Description: MAP2K1 MS Standard C13 and N15-labeled recombinant protein (NP_002746)

Species: Human
Expression Host: HEK293

Expression cDNA Clone

RC218460

or AA Sequence: Predicted MW:

43.3 kDa

Protein Sequence: >RC218460 representing NM_002755

Red=Cloning site Green=Tags(s)

MPKKKPTPIQLNPAPDGSAVNGTSSAETNLEALQKKLEELELDEQQRKRLEAFLTQKQKVGELKDDDFEK ISELGAGNGGVVFKVSHKSSGLVMARKLIHLEIKPAIRNQIIRELQVLHECNSPYIVGFYGAFYSDGEIS ICMEHMDGGSLDQVLKKAGRIPEQILGKVSIAVIKGLTYLREKHKIMHRDVKPSNILVNSRGEIKLCDFG VSGQLIDSMANSFVGTRSYMSPERLQGTHYSVQSDIWSMGLSLVEMAVGRYPIPPPDAKELELMFGCQVE GDAAETPPRPTPGRPLSSYGMDSRPPMAIFELLDYIVNEPPPKLPSGVFSLEFQDFVNKCLIKNPAERA

DLKQLMVHAFIKRSDAEEVDFAGWLCSTIGLNQPSTPTHAAGV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Labeling Method: Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Storage: Store at -80°C. Avoid repeated freeze-thaw cycles.

Stability: Stable for 3 months from receipt of products under proper storage and handling conditions.

RefSeq: NP 002746

RefSeq Size: 2222 RefSeq ORF: 1179

Synonyms: CFC3; MAPKK1; MEK1; MEL; MKK1; PRKMK1

Locus ID: 5604



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UniProt ID: <u>Q02750</u>, <u>A4QPA9</u>

Cytogenetics: 15q22.31

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, Jul 2008]

Protein Families: Druggable Genome, Protein Kinase

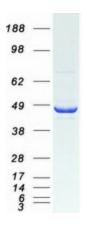
Protein Pathways: Acute myeloid leukemia, B cell receptor signaling pathway, Bladder cancer, Chemokine

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, Oocyte meiosis, Pancreatic cancer, Pathways in cancer, Prion diseases, Progesterone-mediated oocyte maturation, 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

Product images:



Coomassie blue staining of purified MAP2K1 protein (Cat# [TP318460]). The protein was produced from HEK293T cells transfected with MAP2K1 cDNA clone (Cat# [RC218460]) using MegaTran 2.0 (Cat# [TT210002]).