

## **Product datasheet for PH307115**

### OriGene Technologies, Inc.

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# MEK3 (MAP2K3) (NM 145109) Human Mass Spec Standard

**Product data:** 

**Product Type:** Mass Spec Standards

**Description:** MAP2K3 MS Standard C13 and N15-labeled recombinant protein (NP\_659731)

Species: Human **HEK293 Expression Host:** 

**Expression cDNA Clone** 

or AA Sequence:

RC207115

Predicted MW: 39.3 kDa

>RC207115 protein sequence **Protein Sequence:** 

Red=Cloning site Green=Tags(s)

MESPASSQPASMPQSKGKSKRKKDLRISCMSKPPAPNPTPPRNLDSRTFITIGDRNFEVEADDLVTISEL GRGAYGVVEKVRHAQSGTIMAVKRIRATVNSQEQKRLLMDLDINMRTVDCFYTVTFYGALFREGDVWICM ELMDTSLDKFYRKVLDKNMTIPEDILGEIAVSIVRALEHLHSKLSVIHRDVKPSNVLINKEGHVKMCDFG ISGYLVDSVAKTMDAGCKPYMAPERINPELNQKGYNVKSDVWSLGITMIEMAILRFPYESWGTPFQQLKQ VVEEPSPQLPADRFSPEFVDFTAQCLRKNPAERMSYLELMEHPFFTLHKTKKTDIAAFVKEILGEDS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

C-Myc/DDK Tag:

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

Concentration: >0.05 µg/µL 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

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

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

RefSeq: NP 659731

RefSeq Size: 2319 RefSeq ORF: 1041

Synonyms: MAPKK3; MEK3; MKK3; PRKMK3; SAPKK-2; SAPKK2

Locus ID: 5606



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UniProt ID: <u>P46734</u>, <u>Q6Fl23</u>

Cytogenetics: 17p11.2

**Summary:** The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP

kinase kinase family. This kinase is activated by mitogenic and environmental stress, and participates in the MAP kinase-mediated signaling cascade. It phosphorylates and thus activates MAPK14/p38-MAPK. This kinase can be activated by insulin, and is necessary for the expression of glucose transporter. Expression of RAS oncogene is found to result in the accumulation of the active form of this kinase, which thus leads to the constitutive activation of MAPK14, and confers oncogenic transformation of primary cells. The inhibition of this kinase is involved in the pathogenesis of Yersina pseudotuberculosis. Multiple alternatively spliced transcript variants that encode distinct isoforms have been reported for this gene.

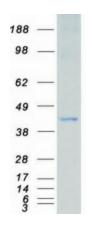
[provided by RefSeq, Jul 2008]

**Protein Families:** Druggable Genome, Protein Kinase, Transcription Factors

**Protein Pathways:** Amyotrophic lateral sclerosis (ALS), Fc epsilon RI signaling pathway, GnRH signaling pathway,

MAPK signaling pathway, Toll-like receptor signaling pathway

### **Product images:**



Coomassie blue staining of purified MAP2K3 protein (Cat# [TP307115]). The protein was produced from HEK293T cells transfected with MAP2K3 cDNA clone (Cat# [RC207115]) using MegaTran 2.0 (Cat# [TT210002]).