

Product datasheet for **CF505659**

MEK3 (MAP2K3) Mouse Monoclonal Antibody [Clone ID: OTI4G4]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI4G4
Applications:	IF, IHC, WB
Recommended Dilution:	WB 1:200~2000, IHC 1:150, IF 1:100
Reactivity:	Human, Dog, Rat, Mouse
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human MAP2K3(NP_659731) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	39.1 kDa
Gene Name:	mitogen-activated protein kinase kinase 3
Database Link:	NP_659731 Entrez Gene 26397 Mouse Entrez Gene 303200 Rat Entrez Gene 489547 Dog Entrez Gene 5606 Human P46734



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Background:

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]

Synonyms:

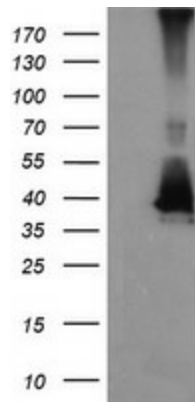
MAPKK3; MEK3; MKK3; PRKMK3; SAPKK-2; SAPKK2

Protein Families:

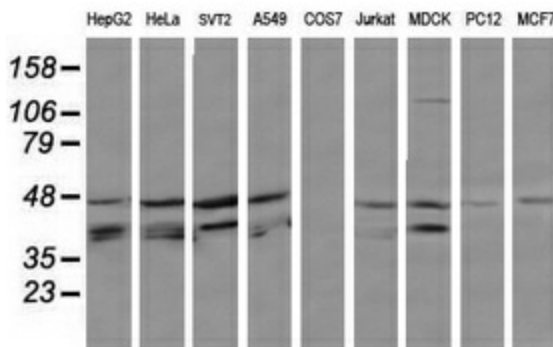
Druggable Genome, Protein Kinase, Transcription Factors

Protein Pathways:

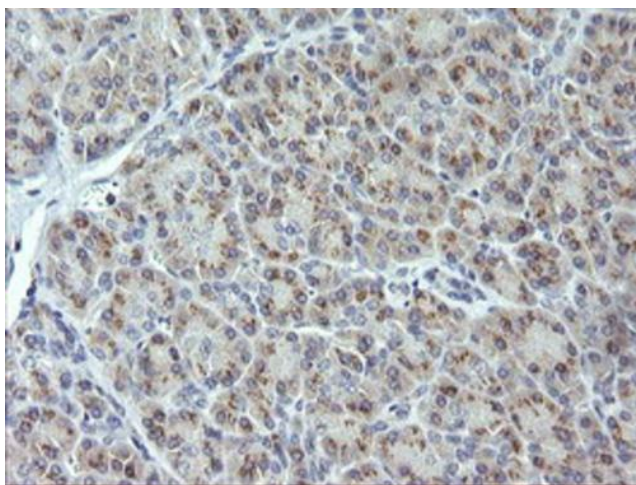
Amyotrophic lateral sclerosis (ALS), Fc epsilon RI signaling pathway, GnRH signaling pathway, MAPK signaling pathway, Toll-like receptor signaling pathway

Product images:


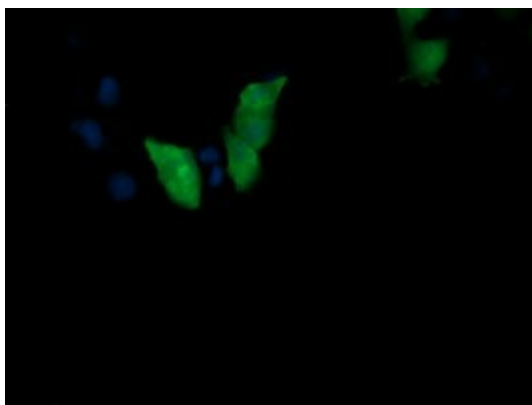
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY MAP2K3 ([RC207115], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MAP2K3. Positive lysates [LY403425] (100ug) and [LC403425] (20ug) can be purchased separately from OriGene.



Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-MAP2K3 monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).



Immunohistochemical staining of paraffin-embedded Human pancreas tissue within the normal limits using anti-MAP2K3 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, [TA505659])



Anti-MAP2K3 mouse monoclonal antibody ([TA505659]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY MAP2K3 ([RC207115]).