

Immunotag™ MEK-1 Polyclonal Antibody

Antibody Specification	
Catalog No.	ITM3433
Product Description	Immunotag™ MEK-1 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	MEK-1
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p
Recommended Dilution	Western Blot: 1/500 - 1/2000.IHC-p:1:50-300. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from human MEK-1 around the non-phosphorylation site of T286.
Specificity	The antibody detects endogenous MEK-1 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	PBS, pH 7.4, containing 0.02% sodium azide as Preservative and 50% Glycerol.
Gene Name	MAP2K1
Accession No.	Q02750 P31938 Q01986
Alternate Names	MAP2K1; MEK1; PRKMK1; Dual specificity mitogen-activated protein kinase kinase 1; MAP kinase kinase 1; MAPKK 1; MKK1; ERK activator kinase 1; MAPK/ERK kinase 1; MEK 1

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Description	mitogen-activated protein kinase kinase 1(MAP2K1) Homo sapiens 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],
Cell Pathway/ Category	MAPK_ERK_Growth,MAPK_G_Protein,ErbB_HER,Chemokine,Oocyte meiosis,Vascular smooth muscle contraction,Dorso-ventral axis formation,VEGF,Focal adhesion,Gap junction,Toll_Like,Natural killer cell mediated cytotoxicity,T_Cell_Receptor,B_Cell_Antigen,Fc epsilon RI,Fc gamma R-mediated phagocytosis,Long-term potentiation,Neurotrophin,Long-term depression,Regulates Actin and Cytoskeleton,Insulin_Receptor,GnRH,Progesterone-mediated oocyte maturation,Melanogenesis,Prion diseases,Pathways in cancer,Colorectal cancer,Renal cell carcinoma,Pancreatic cancer,Endometrial cancer,Glioma,Prostate cancer,Thyroid cancer,Melanoma,Bladder cancer,Chronic myeloid leukemia,Acute myeloid leukemia,Non-small cell lung cancer,
Protein Expression	Brain,PCR rescued clones,
Subcellular Localization	nucleus,cytoplasm,mitochondrion,early endosome,late endosome,endoplasmic reticulum,Golgi apparatus,microtubule organizing center,spindle pole body,cytosol,plasma membrane,focal adhesion,extrace
Protein Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,disease:Defects in MAP2K1 are a cause of cardiofaciocutaneous syndrome (CFC syndrome) [MIM:115150]; also known as cardio-facio-cutaneous syndrome. CFC syndrome is characterized by a distinctive facial appearance, heart defects and mental retardation. Heart defects include pulmonic stenosis, atrial septal defects and hypertrophic cardiomyopathy. Some affected individuals present with ectodermal abnormalities such as sparse, friable hair, hyperkeratotic skin lesions and a generalized ichthyosis-like condition. Typical facial features are similar to Noonan syndrome. They include high forehead with bitemporal constriction, hypoplastic supraorbital ridges, downslanting palpebral fissures, a depressed nasal bridge, and posteriorly angulated ears with prominent helices. The inheritance of CFC syndrome is autosomal dominant.,enzyme regulation:Activated by phosphorylation.,function:Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. Activates ERK1 and ERK2 MAP kinases.,PTM:Acetylation by Yersinia yopJ prevents phosphorylation and activation, thus blocking the MAPK signaling pathway.,PTM:Phosphorylation on Ser/Thr by MAP kinase kinase kinases (RAF or MEKK1) regulates positively the kinase activity.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Interacts with MORG1 (By similarity). Interacts with Yersinia yopJ.,
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