

Summary

Production Name	MEK-1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC, WB, ELISA
Reactivity	Human, Mouse, Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	MAP2K1 MAP2K1; MEK1; PRKMK1; Dual specificity mitogen-activated protein kinase kinase 1;
Alternative Names	MAP kinase kinase 1; MAPKK 1; MKK1; ERK activator kinase 1; MAPK/ERK kinase 1; MEK 1
Gene ID	5604.0
SwissProt ID	Q02750. The antiserum was produced against synthesized peptide derived from human MEK1. AA range: 252-301

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000..
Molecular Weight	43kD

Background

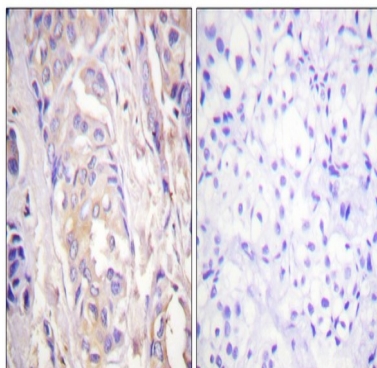
The protein encoded by this gene is a member of the dual specificity protein kinase family, which acts as a mitogen-activated protein (MAP) kinase kinase. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals. This protein 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],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.,

Research Area

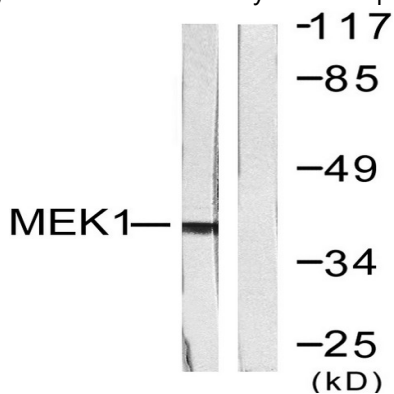
Regulates Angiogenesis; Regulation of Actin Dynamics; Stem cell pathway; T_Cell_Receptor; Cell Growth; Insulin Receptor; Toll_Like; MAPK_ERK_Growth;MAPK_G_Protein; ErbB/HER; B_Cell_Antigen; PI3K/Akt

Image Data

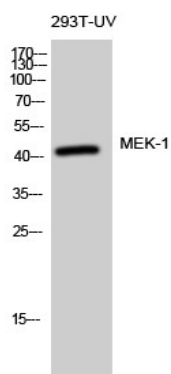
Product Name: MEK-1 Rabbit Polyclonal Antibody
Catalog #: APRab13798



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using MEK1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from NIH/3T3 cells, treated with PMA 250ng/ml 5', using MEK1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of 293T-UV cells using MEK-1 Polyclonal Antibody diluted at 1: 500

Note

For research use only.