
Product Name: MEK-2 Rabbit Polyclonal Antibody**Catalog #: APRab13802**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA,IP
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000,IP 1:20-1:50
Molecular Weight	44kDa

Antigen Information

Gene Name	MAP2K2
Alternative Names	MAP2K2; MEK2; MKK2; PRKMK2; Dual specificity mitogen-activated protein kinase kinase 2; MAP kinase kinase 2; MAPKK 2; ERK activator kinase 2; MAPK/ERK kinase 2; MEK 2
Gene ID	5605.0
SwissProt ID	P36507
Immunogen	The antiserum was produced against synthesized peptide derived from human MAP2K2. AA range:261-310

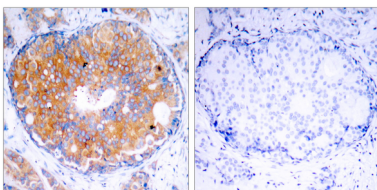
Background

The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase is known to play a critical role in mitogen growth factor signal transduction. It phosphorylates and thus activates MAPK1/ERK2 and MAPK2/ERK3. The activation of this kinase itself is dependent on the Ser/Thr phosphorylation by MAP kinase kinase kinases. Mutations in this gene cause cardiofaciocutaneous syndrome (CFC syndrome), a disease characterized by heart defects, mental retardation, and distinctive facial features similar to those found in Noonan syndrome. The inhibition or degradation of this kinase is also found to be involved in the pathogenesis of Yersinia and anthrax. A pseudogene, which is located on chromosome 7, has been identified for this gene. [provided by RefSeq, Jul 2008],catalytic activity:ATP + a protein = ADP + a phosphoprotein.,disease:Defects in MAP2K2 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.,function:Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. Activates the ERK1 and ERK2 MAP kinases.,PTM:MAPKK is itself dependent on Ser/Thr phosphorylation for activity catalyzed by MAP kinase kinase kinases (RAF or MEKK1),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.,

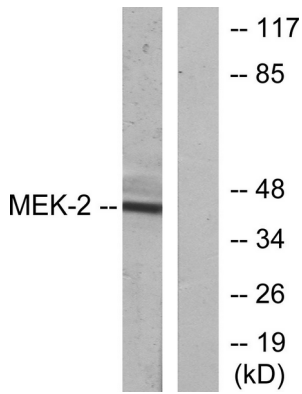
Research Area

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

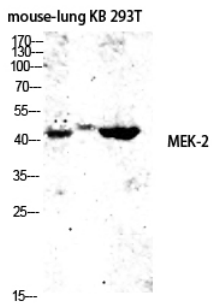
Image Data



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using MEK2 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from ovary cancer cells, using MEK2 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of mouse-lung KB 293T lysis using MEK-2 antibody. Antibody was diluted at 1:2000