Product Name: **MEK2(2C3)Mouse Monoclonal Antibody**
Catalog #: **AMM13803**
For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
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
Molecular Weight	45kDa

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	A synthetic peptide corresponding to target protein

Background

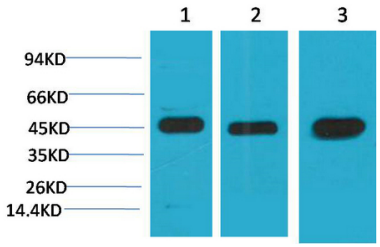
The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase is

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

MAPK_ERK_Growth;MAPK_G_Protein;ErbB_HER;Vascular smooth muscle contraction;VEGF;Gap junction;Toll_Like;Natural killer cell mediated cytotoxicity;T_Cell_Receptor;B_Cell_Antigen;Fc epsilon RI;Long-term potentiation;Neurotrophin;Long-term depression;Regulates Actin and Cytoskeleton;Insulin_Receptor;GnRH;Melanogenesis;Prion diseases;Pathways in cancer;Renal cell carcinoma;Endometrial cancer;Glioma;Prostate cancer;Thyroid cancer;Melanoma;Bladder cancer;Chronic myeloid leukemia;Acute myeloid leukemia;Non-small cell lung cancer;

Image Data



Western blot analysis of 1） Hela, 2）3T3, 3） Rat Brain Tissue with MEK2 Mouse mAb diluted at 1:2,000.