

## Summary

<b>Production Name</b>	MEK2(2C3)Mouse Monoclonal Antibody
<b>Description</b>	Mouse Monoclonal Antibody
<b>Host</b>	Mouse
<b>Application</b>	WB
<b>Reactivity</b>	Human,Rat,Mouse

## Performance

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

## Immunogen

<b>Gene Name</b>	MAP2K2 MAP2K2; MEK2; MKK2; PRKMK2; Dual specificity mitogen-activated protein kinase
<b>Alternative Names</b>	kinase 2; MAP kinase kinase 2; MAPKK 2; ERK activator kinase 2; MAPK/ERK kinase 2; MEK 2
<b>Gene ID</b>	5605.0
<b>SwissProt ID</b>	P36507.Synthesized peptide derived from human MEK-2 around the non-phosphorylation site of T394.

## Application

<b>Dilution Ratio</b>	WB 1:500-1:2000
<b>Molecular Weight</b>	45kD

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## Background

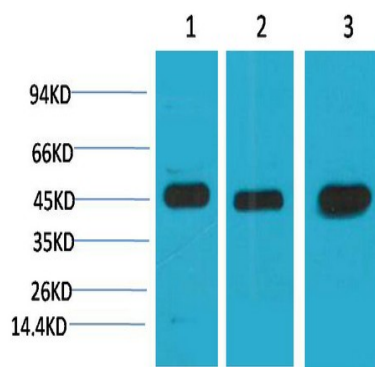
The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase is known to play a critical role in mitogen growth factor signal transduction. It phosphorylates and thus activates MAPK1/ERK2 and MAPK2/ERK3. The activation of this kinase 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

Product Name: MEK2(2C3)Mouse Monoclonal Antibody  
Catalog #: AMM13803



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

### Note

For research use only.