

## **MEK-2 Polyclonal Antibody**

Catalog No: YT2716

Reactivity: Human; Mouse; Rat

**Applications:** WB;IHC;IF;IP;ELISA

Target: MEK2

**Fields:** >>EGFR tyrosine kinase inhibitor resistance;>>Endocrine resistance;>>MAPK

signaling pathway;>>ErbB signaling pathway;>>Ras signaling pathway;>>Rap1

signaling pathway;>>cGMP-PKG signaling pathway;>>cAMP signaling

pathway;>>HIF-1 signaling pathway;>>FoxO signaling pathway;>>Sphingolipid

signaling pathway;>>Phospholipase D signaling pathway;>>Autophagy -

animal;>>mTOR signaling pathway;>>PI3K-Akt signaling

pathway;>>Apoptosis;>>Cellular senescence;>>Vascular smooth muscle contraction;>>VEGF signaling pathway;>>Apelin signaling pathway;>>Gap junction;>>Signaling pathways regulating pluripotency of stem cells;>>Neutrophil extracellular trap formation;>>Toll-like receptor signaling pathway;>>Natural killer cell mediated cytotoxicity;>>T cell receptor signaling pathway;>>B cell receptor

signaling pathway;>>Fc epsilon RI signaling pathway;>>Long-term potentiation;>>Neurotrophin signaling pathway;>>Long-term depression;>>Regulation of actin cytoskeleton;>>Insulin signaling

pathway;>>GnRH signal

Gene Name: MAP2K2

**Protein Name:** Dual specificity mitogen-activated protein kinase kinase 2

Human Gene Id: 5605

**Human Swiss Prot** P36507

No:

Mouse Gene Id: 26396

**Mouse Swiss Prot** 

No:

Rat Gene ld: 58960

Q63932

Rat Swiss Prot No: P36506

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**Immunogen:** The antiserum was produced against synthesized peptide derived from human

MAP2K2. AA range:261-310

**Specificity:** MEK-2 Polyclonal Antibody detects endogenous levels of MEK-2 protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. Immunoprecipitation: 2-5 ug:mg lysate.

ELISA: 1:10000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 44kD

**Cell Pathway:** 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

**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],

**Function:** 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

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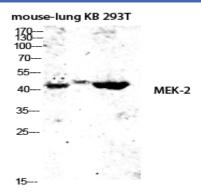
supraorbital ridges, downslanting palpebral fissures, a depressed nasal bridge, and posteriorly angulated ears with prominent helices. The inheritance of CFC syndrome is autosomal dominant.,function:C

Subcellular Location:

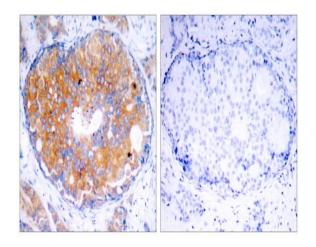
Cytoplasm . Membrane ; Peripheral membrane protein . Membrane localization is probably regulated by its interaction with KSR1. .

**Expression:** Colon carcinoma, Epithelium, Human cerebellum, Muscle, Platelet

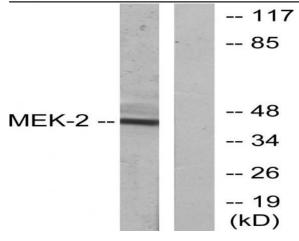
## **Products Images**



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



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.