



## Rabbit Anti-phospho-MEK2

SL5427R-FITC

<b>Product Name:</b>	Anti-phospho-MEK2 (Thr394)/FITC
<b>Chinese Name:</b>	FITC标记的磷酸化丝裂原活化蛋白激酶激酶2抗体
<b>Alias:</b>	MEK2 (phospho T394); p-MEK2 (phospho T394); MEK2(Phospho-Thr394); Cardiofaciocutaneous syndrome; CFC syndrome; Dual specificity mitogen activated protein kinase kinase 2; Dual specificity mitogen-activated protein kinase kinase 2; ERK activator kinase 2; FLJ26075; MAP kinase kinase 2; MAP2K 2; map2k2; MAPK / ERK kinase 2; MAPK/ERK kinase 2; MAPKK 2; MAPKK2; MEK 2; MEK2; Microtubule Associated Protein Kinase Kinase 2; Mitogen activated protein kinase kinase 2; Mitogen activated protein kinase kinase 2 p45; MKK 2; MKK2; MP2K2_HUMAN; OTTHUMP00000165826; OTTHUMP00000165827; PRKMK 2; PRKMK2 V.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,
<b>Applications:</b>	IF=1:50-200 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	46kDa
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated Synthesised phosphopeptide derived from human MEK2 around the phosphorylation site of Thr394
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**Product Detail:**

**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:**

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.

**Subunit:**

Interacts with MORG1 (By similarity). Interacts with SGK1.

**Post-translational modifications:**

MAPKK is itself dependent on Ser/Thr phosphorylation for activity catalyzed by MAP kinase kinase kinases (RAF or MEKK1). Phosphorylated by MAP2K1/MEK1. Acetylation of Ser-222 and Ser-226 by Yersinia yopJ prevents phosphorylation and activation, thus blocking the MAPK signaling pathway.

**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.

**Similarity:**

Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase subfamily.  
Contains 1 protein kinase domain.

**Database links:**

[Entrez Gene: 407835](#) Human

[Entrez Gene: 5605](#) Human

[Entrez Gene: 26396](#) Mouse

[Entrez Gene: 58960](#) Rat

[Omim: 601263](#) Human

[SwissProt: P36507](#) Human

[SwissProt: Q63932](#) Mouse

[SwissProt: P36506](#) Rat

[Unigene: 465627](#) Human

[Unigene: 275436](#) Mouse

[Unigene: 82693](#) Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.