

## MEK1/2 (Phospho Ser217/221) (AX0583) Rabbit mAb

**M3537**

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human, Mouse, Rat

#### Applications

- WB, IHC, IF, IP, ELISA

#### MW

- 44kDa (Calculated)
- 44kDa (Observed)

#### Isotype

- IgG

### Recommended Dilution Ratios

#### Application

Western Blotting (WB)  
 Immunohistochemistry (IHC) (Paraffin)  
 IF/ICC  
 ELISA  
 Immunoprecipitation (IP)

#### Dilution

1:2000-10000  
 1:1000-5000  
 1:200-1000  
 1:5000-20000  
 1:50-200

### Storage

**Storage at** -15°C to -25°C/1 year (Do not lower than -25°C)  
**Storage buffer** PBS, 50% glycerol, 0.05% Proclin 300, 0.05% BSA

### Basic Information

**Clonality** Monoclonal  
**Clone Number** AX0583  
**Immunogen** Recombinant protein of the human MEK1 protein.  
**Specificity** The antibody can specifically recognize human MEK1/2 (Phospho Ser217/221) protein.  
**Purification** Affinity purification Protein A  
**Concentration** Product concentration may vary by batch. Please refer to the product COA for details.

### Target Information

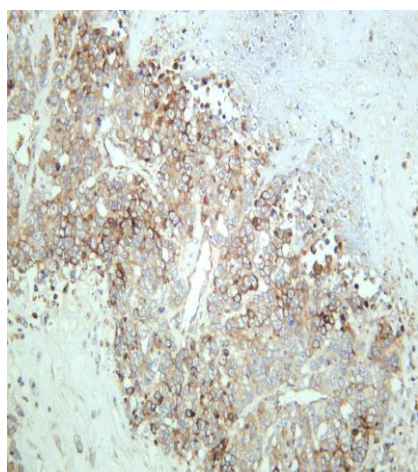
**Gene name** MAP2K1/MAP2K2  
**Protein Name** MEK1

Database Link	Organism	Swiss Prot.	Gene ID
	Human	P36507 ; Q02750	56045605
	Mouse	Q63932	26396
	Rat	P36506	58960

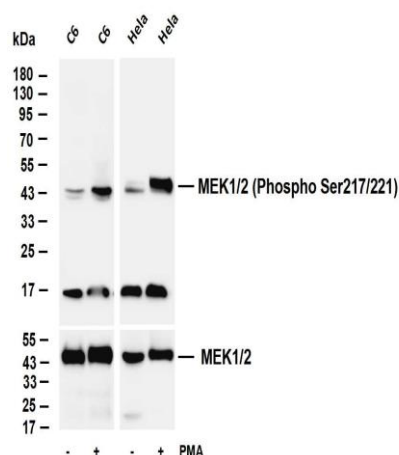
## Background

**catalytic activity:**ATP + a protein = ADP + a phosphoprotein.,**disease:**Defects in MAP2K1 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.,**enzyme regulation:**Activated by phosphorylation.,**function:**Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. Activates ERK1 and ERK2 MAP kinases.,**PTM:**Acetylation by Yersinia yopJ prevents phosphorylation and activation, thus blocking the MAPK signaling pathway.,**PTM:**Phosphorylation on Ser/Thr by MAP kinase kinases (RAF or MEKK1) regulates positively the kinase activity.,**similarity:**Belongs to the protein kinase superfamily.,**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 (By similarity). Interacts with Yersinia yopJ.,

## Validation Data



Human lung carcinoma was stained with anti-MEK1/2 (Phospho Ser217/221) (Phospho Ser217/221) rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-MEK1/2 (Phospho Ser217/221) (PT0747R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody.

Lane 1: C6

Lane 2: C6 was treated with Phorbol 12-myristate 13-acetate(200 nM) of 30 minutes

Lane 3: Hela

Lane 4: Hela starved of serum overnight and then treated with Phorbol 12-myristate 13-acetate(200 nM)  
Predicted band size: 44kDa  
Observed band size: 44kDa