

# MEK1 (Phospho Ser298) Rabbit pAb

CatalogNo: YP0329 Orthogonal Validated 

## Key Features

### Host Species

- Rabbit

### Reactivity

- Human, Mouse, Rat

### Applications

- WB, IHC, IF, ELISA

### MW

- 45kD (Observed)

### Isotype

- IgG

## Storage

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

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

## Recommended Dilution Ratios

**WB 1:500-1:2000**

**IHC 1:100-1:300**

**ELISA 1:10000**

**IF 1:50-200**

## Basic Information

**Clonality** Polyclonal

## Immunogen Information

**Immunogen** The antiserum was produced against synthesized peptide derived from human MEK1 around the phosphorylation site of Ser298. AA range: 264-313

## Specificity

Phospho-MEK1 (S298) Polyclonal Antibody detects endogenous levels of MEK1 protein only when phosphorylated at S298. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):PLSY

## Target Information

**Gene name** MAP2K1

**Protein Name** Dual specificity mitogen-activated protein kinase kinase 1

Organism	Gene ID	UniProt ID
Human	<a href="#">5604</a> ;	<a href="#">Q02750</a> ;
Mouse	<a href="#">26395</a> ;	<a href="#">P31938</a> ;
Rat	<a href="#">170851</a> ;	<a href="#">Q01986</a> ;

## Cellular Localization

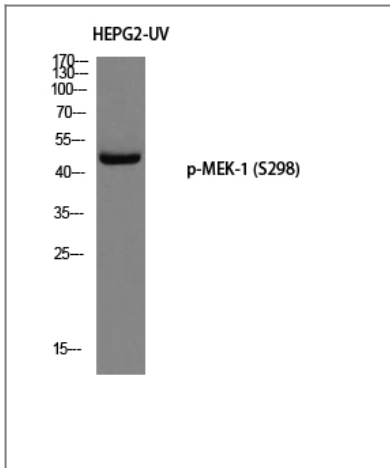
Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Cytoplasm, cytoskeleton, microtubule organizing center, spindle pole body . Cytoplasm . Nucleus . Membrane ; Peripheral membrane protein . Localizes at centrosomes during prometaphase, midzone during anaphase and midbody during telophase/cytokinesis (PubMed:14737111). Membrane localization is probably regulated by its interaction with KSR1 (PubMed:10409742). .

**Tissue specificity** Widely expressed, with extremely low levels in brain.

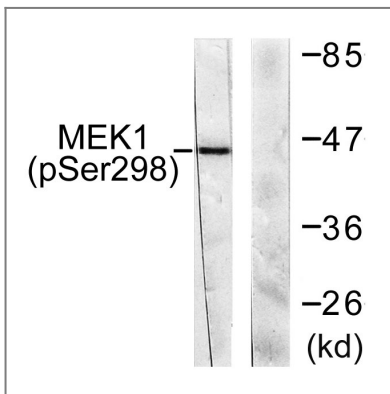
## Function

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 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.,

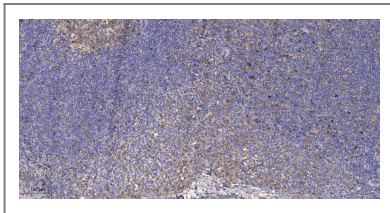
## Validation Data



Western blot analysis of HEPG2-UV using p-MEK-1 (S298) antibody. Antibody was diluted at 1:500



Western blot analysis of lysates from NIH/3T3 cells treated with PDGF 50ng/ml 20', using MEK1 (Phospho-Ser298) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200 (4°C overnight). 2, Tris-EDTA, pH9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200 (room temperature, 30min).

## Contact information

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Please scan the QR code to access additional product information:  
**MEK1 (Phospho-Ser298) Rabbit pAb**