MEK1/2 (Phospho Ser218/222) Rabbit pAb

CatalogNo: YP0167 Orthogonal Validated

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,IHC,IF,ELISA

MW
- 48kD (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 1:5000
IF 1:50-200

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	The antiserum was produced against synthesized peptide derived from human MEK1/2 around the phosphorylation site of Ser217. AA range:189-238

Specificity This antibody detects endogenous levels of MEK-1/2 only when phosphorylated at Ser218/222..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 When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports.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):IDsMA

Target Information

Gene name MAP2K1/MAP2K2

Protein Name Dual specificity mitogen-activated protein kinase kinase 1/2

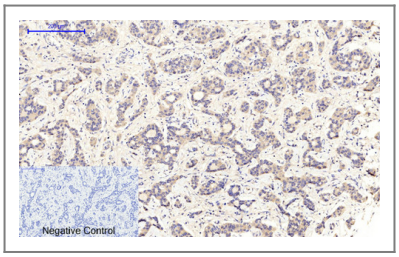
Organism	Gene ID	UniProt ID
Human	5604; 5605;	Q02750; P36507;
Mouse	26395; 26396;	
Rat	170851; 58960;	Q01986; P36506;

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) . .

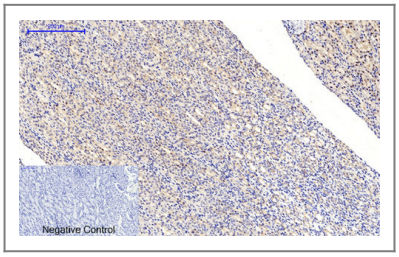
Tissue specificity Widely expressed , with extremely low levels in brain.

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. ,

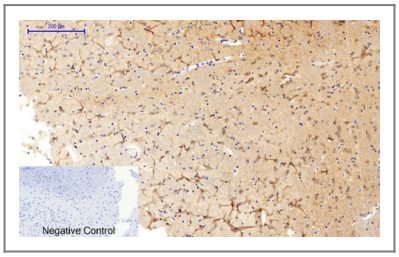
Validation Data



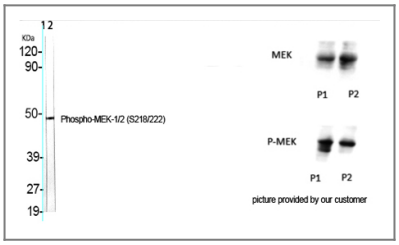
Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,MEK-1/2 (phospho Ser218/222) Polyclonal Antibody was diluted at 1:200 (4℃ overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98℃,20min). 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min). Negative control was used by secondary antibody only.



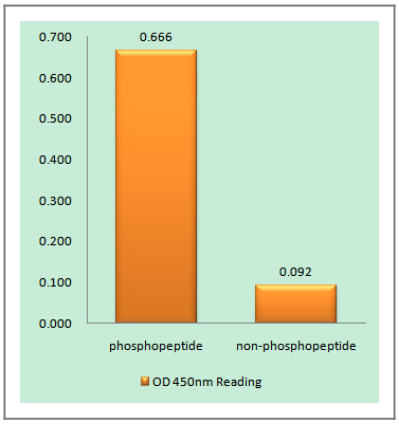
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,MEK-1/2 (phospho Ser218/222) Polyclonal Antibody was diluted at 1:200 (4℃ overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98℃,20min). 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min). Negative control was used by secondary antibody only.



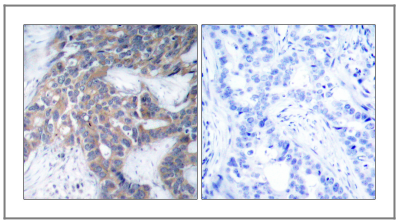
Immunohistochemical analysis of paraffin-embedded Rat-brain tissue. 1,MEK-1/2 (phospho Ser218/222) Polyclonal Antibody was diluted at 1:200 (4℃ overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98℃,20min). 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min). Negative control was used by secondary antibody only.



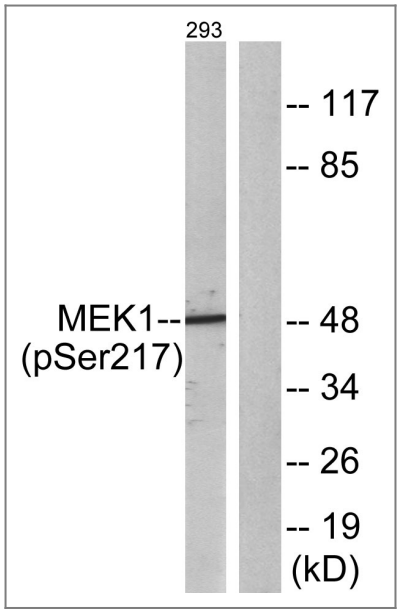
Western Blot analysis of various cells using Phospho-MEK-1/2 (S218/222) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using MEK1/2 (Phospho-Ser217) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using MEK1/2 (Phospho-Ser217) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from 293 cells treated with PMA 125ng/ml 30', using MEK1/2 (Phospho-Ser217) Antibody. The lane on the right is blocked with the phospho peptide.

Contact information

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Please scan the QR code to access additional product information: **MEK1/2 (Phospho Ser218/222) Rabbit pAb**

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