

# Rabbit Anti-phospho-MEK3 (Thr222) antibody

SL4123R

| Product Name:          | phospho-MEK3 (Thr222)   |  |
|------------------------|---|--|
| Chinese Name:          | 磷酸化丝裂原活化蛋白激酶激酶3抗体   |  |
| Alias:                 | MEK3 (phospho Thr222); MEK3 (phospho T222); p-MEK3 (Thr222); p-MEK3 (T222);<br>Dual specificity mitogen-activated protein kinase kinase 3; MAP kinase kinase 3;<br>map2k3; MAPK ERK kinase 3; MAPK/ERK kinase 3; MAPKK 3; MAPKK3; MEK 3;<br>MEK3; Mitogen activated protein kinase kinase 3; MKK3; MP2K3_HUMAN;<br>PRKMK3.    |  |
|                        |   |  |
| Organism Species:      | Rabbit  |  |
| Clonality:             | Polyclonal  |  |
| React Species:         | Human,Mouse,Rat,Chicken,Cow,Horse,Sheep,  |  |
| Applications:          | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-<br>500 (Paraffin sections need antigen repair)<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user.  |  |
| Molecular weight:      | 39kDa   |  |
| Cellular localization: | The nucleuscytoplasmic  |  |
| Form:                  | Lyophilized or Liquid   |  |
| <b>Concentration:</b>  | 1mg/ml  |  |
| immunogen:             | KLH conjugated Synthesised phosphopeptide derived from human MEK3 around the phosphorylation site of Thr222:AK(p-T)MD   |  |
| Lsotype:               | IgG   |  |
| Purification:          | affinity purified by Protein A  |  |
| Storage Buffer:        | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.  |  |
| Storage:               | 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. |  |
| PubMed:                | PubMed  |  |
| Product Detail:        | The protein encoded by this gene is a dual specificity protein kinase that belongs to the   |  |

MAP kinase kinase family. This kinase is activated by mitogenic and environmental stress, and participates in the MAP kinase-mediated signaling cascade. It phosphorylates and thus activates MAPK14/p38-MAPK. This kinase can be activated by insulin, and is necessary for the expression of glucose transporter. Expression of RAS oncogene is found to result in the accumulation of the active form of this kinase, which thus leads to the constitutive activation of MAPK14, and confers oncogenic transformation of primary cells. The inhibition of this kinase is involved in the pathogenesis of Yersina pseudotuberculosis. Multiple alternatively spliced transcript variants that encode distinct isoforms have been reported for this gene. [provided by RefSeq].

#### **Function:**

Dual specificity kinase. Is activated by cytokines and environmental stress in vivo. Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in the MAP kinase p38.

#### Subunit:

Binds to DYRK1B/MIRK and increases its kinase activity. Part of a complex with MAP3K3, RAC1 and CCM2. Interacts with ARRB1. Interacts with Yersinia yopJ.

## Tissue Specificity:

Abundant expression is seen in the skeletal muscle. It is also widely expressed in other tissues.

#### **Post-translational modifications:**

Autophosphorylated. Phosphorylation on Ser-218 and Thr-222 by MAP kinase kinase kinases regulates positively the kinase activity. Phosphorylated by TAOK2. Yersinia yopJ may acetylate Ser/Thr residues, preventing phosphorylation and activation, thus blocking the MAPK signaling pathway.

#### DISEASE:

Note=Defects in MAP2K3 may be involved in colon cancer.

## Similarity:

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

Contains 1 protein kinase domain.

# **SWISS:** P46734

**Gene ID:** 5606

## Database links:

Entrez Gene: 5606Human

|          | Entrez Gene: 26397Mouse  |
|----------|--|
|          | <u>Omim: 602315</u> Human  |
|          | SwissProt: P46734Human   |
|          | SwissProt: 009110Mouse   |
|          | Unigene: 514012Human   |
|          | Unigene: 18494Mouse  |
|          |  |
|          | <b>Important Note:</b><br>This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.  |
| Picture: | MM Contraction of the second sec |
|          | Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by  |
|          | boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by   |
|          | 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C   |
|          | for 30min; Antibody incubation with (phospho-MEK3 (Thr222)) Polyclonal   |
|          | Antibody, Unconjugated (SL4123R) at 1:400 overnight at 4°C, followed by  |
|          | operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.   |
|          |  |

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