

Rabbit Anti-phospho-MEK3 (Thr222)/AP Conjugated antibody

SL4123R-AP

Product Name	Anti-phospho-MEK3 (Thr222)/AP
Chinese Name	碱性磷酸酶（AP）标记的磷酸化丝裂原活化蛋白激酶激酶 3 抗体 MEK3 (phospho Thr222); MEK3 (phospho T222); p-MEK3 (Thr222); p-MEK3 (T222); Dual specificity mitogen-activated protein kinase kinase 3; MAP kinase kinase 3; map2k3; MAPK ERK kinase 3; MAPK/ERK kinase 3; MAPKK 3; MAPKK3; MEK 3; MEK3; Mitogen activated protein kinase kinase 3; MKK3; MP2K3_HUMAN; PRKMK3.
Alias	
Product Type	Phosphorylated anti
Research Area	Tumour Cell biology immunology Signal transduction transcriptional regulatory factor Kinases and Phosphatases
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Mouse,Rat(predicted:Human,Chicken,Cow,Horse,Sheep) WB=1:50-200 IHC-P=1:50-200 IHC-F=1:50-200
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	39kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated Synthesised phosphopeptide derived from human MEK3 around the phosphorylation site of Thr222
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. 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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Storage	

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 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 Yersinia 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.

Database links:



[Entrez Gene: 5606](#) Human

[Entrez Gene: 26397](#) Mouse

[Omim: 602315](#) Human

[SwissProt: P46734](#) Human

[SwissProt: O09110](#) Mouse

[Unigene: 514012](#) Human

[Unigene: 18494](#) Mouse

Important Note:

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