

## Rabbit anti-Human MEK1 Polyclonal Antibody | anti-MAP2K1 antibody

Anti-MEK1 Antibody, Rabbit Polyclonal

|                               |                       |                            |                                                           |
|-------------------------------|-----------------------|----------------------------|-----------------------------------------------------------|
| CATALOG #<br><b>AAA255878</b> | HOST<br><b>Rabbit</b> | REACTIVITY<br><b>Human</b> | APPLICATIONS<br><b>Immunohistochemistry, Western Blot</b> |
|-------------------------------|-----------------------|----------------------------|-----------------------------------------------------------|

### PRODUCT SYNONYMS

MEK1; Polyclonal Antibody; Anti-MEK1 Antibody; Rabbit Polyclonal; MEK1 Antibody; Rabbit PAb; Antigen Affinity Purified; mitogen-activated protein kinase kinase 1; Anti-CFC3 Antibody; Anti-MAPKK1 Antibody; Anti-MKK1 Antibody; Anti-PRKMK1 Antibody; anti-MAP2K1 antibody

### PRODUCT SPECIFICATIONS

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|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                             | Rabbit                                                                                                                                                                                                                                             |
| Reactivity                                       | Human                                                                                                                                                                                                                                              |
| Clonality                                        | Polyclonal                                                                                                                                                                                                                                         |
| Isotype                                          | Rabbit IgG                                                                                                                                                                                                                                         |
| Specificity                                      | Human MEK1                                                                                                                                                                                                                                         |
| Purity/Purification                              | Protein A & Antigen Affinity                                                                                                                                                                                                                       |
| Form/Format                                      | Liquid; PBS, pH7.0 with 0.03% Proclin300                                                                                                                                                                                                           |
| Applicable Applications for anti-MAP2K1 antibody | IHC (Immunohistochemistry), WB (Western Blot)                                                                                                                                                                                                      |
| Immunogen                                        | E Coli-derived Human MEK1 fragment                                                                                                                                                                                                                 |
| Conjugation                                      | Unconjugated                                                                                                                                                                                                                                       |
| Preparation                                      | Produced in rabbits immunized with E Coli-derived Human MEK1 fragment, and purified by antigen affinity chromatography.                                                                                                                            |
| Preparation and Storage                          | This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Avoid repeated freeze-thaw cycles. |

### IMAGES



#### IHC (Immunohistochemistry)

Immunochemical staining of human MAP2K1 in human kidney with rabbit polyclonal antibody at 1:300 dilution, formalin-fixed paraffin embedded sections.



#### IHC (Immunohistochemistry)

Immunochemical staining of human MAP2K1 in human brain with rabbit polyclonal antibody at 1:300 dilution, formalin-fixed paraffin embedded sections.



#### WB (Western Blot)

Anti-MEK1 rabbit polyclonal antibody at 1:500 dilution  
Lane A: HeLa Whole Cell Lysate  
Lane B: HepG2 Whole Cell Lysate  
Lysates/proteins at 30 ug per lane.  
Secondary Goat Anti-Rabbit IgG (H+L)/HRP at 1/10000 dilution.  
Developed using the ECL technique.  
Performed under reducing conditions.  
Predicted band size: 43 kDa  
Observed band size: 43 kDa

### ADDITIONAL INFORMATION

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| <b>Related Product Information for anti-MAP2K1 antibody</b> | MEK1, also known as MAP2K1 and MKK1, is a member of the dual-specificity protein kinase family, which acts as a mitogen-activated protein (MAP) kinase kinase. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals. MEK1 is widely expressed, with extremely low levels in the brain. It lies upstream of MAP kinases and stimulates the enzymatic activity of MAP kinases upon a wide variety of extra-and intracellular signals. As an essential component of the MAP kinase signal transduction pathway, MEK1 is involved in many cellular processes such as proliferation, differentiation, transcription regulation, and development. Binding extracellular ligands such as growth factors, cytokines, and hormones to their cell-surface receptors activates RAS and this initiates RAF1 activation. RAF1 then further activates the dual-specificity protein kinases MAP2K1 and MEK2. MEK1 has been shown to export PPARG from the nucleus. The MAPK cascade is also involved in the regulation of endosomal dynamics, including lysosome processing and endosome cycling through the perinuclear recycling compartment (PNRC), as well as in the fragmentation of the Golgi apparatus during mitosis. MKK1 catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. Defects in MEK1 can cause Cardiofaciocutaneous Syndrome. |
| <b>Product Categories/Family for anti-MAP2K1 antibody</b>   | Cancer Drug Targets; Death Receptor Signaling                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>References</b>                                           | <p>Rampoldi L, et al. (1998) Chromosomal localization of four MAPK signaling cascade genes: MEK1, MEK3, MEK4 and MEKK5. Cytogenet Cell Genet. 78(3-4):301-3.</p> <p>Zheng CF, et al. (1993) Cloning and characterization of two distinct human extracellular signal-regulated kinase activator kinases, MEK1 and MEK2. J Biol Chem. 268(15):11435-9.</p> <p>Nantel, et al. (1998) Interaction of the Grb10 adapter protein with the Raf1 and MEK1 kinases. J Biol Chem. 273(17):10475-84.</p> <p>Hirata H, et al. (2012) l MicroRNA-1826 targets VEGFC, beta-catenin (CTNNB1) and MEK1 (MAP2K1) in human bladder cancer. Carcinogenesis. 33(1):41-8.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.