ARG52335
anti-MEK1 phospho (Thr386) antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes MEK1 phospho (Thr386)
Tested Reactivity	Hu, Rat
Predict Reactivity	Ms, Bov, Chk, Dog, NHuPrm, Xenopus laevis
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	MEK1
Species	Human
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Thr386 conjugated to KLH
Conjugation	Un-conjugated
Alternate Names	MEK 1; PRKMK1; MAPKK 1; EC 2.7.12.2; MEK1; MAPKK1; MKK1; Dual specificity mitogen-activated protein kinase kinase 1; MAP kinase kinase 1; MAPK/ERK kinase 1; CFC3; ERK activator kinase 1

Application Instructions

Application table

Application	Dilution
WB	1:1000

Application Note: Specific for the ~45k MEK 1 protein phosphorylated at Thr386. The immunolabeling is completely eliminated by treatment with λ-phosphatase.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

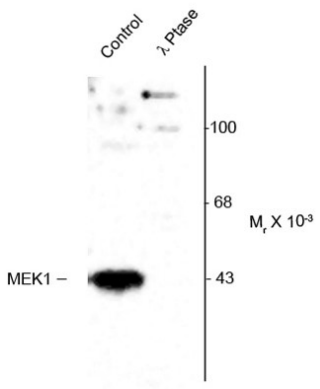
Properties

Form	Liquid
Purification	Affinity Purified
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol
Stabilizer	0.1 mg/ml BSA, 50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 170851 Rat GeneID: 5604 Human Swiss-port # Q01986 Rat Swiss-port # Q02750 Human
Gene Symbol	MAP2K1
Gene Full Name	mitogen-activated protein kinase kinase 1
Background	MEK 1 (MAP Kinase Kinase, also known as MKK) is an integral component of the MAP kinase cascade that regulates cell growth and differentiation (Ahn, 1993; Chong et al., 2003). This pathway also plays a key role in synaptic plasticity in the brain (Adams and Sweatt, 2002). Activated MEK 1 acts as a dual specificity kinase phosphorylating both a threonine and a tyrosine residue on MAP kinase (Kyriakis et al., 1991; Seger et al., 1991; Crews et al., 1992). Conversely, there also appears to be a feedback phosphorylation of MEK 1 by MAP kinase. The sites on MEK 1 that are phosphorylated by MAP kinase are Thr292 and Thr386 (Mansour et al., 1994).
Research Area	Signaling Transduction antibody
Calculated Mw	43 kDa
PTM	Phosphorylation at Ser-218 and Ser-222 by MAP kinase kinase kinases (RAF or MEKK1) positively regulates kinase activity. Also phosphorylated at Thr-292 by MAPK1/ERK2 and at Ser-298 by PAK. MAPK1/ERK2 phosphorylation of Thr-292 occurs in response to cellular adhesion and leads to inhibition of Ser-298 phosphorylation by PAK. Acetylation by Yersinia yopJ prevents phosphorylation and activation, thus blocking the MAPK signaling pathway.

Images



ARG52335 anti-MEK1 phospho (Thr386) antibody WB image

Western blot: Human T47D cells showing phospho-specific immunolabeling of the ~45 kDa MEK1 protein phosphorylated at Thr386 stained with ARG52335 anti-MEK1 phospho (Thr386) antibody.