

## ARG52333 anti-MEK1/2 phospho (Ser218 / 222) antibody

Package: 50 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes MEK1/2 phospho (Ser218 / 222)
Tested Reactivity	Hu, Ms
Predict Reactivity	Bov, Rat, Chk, Dog, NHuPrm, Xenopus laevis, Zfsh
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	MEK1/2
Species	Human
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser218/222 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	<table><thead><tr><th>Application</th><th>Dilution</th></tr></thead><tbody><tr><td>WB</td><td>1:1000</td></tr></tbody></table>	Application	Dilution	WB	1:1000
Application	Dilution				
WB	1:1000				
Application Note	Specific for the ~45k MEK 1/2 protein phosphorylated at Ser218/222 in Western blots. Immunolabeling is blocked by the phosphopeptide used as the antigen but not by the corresponding dephosphopeptide. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.				

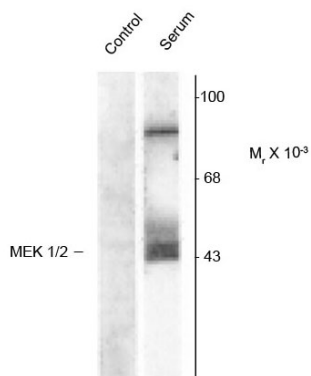
### Properties

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	<a href="#">GeneID: 26395 Mouse</a> <a href="#">GeneID: 5604 Human</a> <a href="#">Swiss-port # P31938 Mouse</a> <a href="#">Swiss-port # Q02750 Human</a>
Gene Symbol	MAP2K1/2
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).
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



ARG52333 anti-MEK1/2 phospho (Ser218 / 222) antibody WB image

Western blot: NIH 3T3 cell lysates showing specific immunolabeling of the ~45kDa MEK 1/2 protein phosphorylated at Ser218 and Ser222. The cells were either serum starved (Control) or incubated in the presence of serum (Serum) stained with ARG52333 anti-MEK1/2 phospho (Ser218 / 222) antibody. Immunolabeling of an additional band at ~95kDa was also observed.