

MEK1 (Thr292). Rabbit Antigen Immunoaffinity Purified Polyclonal , Human

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 and this pathway also plays a key role in synaptic plasticity in brain. Activated MEK 1 acts as a dual specificity kinase phosphorylating both a threonine and a tyrosine residue on MAP kinase. 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.

ORDERING INFORMATION

CATALOG NUMBER
X1671P

SIZE
10 Miniblots

FORM
Affinity Purified

HOST/CLONE
Rabbit

FORMULATION
Provided in HEPES (pH 7.5) solution containing 150 mM NaCl, 100 µg per ml BSA and 50% glycerol

CONCENTRATION
Varies from lot to lot

ISOTYPE
IgG

APPLICATIONS
Western Blot, Dot Blot

IMMUNOGEN

Synthetic phosphopeptide corresponding to amino acids residues surrounding the phospho Thr²⁹² of human MEK 1.

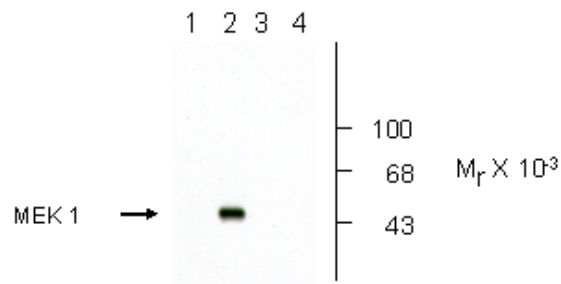
SPECIES REACTIVITY

Human

Legend:

Western Blot of recombinant WT and mutant MEK 1 immunolabeled with the anti-Thr²⁹² MEK1 antibody. Lanes 1 and 2 are WT MEK 1 and Lanes 3 and 4 are mutant MEK 1 (T292A). MAP kinase was coexpressed in the samples run in Lanes 2 and 4.

Anti-Phospho Thr²⁹² MEK 1



For research use only. Not for use in human diagnostics or therapeutics.

POSITIVE CONTROL/TISSUE EXPRESSION

Human brain extract

COMMENTS

Antibody should be used at a 1:1000 dilution to provide for 10 miniblots in Western blotting and dot blots. Antibody detects only phosphorylated protein and does not detect non-phosphorylated protein as shown by the lack of ability of a non-phospho peptide to block the antibody activity. Optimal concentration may be evaluated by serial dilutions.

SHIP CONDITIONS

Ship on gel ice, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -70°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

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3. Ahn, N.G., et al., "Identification of an activator of the microtubule-associated protein 2 kinases ERK1 and ERK2 in PC12 cells stimulated with nerve growth factor or bradykinin," *J. Neurochem.* 59, 147-156 (1992).
4. Crews, C.M., Alessandrini, A. and Erikson, R.L. "The primary structure of MEK, a protein kinase that phosphorylates the ERK gene product," *Science* 258, 478-480 (1992).
5. Mansour, S.J., et al. "Mitogen-activated protein (MAP) kinase phosphorylation of MAP kinase kinase: determination of phosphorylation sites by mass spectrometry and site-directed mutagenesis." *J. Biochem. (Tokyo)* 116, 304-314 (1994).
6. Park, S.H., Zarrinpar, A. and Lim, W.A., "Rewiring MAP kinase pathways using alternative scaffold assembly mechanisms," *Science* 299, 1061-1064 (2003).

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