

Product Information



MEK1/2 (Phospho-Ser^{218,222}) Polyclonal Antibody

Item No. 10009178

Contents:	Affinity-purified IgG
Synonyms:	MAP Kinase Kinase 1/2, MAPKK1/2
Host:	Rabbit
Antigen:	Phosphopeptide corresponding to amino acid residues surrounding phospho-Ser ^{218,222} of human MEK1/2
Cross Reactivity:	(+) NIH 3T3 cells
Stability:	≥1 year at -20°C
Application:	The recommended starting dilution for western blot is 1:1,000. Other applications were not attempted and therefore optimal working dilutions should be determined empirically.

MAP kinase kinase 1 (MEK1) is an integral component of the MAP kinase cascade that regulates cell growth and differentiation.^{1,2} This pathway also plays a key role in synaptic plasticity in the brain.³ Activated MEK1 acts as a dual specificity kinase phosphorylating both a threonine and a tyrosine residue on MAP kinase.⁴⁻⁶

References

1. Ahn, N.G. Discovery of a new signal transduction pathway. *Mol. Cell. Biochem.* **127-128**, 201-209 (1993).
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3. Adams, J.P. and Sweatt, J.D. Molecular psychology: Roles for the ERK MAP kinase cascade in memory. *Annu. Rev. Pharmacol. Toxicol.* **42**, 135-163 (2002).
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. Kyriakis, J.M., Brautigan, D.L., Ingebritsen, T.S., *et al.* pp54 Microtubule-associated protein-2 kinase requires both tyrosine and serine/threonine phosphorylation for activity. *J. Biol. Chem.* **266(16)**, 10043-10046 (1991).
6. Seger, R., Ahn, N.G., Boulton, T.G., *et al.* Microtubule-associated protein 2 kinases, ERK1 and ERK2, undergo autophosphorylation on both tyrosine and threonine residues: Implications for their mechanism of activation. *Proc. Natl. Acad. Sci. USA* **88**, 6142-6146 (1991).

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