MEK1/2 Antibody

Product Usage Information

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<th>Application</th>
<th>Sensitivity</th>
<th>MW (kDa)</th>
<th>Source</th>
<th>UniProt ID:</th>
<th>Entrez-Gene Id:</th>
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<tr>
<td>Western Blotting</td>
<td>Endogenous</td>
<td>45</td>
<td>Rabbit</td>
<td>Q02750, P36507</td>
<td>5604, 5605</td>
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<tr>
<td>Immunoprecipitation</td>
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Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity / Sensitivity

MEK1/2 Antibody detects endogenous levels of total MEK1/2 protein. The antibody does not cross-react with related kinases such as SEK (MKK4), MKK3 or MKK6.

Species Reactivity:

Human, Mouse, Rat, Monkey, D. melanogaster

Species predicted to react based on 100% sequence homology:

Chicken, Xenopus

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the sequence of human MEK1/2. Antibodies are purified by protein A and peptide affinity chromatography.

Background

MEK1 and MEK2, also called MAPK or Erk kinases, are dual-specificity protein kinases that function in a mitogen activated protein kinase cascade controlling cell growth and differentiation (1-3). Activation of MEK1 and MEK2 occurs through phosphorylation of two serine residues at positions 217 and 221, located in the activation loop of subdomain VIII, by Raf-like molecules. MEK1/2 is activated by a wide variety of growth factors and cytokines and also by membrane depolarization and calcium influx (1-4). Constitutively active forms of MEK1/2 are sufficient for the transformation of NIH/3T3 cells or the differentiation of PC-12 cells (4). MEK activates p44 and p42 MAP kinase by phosphorylating both threonine and tyrosine residues at sites located within the activation loop of kinase subdomain VIII.


Species Reactivity determined by testing in at least one approved application (e.g., western blot).

IMPORTANT: For primary antibodies recommended for western blotting applications, we recommend incubating the membrane with diluted antibody at 4°C with gentle shaking overnight. Please refer to the western blot protocol found on the product web page for the antibody-specific diluent recommendation.