

Store at -20C  
#9126**MEK1/2 (47E6) Rabbit mAb**
**Orders:** 877-616-CELL (2355)  
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**For Research Use Only. Not for Use in Diagnostic Procedures.**

| Applications: | Reactivity: | Sensitivity: | MW (kDa): | Source/Isotype: | UniProt ID:      | Entrez-Gene Id: |
|---------------|-------------|--------------|-----------|-----------------|------------------|-----------------|
| W, W-S        | H M R Mk    | Endogenous   | 45        | Rabbit IgG      | #P36507, #Q02750 | 5605, 5604      |

**Product Usage Information****Application**Western Blotting  
Simple Western™**Dilution**1:1000  
1:10 - 1:50**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

MEK1/2 (47E6) Rabbit mAb detects endogenous levels of total MEK1/2 protein.

**Species predicted to react based on 100% sequence homology**

Dog

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the sequence of human MEK1/2.

**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.

**Background References**

1. Crews, C.M. et al. (1992) *Science* 258, 478-480.
2. Alessi, D.R. et al. (1994) *EMBO J.* 13, 1610-19.
3. Rosen, L.B. et al. (1994) *Neuron* 12, 1207-21.
4. Cowley, S. et al. (1994) *Cell* 77, 841-52.

**Species Reactivity**

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

**Western Blot Buffer**

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key****W:** Western Blotting **W-S:** Simple Western™**Cross-Reactivity Key****H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey**Trademarks and Patents**

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