

#13033 Store at -20°C

MEK1/2 (D1A5) Rabbit mAb (HRP Conjugate)



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New 07/13

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Applications W Endogenous	Species Cross-Reactivity* H, M, R, Mk, Dm, (Hm, X, Z, B, Dg, Pg, Ce)	Molecular Wt. 46 kDa	Isotype Rabbit IgG
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Description: This Cell Signaling Technology antibody is conjugated to the carbohydrate groups of horseradish peroxidase (HRP) via its amine groups. The HRP conjugated antibody is expected to exhibit the same species cross-reactivity as the unconjugated antibody MEK1/2 (D1A5) Rabbit mAb #8727.

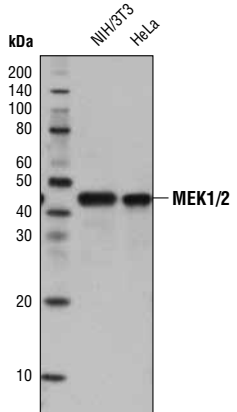
Background: MEK1 and MEK2, also called MAPK or Erk kinases, are dual-specificity protein kinases that function in a mitogen activated protein kinase cascade controlling cell growth and differentiation (1-3). Activation of MEK1 and MEK2 occurs through phosphorylation of two serine residues at positions 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.

Specificity/Sensitivity: MEK1/2 (D1A5) Rabbit mAb (HRP Conjugate) recognizes endogenous levels of total MEK1 and MEK2 proteins. This antibody is predicted to cross-react with MEK1/MEK2 orthologs in a variety of species.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala220 of human MEK1 protein.

Background References:

- (1) Crews, C.M. et al. (1992) *Science* 258, 478-480.
- (2) Alessi, D.R. et al. (1994) *EMBO J.* 13, 1610-1619.
- (3) Rosen, L.B. et al. (1994) *Neuron* 12, 1207-1221.
- (4) Cowley, S. et al. (1994) *Cell* 77, 841-852.



Western blot analysis of extracts from NIH/3T3 and HeLa cells using MEK1/2 (D1A5) Rabbit mAb (HRP Conjugate).

Entrez Gene ID #5604, 5605
UniProt ID #Q02750, P36507

Storage: Supplied in 136 mM NaCl, 2.6 mM KCl, 12 mM sodium phosphate (pH 7.4) dibasic, 2 mg/ml BSA, and 50% glycerol. Store at -20°C. Do not aliquot the antibodies.

*Species cross-reactivity is determined by western blot using the unconjugated antibody.

HRP-conjugated antibodies do not require incubation with a secondary antibody.

Recommended Antibody Dilutions:
Western blotting 1:1000

For product specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended complementary products.

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

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Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA—Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.