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## Product Information Sheet

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### **Polyclonal Anti-MAPK1/3 (*Magnetic Bead Conjugate*)**

**Catalogue No.** PA1049-M

**Lot No.** 03A01

**Ig type:** rabbit IgG

**Size:** 100µg/vial

**Specificity**

Human, mouse, rat.

No cross reactivity with other proteins.

**Recommended application**

ImmunoPrecipitation (IP)

**Immunogen**

A synthetic peptide mapping at the N-terminal of the human MAPK1+3, identical to the related rat sequence.

**Purity**

Immunogen affinity purified.

**Contents**

Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN<sub>3</sub>.

**Storage**

Store at 4°C for frequent use.

**Description**

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads. It is useful for immunoprecipitation

### **BACKGROUND**

MAPK1(ERK2) shares high homology with MAPK3(ERK1). MAP kinase phosphatase as a locus of flexibility in a mitogen-activated protein kinase signaling network. Mitogen-activated protein (MAP) kinases [also known as Erks] have been established to function as important mediators of signal transduction by growth factor receptors. ERK1/ERK2-dependent activation of endogenous ribosomal transcription, while inactivation of ERK1/ERK2 causes an equally immediate reversion to the basal transcription level. ERK1/ERK2 was found to phosphorylate the architectural transcription factor UBF at amino acids 117 and 201 within HMG boxes 1 and 2, preventing their interaction with DNA. Mutation of these sites inhibited transcription activation and abrogated the transcriptional response to ERK1/ERK2.

### **REFERENCE**

1. Bhalla, U. S.; Ram, P. T.; Iyengar, R. : MAP kinase phosphatase as a locus of flexibility in a mitogen-activated protein kinase signaling network. *Science* 297: 1018-1023, 2002.
2. Li, L.; Wysk, M.; Gonzalez, F. A.; Davis, R. J. : Genomic loci of human mitogen-activated protein kinases. *Oncogene* 9: 647-649, 1994.