Product Information Sheet

# Polyclonal Anti-MAPK1/3

**Catalogue No.** PA1049

**Lot No.** 03A01

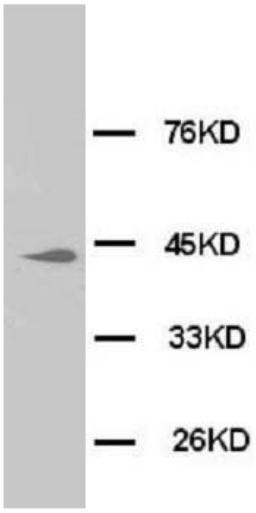
**Ig type:** rabbit IgG

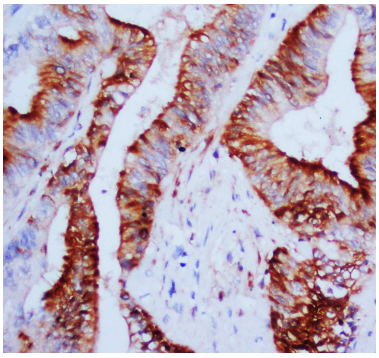
**Size:** 100μg/vial

**Specificity**

Human, mouse, rat.

No cross reactivity with other proteins.



**Recommended application**

*Western blot*

*Immunohistochemistry(P)*

**Immunogen**

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

**Purity**

Immunogen affinity purified.

**Application**

*Western blot*

At 0.5-1μg/ml with the appropriate system to detect MAPK1/3 in cells and tissues.

*Immunohistochemistry(P)*

At 1-2μg/ml to detect MAPK1/3 in formalin fixed and paraffin embedded tissues. Boiling the sections is required.

*Other applications have not been tested.*

*Optimal dilutions should be determined by end user.*

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg $Na_2HPO_4$, 0.05mg Thimerosal, 0.05mg $NaN_3$.

**Reconstitution**

0.2ml of distilled water will yield a concentration of 500μg/ml.

**Storage**

At -20˚C for one year. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for longer time.

**To reorder contact us at:**

**Antagene, Inc.**

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**email: Info@antageneinc.com**

**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.