

## Mitogen activated protein kinase from rat, Recombinant

Cat. No. NATE-0443

Lot. No. (See product label)

### Introduction

**Description** Mitogen-activated protein kinases (MAPK) are protein kinases that are specific to the amino acids serine, threonine, and tyrosine. MAPKs belong to the CMGC (CDK/MAPK/GSK3/CLK) kinase group. MAPKs are involved in directing cellular responses to a diverse array of stimuli, such as mitogens, osmotic stress, heat shock and proinflammatory cytokines. They regulate cell functions including proliferation, gene expression, differentiation, mitosis, cell survival, and apoptosis.

**Synonyms** ERK2; Extracellular-signal regulated kinase; MAP Kinase Activated from rat; MAPK; Mitogen activated protein kinase

### Product Information

<b>Species</b>	Rat
<b>Source</b>	E. coli
<b>Form</b>	buffered aqueous glycerol solution
<b>Molecular Weight</b>	mol wt 42 kDa
<b>Purity</b>	> 95% (SDS-PAGE)
<b>Activity</b>	> 500 U/mg
<b>Buffer</b>	Solution in 20 mM Tris, pH 7.5, 150 mM NaCl, 1 mM EGTA, 10% glycerol, 1 mM DTT, and 0.03% Brij.
<b>Pathway</b>	ARMS-mediated activation, organism-specific biosystem; Activated TLR4 signalling, organism-specific biosystem; Acute myeloid leukemia, organism-specific biosystem; Acute myeloid leukemia, conserved biosystem; Adherens junction, organism-specific biosystem; Adherens junction, conserved biosystem; Aldosterone-regulated sodium reabsorption, organism-specific biosystem
<b>Function</b>	ATP binding; ATP binding; MAP kinase activity; MAP kinase activity; MAP kinase activity; MAP kinase activity; RNA polymerase II carboxy-terminal domain kinase activity; RNA polymerase II carboxy-terminal domain kinase activity; kinase activity; kinase activity; mitogen-activated protein kinase kinase binding; nucleotide binding; phosphatase binding; phosphatase binding; phosphotyrosine binding; phosphotyrosine binding; protein binding; protein kinase activity; protein serine/threonine kinase activity; protein serine/threonine kinase activity; protein serine/threonine kinase activity; protein serine/threonine kinase activity; transcription factor binding
<b>Unit Definition</b>	One unit of activated MAP kinase will transfer 1 nmole of phosphate from ATP to myelin basic protein per min at 30°C.

### Usage and Packaging

**Package** vial of 100 ng

### Storage and Shipping Information

**Stability** -70°C