

Recombinant Rat Mitogen-activated Protein Kinase 8

Cat. No. Mapk8-689R Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant rat Mapk8 is expressed in <i>E. coli</i> .
Species	Rat
Source	E.coli
Description	<p>The protein encoded by this gene is a member of the MAP kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. This kinase is activated by various cell stimuli, and targets specific transcription factors, and thus mediates immediate-early gene expression in response to cell stimuli. The activation of this kinase by tumor-necrosis factor alpha (TNF-alpha) is found to be required for TNF-alpha induced apoptosis. This kinase is also involved in UV radiation induced apoptosis, which is thought to be related to cytochrom c-mediated cell death pathway.</p>
Form	Liquid.
Formulation	In 150 mM NaCl, 50 mM Tris-HCl, 10 mM β-mercaptoethanol, 1 mM imidazole, 1 mM Mg (OAc) 2, 500 nM ATP, 10% glycerol, pH 7.5.
Molar Mass	48000Da.
Specific Activity	≥30 units/mg protein.

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Unit Definition	One unit is defined as the amount of enzyme that will phosphorylate 1.0 nmol GST-c-Jun (1-79) Substrate per min at 30°C, pH 7.5.
Purity	≥90% by SDS-PAGE.
Storage	≤ -70oC. Ship: Dry Ice Only.

GENE INFORMATION

Gene Name	Mapk8 mitogen-activated protein kinase 8 [Rattus norvegicus]
Synonyms	Mapk8; mitogen-activated protein kinase 8; MAP kinase 8; MAPK 8; SAPK gamma; c-Jun N-terminal kinase 1; c-jun NH2-terminal kinase; p54 gamma; stress-activated protein kinase JNK1; JNK
Gene ID	116554
mRNA Refseq	XM_341399
Protein Refseq	XP_341400
UniProt ID	P49185
Chromosome Location	16p16
Pathway	ErbB signaling pathway; Fc epsilon RI signaling pathway; Focal adhesion; Insulin signaling pathway; NOD-like receptor signaling pathway; Neurotrophin signaling pathway; Progesterone-mediated oocyte maturation; Toll-like receptor signaling pathway; Wnt signaling pathway

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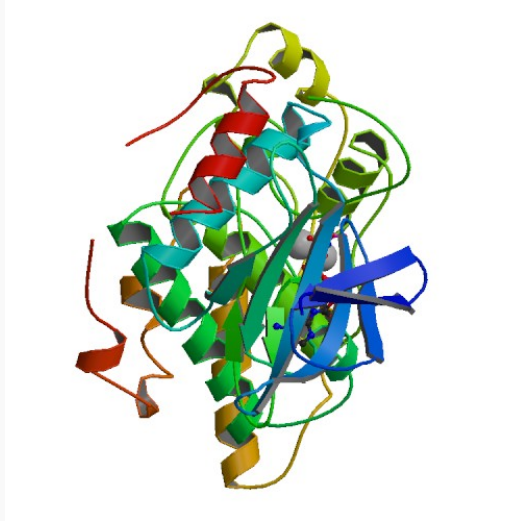
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Function

ATP binding; JUN kinase activity; MAP kinase activity; protein serine/threonine kinase activity; transferase activity

PDB rendering based on 1jnk.



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