Creative Enzymes®

mitogen-activated protein kinase kinase

Cat. No. EXWM-3162

Lot. No. (See product label)

Introduction

Description	This enzyme is a dual-specific protein kinase and requires mitogen-activated protein kinase kinase kinase (MAPKKK) for activation. It is required for activation of EC 2.7.11.24, mitogen-activated protein kinase. Phosphorylation of MEK1 by Raf involves phosphorylation of two serine residues. Mitogen-activated protein kinase (MAPK) signal transduction pathways are among the most widespread mechanisms of cellular regulation. Mammalian MAPK pathways can be recruited by a wide variety of stimuli including hormones (e.g. insulin and growth hormone), mitogens (e.g. epidermal growth factor and platelet-derived growth factor), vasoactive peptides (e.g. angiotensin-II and endothelin), inflammatory cytokines of the tumour necrosis factor (TNF) family and environmental stresses such as osmotic shock, ionizing radiation and ischaemic injury.
Synonyms	MAP kinase kinase; MAP kinase kinase 4; MAP kinase kinase 7; MAP kinase or ERK kinase; MAP2K; MAPKK; MAPKK1; MEK; MEK1; MEK2; MKK; MKK2; MKK4; MKK6; MKK7; STK27

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 2.7.12.2
Reaction	ATP + a protein = ADP + a phosphoprotein
Notes	This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage	Store it at +4 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.