Creative Enzymes®

mitogen-activated protein kinase kinase kinase

Cat. No. EXWM-3145

Lot. No. (See product label)

Introduction

Description	This enzyme phosphorylates and activates its downstream protein kinase, EC 2.7.12.2, mitogen-activated protein kinase kinase (MAPKK) but requires MAPKKKK for activation. Some members of this family can be activated by p21-activated kinases (PAK/STE20) or Ras. While c-Raf and c-Mos activate the classical MAPK/ERK pathway, MEKK1 and MEKK2 preferentially activate the c-Jun N-terminal protein kinase(JNK)/stress-activated protein kinase (SAPK) pathway. 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	cMos; cRaf; MAPKKK; MAP3K; MAP kinase kinase kinase; MEKK; MEKK1; MEKK2; MEKK3; MEK kinase; Mil/Raf; MLK-like mitogen-activated protein triple kinase; MLTK; MLTKa; MLTKb; REKS; STK28

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 2.7.11.25
CAS No.	146702-84-3
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 ℃.