

## 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 °C for short term. For long term storage, store it at -20 °C~-80 °C.