

## inositol-polyphosphate multikinase

Cat. No. EXWM-2982

Lot. No. (See product label)

### Introduction

**Description** This enzyme also phosphorylates Ins(1,4,5)P3 to Ins(1,3,4,5)P4, Ins(1,3,4,5)P4 to Ins(1,3,4,5,6)P5, and Ins(1,3,4,5,6)P4 to Ins(PP)P4, isomer unknown. The enzyme from the plant *Arabidopsis thaliana* can also phosphorylate Ins(1,3,4,6)P4 and Ins(1,2,3,4,6)P5 at the D-5-position to produce 1,3,4,5,6-pentakisphosphate and inositol hexakisphosphate (InsP6), respectively. Yeast produce InsP6 from Ins(1,4,5)P3 by the actions of this enzyme and EC 2.7.1.158, inositol-pentakisphosphate 2-kinase.

**Synonyms** IpK2; IP3/IP4 6-/3-kinase; IP3/IP4 dual-specificity 6-/3-kinase; IpmK; ArgRIII; AtIpk2α; AtIpk2β; inositol polyphosphate 6-/3-/5-kinase

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 2.7.1.151

**CAS No.** 9077-69-4

**Reaction** 2 ATP + 1D-myo-inositol 1,4,5-trisphosphate = 2 ADP + 1D-myo-inositol 1,3,4,5,6-pentakisphosphate (overall reaction); (1a) ATP + 1D-myo-inositol 1,4,5-trisphosphate = ADP + 1D-myo-inositol 1,4,5,6-tetrakisphosphate; (1b) ATP + 1D-myo-inositol 1,4,5,6-tetrakisphosphate = ADP + 1D-myo-inositol 1,3,4,5,6-pentakisphosphate

**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.