Creative Enzymes®

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