Creative Enzymes®

adenylyl-sulfate kinase

Cat. No. EXWM-3055

Lot. No. (See product label)

Introduction

Description	The human phosphoadenosine-phosphosulfate synthase (PAPSS) system is a bifunctional enzyme (fusion product of two catalytic activities). In a first step, sulfate adenylyltransferase catalyses the formation of adenosine 5'-phosphosulfate (APS) from ATP and inorganic sulfate. The second step is catalysed by the adenylylsulfate kinase portion of 3'-phosphoadenosine 5'-phosphosulfate (PAPS) synthase, which involves the formation of PAPS from enzyme-bound APS and ATP. In contrast, in bacteria, yeast, fungi and plants, the formation of PAPS is carried out by two individual polypeptides, sulfate adenylyltransferase (EC 2.7.7.4) and adenylyl-sulfate kinase (EC 2.7.1.25).
Synonyms	adenylylsulfate kinase (phosphorylating); 5'-phosphoadenosine sulfate kinase; adenosine 5'-phosphosulfate kinase; adenosine phosphosulfate kinase; adenosine phosphosulfokinase; adenosine-5'-phosphosulfate-3'-phosphokinase; APS kinase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 2.7.1.25
CAS No.	9012-38-8
Reaction	ATP + adenylyl sulfate = ADP + 3'-phosphoadenylyl sulfate
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 ℃.