Creative Enzymes®

formate-phosphoribosylaminoimidazolecarboxamide ligase

Cat. No. EXWM-5793

Lot. No. (See product label)

Introduction

Description This archaeal enzyme, characterized from the methanogen Methanocaldococcus jannaschii, catalyses a step in the synthesis of purine nucleotides. It differs from the orthologous bacterial/eukaryotic enzymes, which utilize 10-formyltetrahydrofolate rather than formate and ATP. cf. EC 2.1.2.3, phosphoribosylaminoimidazolecarboxamide formyltransferase.

Synonyms 5-formaminoimidazole-4-carboxamide ribonucleotide synthetase; 5-formaminoimidazole-4-carboxamide-1-β-D-ribofuranosyl 5'-monophosphate synthetase; purP (gene name)

Product Information

Form Liquid or lyophilized powder

EC Number EC 6.3.4.23

CAS No. 9032-03-5

Reaction ATP + formate + 5-amino-1-(5-phospho-D-ribosyl)imidazole-4-carboxamide = ADP + phosphate + 5-formamido-1-(5-phospho-D-ribosyl)imidazole-4-carboxamide

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 ℃.