

5-(carboxyamino)imidazole ribonucleotide synthase

Cat. No. EXWM-5787

Lot. No. (See product label)

Introduction

Description

In Escherichia coli, this enzyme, along with EC 5.4.99.18, 5-(carboxyamino)imidazole ribonucleotide mutase, is required to carry out the single reaction catalysed by EC 4.1.1.21, phosphoribosylaminoimidazole carboxylase, in vertebrates. Belongs to the ATP grasp protein superfamily. Carboxyphosphate is the putative acyl phosphate intermediate. Involved in the late stages of purine biosynthesis.

Synonyms

N5-CAIR synthetase; N5-carboxyaminoimidazole ribonucleotide synthetase; PurK

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 6.3.4.18

CAS No.

255379-40-9

Reaction

ATP + 5-amino-1-(5-phospho-D-ribosyl)imidazole + HCO₃⁻ = ADP + phosphate + 5-carboxyamino-1-(5-phospho-D-ribosyl)imidazole

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.