

amidophosphoribosyltransferase

Cat. No. EXWM-2641

Lot. No. (See product label)

Introduction

Description

Amidophosphoribosyltransferase (ATase), also known as glutamine phosphoribosylpyrophosphate amidotransferase (GPAT), is an enzyme responsible for catalyzing the conversion of 5-phosphoribosyl-1-pyrophosphate (PRPP) into 5-phosphoribosyl-1-amine (PRA), using the ammonia group from a glutamine side-chain. This is the committing step in de novo purine synthesis. In humans it is encoded by the PPAT (phosphoribosyl pyrophosphate amidotransferase) gene. ATase is a member of the purine/pyrimidine phosphoribosyltransferase family.

Synonyms

phosphoribosyldiphosphate 5-amidotransferase; glutamine phosphoribosyldiphosphate amidotransferase; α -5-phosphoribosyl-1-pyrophosphate amidotransferase; 5'-phosphoribosylpyrophosphate amidotransferase; 5-phosphoribosyl-1-pyrophosphate amidotransferase; 5-phosphoribosyl-1-pyrophosphate amidotransferase; glutamine 5-phosphoribosylpyrophosphate amidotransferase; glutamine ribosylpyrophosphate 5-phosphate amidotransferase; phosphoribose pyrophosphate amidotransferase; phosphoribosyl pyrophosphate amidotransferase; phosphoribosylpyrophosphate glutamyl amidotransferase; 5-phosphoribosylamine:diphosphate phospho- α -D-ribosyltransferase (glutamate-amidating)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 2.4.2.14

CAS No.

9031-82-7

Reaction

5-phospho- β -D-ribosylamine + diphosphate + L-glutamate = L-glutamine + 5-phospho- α -D-ribose 1-diphosphate + H₂O

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.