Creative Enzymes®

nicotinate phosphoribosyltransferase

Cat. No. EXWM-5791

Lot. No. (See product label)

Introduction

Description The enzyme, which is involved in pyridine nucleotide recycling, can form β-nicotinate D-ribonucleotide and diphosphate from nicotinate and 5-phospho-α-D-ribose 1-diphosphate (PRPP) in the absence of ATP. However, when ATP is available the enzyme is phosphorylated resulting in a much lower Km for nicotinate. The phospho-enzyme is hydrolysed during the transferase reaction, regenerating the low affinity form. The presence of ATP shifts the products/substrates equilibrium from 0.67 to 1100.

Synonyms niacin ribonucleotidase; nicotinic acid mononucleotide glycohydrolase; nicotinic acid mononucleotide pyrophosphorylase; nicotinic acid phosphoribosyltransferase; nicotinate-nucleotide:diphosphate phospho-α-D-ribosyltransferase

Product Information

Form Liquid or lyophilized powder

EC Number EC 6.3.4.21

CAS No. 9030-26-6

Reaction nicotinate + 5-phospho-α-D-ribose 1-diphosphate + ATP + H2O = β-nicotinate D-ribonucleotide + diphosphate + ADP + phosphate

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 ℃.