

## nicotinate phosphoribosyltransferase

Cat. No. EXWM-5791

Lot. No. (See product label)

### Introduction

**Description** The enzyme, which is involved in pyridine nucleotide recycling, can form  $\beta$ -nicotinate D-ribonucleotide and diphosphate from nicotinate and 5-phospho- $\alpha$ -D-ribose 1-diphosphate (PRPP) in the absence of ATP. However, when ATP is available the enzyme is phosphorylated resulting in a much lower  $K_m$  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- $\alpha$ -D-ribosyltransferase

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 6.3.4.21

**CAS No.** 9030-26-6

**Reaction**  $\text{nicotinate} + 5\text{-phospho-}\alpha\text{-D-ribose 1-diphosphate} + \text{ATP} + \text{H}_2\text{O} = \beta\text{-nicotinate D-ribonucleotide} + \text{diphosphate} + \text{ADP} + \text{phosphate}$

**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 °C for short term. For long term storage, store it at -20 °C~-80 °C.