

## 2'-phospho-ADP-ribosyl cyclase/2'-phospho-cyclic-ADP-ribose transferase

Cat. No. EXWM-2705

Lot. No. (See product label)

### Introduction

#### Description

This multifunctional enzyme catalyses both the removal of nicotinamide from NADP<sup>+</sup>, forming 2'-phospho-cyclic ADP-ribose, and the addition of nicotinate to the cyclic product, forming NAADP<sup>+</sup>, a calcium messenger that can mobilize intracellular Ca<sup>2+</sup> stores and activate Ca<sup>2+</sup> influx to regulate a wide range of physiological processes. In addition, the enzyme also catalyses EC 3.2.2.6, ADP-ribosyl cyclase/cyclic ADP-ribose hydrolase.

#### Synonyms

diphosphopyridine nucleosidase (ambiguous); CD38 (gene name); BST1 (gene name)

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 2.4.99.20

#### Reaction

NADP<sup>+</sup> + nicotinate = nicotinate-adenine dinucleotide phosphate + nicotinamide (overall reaction); (1a) NADP<sup>+</sup> = 2'-phospho-cyclic ADP-ribose + nicotinamide; (1b) 2'-phospho-cyclic ADP-ribose + nicotinate = nicotinate-adenine dinucleotide 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.