

## Sugar-phosphatase from Escherichia coli, Recombinant

Cat. No. NATE-1228

Lot. No. (See product label)

### Introduction

#### Description

In enzymology, a sugar-phosphatase (EC 3.1.3.23) is an enzyme that catalyzes the chemical reaction: sugar phosphate + H<sub>2</sub>O ↔ sugar + phosphate. Thus, the two substrates of this enzyme are sugar phosphate and H<sub>2</sub>O, whereas its two products are sugar and phosphate. This enzyme belongs to the family of hydrolases, specifically those acting on phosphoric monoester bonds. The systematic name of this enzyme class is sugar-phosphate phosphohydrolase.

#### Synonyms

Sugar-phosphate phosphohydrolase

### Product Information

#### Source

Escherichia coli str. K-12 substr. MG1655

#### Form

Supplied in 3.2 M ammonium sulphate

#### EC Number

EC 3.1.3.23

#### CAS No.

9023-07-8

#### Molecular Weight

34233.0 Da

#### Purity

>95 % as judged by SDS-PAGE

#### Activity

7.786 U/mg

#### Concentration

45.60 U/ml

#### Optimum pH

5.5

#### Optimum temperature

> 40°C

#### Unit Definition

One unit is defined as the amount of enzyme required to release 1 μmol of pNP per minute from pNP-phosphate (15.6 mM) in 78.1 mM sodium acetate buffer, pH 5.5, containing 0.064 mg/mL BSA and 6.25 mM MgCl<sub>2</sub>, at 40°C, and using an extinction coefficient of 18000 M<sup>-1</sup>cm<sup>-1</sup>.

### Usage and Packaging

#### Preparation Instructions

Agitate vial sufficiently to fully homogenise enzyme precipitate before use.

### Storage and Shipping Information

#### Storage

Store at 4°C (shipped at room temperature)