Creative Enzymes®

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 + H2O ↔ sugar + phosphate. Thus, the two substrates of this enzyme are sugar phosphate and H2O, 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 1µmol 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 MgCl2, at 40°C, and using an extinction coefficient of 18000 M-1cm-1.

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)