

Sucrose phosphorylase 13 A from Bifidobacterium adolescentis, Recombinant

Cat. No. NATE-1532

Lot. No. (See product label)

Introduction

Description

Sucrose phosphorylase (EC. 2.4.1.7) is an important enzyme in the metabolism of sucrose and regulation of other metabolic intermediates. Sucrose phosphorylase is in the class of hexosyltransferases. More specifically it has been placed in the retaining glycoside hydrolases family although it catalyzes a transglycosidation rather than hydrolysis. Sucrose phosphorylase catalyzes the conversion of sucrose to D-fructose and α -D-glucose-1-phosphate. It has been shown in multiple experiments that the enzyme catalyzes this conversion by a double displacement mechanism.

Synonyms

Sucrose Phosphorylase; EC 2.4.1.7; sucrose glucosyltransferase; disaccharide glucosyltransferase; Sucrose:orthophosphate α -D-glucosyltransferase

Product Information

Species

Bifidobacterium adolescentis

Source

E. coli

Form

35 mM NaHepes buffer, pH 7.5, 750 mM NaCl, 200 mM imidazol, 3.5 mM CaCl₂, 0.02% sodium azide and 25% (v/v) glycerol

EC Number

EC. 2.4.1.7

CAS No.

9074-06-0

Molecular Weight

58.2 kDa

Purity

>90% as judged by SDS-PAGE

Concentration

1 mg/mL

Optimum pH

6.5-7.0

Optimum temperature

30 °C

Specificity

Sucrose; D- and L-arabinose, D- and L-arabitol and xylitol

Storage and Shipping Information

Storage

This enzyme is shipped at room temperature but should be stored at -20 °C.