

Sucrose Phosphorylase, Recombinant

Cat. No. NATE-0684

Lot. No. (See product label)

Introduction

Description

Sucrose phosphorylase (E.C. 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.

Applications

Sucrose phosphorylase has been used in a study to assess the enzymatic synthesis of stable, odorless, and powdered furanone glucosides. Sucrose phosphorylase has also been used in a study to investigate the novel transglucosylating reaction with carboxylic compounds.

Synonyms

Sucrose Phosphorylase; EC 2.4.1.7; 9074-06-0; sucrose glucosyltransferase; disaccharide glucosyltransferase; Sucrose:orthophosphate α -D-glucosyltransferase

Product Information

Source

E. coli

Form

lyophilized powder; Contains sucrose as stabilizer.

EC Number

EC 2.4.1.7

CAS No.

9074-06-0

Molecular Weight

mol wt 56 kDa by SDS-PAGE

Activity

> 45 units/mg solid

Unit Definition

One unit will produce 1.0 μ mole of D-fructose from sucrose per min with the corresponding reduction of NADP to NADPH at pH 7.6, at 25°C.

Storage and Shipping Information

Storage

-20°C