Creative Enzymes®

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-glucosytransferase

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 µmole 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