

## 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  $\alpha$ -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  $\alpha$ -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  $\mu$ 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