

## Native *Candida utilis* Invertase

Cat. No. NATE-0358

Lot. No. (See product label)

### Introduction

#### Description

Invertase is an enzyme that catalyzes the hydrolysis (breakdown) of sucrose (table sugar). The resulting mixture of fructose and glucose is called inverted sugar syrup. Related to invertases are sucrases. Invertases and sucrases hydrolyze sucrose to give the same mixture of glucose and fructose. Invertases cleave the O-C (fructose) bond, whereas the sucrases cleave the O-C (glucose) bond. Typically used in manufacturing confectionaries, dietary supplements, and other food grade applications.

#### Applications

This enzyme is useful for enzymatic determination of saccharose and for the structure investigation of carbohydrates containing  $\beta$ -D-fructofuranoside residue.

#### Synonyms

EC 3.2.1.26; invertase; saccharase; glucosucrase;  $\beta$ -h-fructosidase;  $\beta$ -fructosidase; invertin; sucrase; maxinvert L 1000; fructosylinvertase; alkaline invertase; acid invertase;  $\beta$ -fructofuranosidase;  $\beta$ -D-fructofuranoside fructohydrolase; 9001-57-4

### Product Information

**Source** Candida utilis

**EC Number** EC 3.2.1.26

**CAS No.** 9001-57-4

**Molecular Weight** mol wt ~260 kDa

**Activity** > 300 units/mg solid

**pH Stability** pH 4.0-6.0 (50°C, 10min)

**Optimum pH** 3.5-4.0

**Thermal stability** below 60°C (pH 4.5, 10min)

**Optimum temperature** 60-70°C

**Michaelis Constant**  $1.5 \times 10^{-2}$ M (Saccharose)

**Structure** Glycoprotein containing ca. 50% of carbohydrates

**Unit Definition** One unit will hydrolyze 1.0  $\mu$ mole of sucrose to invert sugar per min at pH 4.5 at 55°C.

### Storage and Shipping Information

**Storage** -20°C