

## Native *Lactobacillus reuteri* Glucansucrase ( $\alpha$ -glucanotransferase)

Cat. No. NATE-0304

Lot. No. (See product label)

### Introduction

**Description** A moderately thermostable Glucansucrase (4,6-Alpha-Glucanotransferase, reuteransucrase). The enzyme transfers glucose units from sucrose to make a highly branched, high molecular weight alpha-D-Glucan with  $\alpha$  (1 $\rightarrow$ 4) glucosidic linkages and also some  $\alpha$  (1 $\rightarrow$ 6) linked glucosyl units.

**Synonyms** Alpha-glucanotransferase; glucosyltransferase; 4,6-alpha-Glucanotransferase; EC 2.4.1.-

### Product Information

**Species** *Lactobacillus reuteri*

**Source** *Lactobacillus reuteri* strain 121

**EC Number** EC 2.4.1.-

**Optimum pH** Solid line, transferase activity; dashed line, hydrolysis activity (Kralj et al. 2004).

**Optimum temperature** the enzyme has optimum activity around 50°C (Kralj et al. 2004).

**Structure** The crystal structure of Gtfa163 Glucansucrase (Reuteransucrase) from *Lactobacillus reuteri*121 has been determined and shown here in Figure 1 (Pijning et al. 2012). – PDB entry 4AMC

**Unit Definition** One unit (U) of enzyme activity is the amount that leads to the release of 1  $\mu$ mol of fructose from sucrose per minute.