Creative Enzymes®

Native Lactobacillus reuteri Glucansucrase (α-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 α (1→4) glucosidic linkages and also some α (1→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 reuteri121 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 μmol of fructose from sucrose per minute.