Creative Enzymes®

sucrose-1,6-α-glucan 3(6)-α-glucosyltransferase

Cat. No. EXWM-2350

Lot. No. (See product label)

Introduction

Description	The enzyme was characterized from the dental caries bacterium Streptococcus mutans. It transfers glucosyl residues from sucrose to either the 6- or the 3-positions of glucose residues in glucans, producing a highly-branched extracellular D-glucan polymers that promote attachment of the bacteria to teeth. Three types of the enzyme have been described; the insoluble polymers produced by GTF-I and GTF-SI contain 85% α(1→3) bonds and 15% α(1→6) bonds, while the soluble polymers produced by GTF-S contain only 30% of α(1→3) bonds and 70% α(1→6) bonds. cf. EC 2.4.1.5, dextransucrase.
Synonyms	water-soluble-glucan synthase (misleading); GTF-I; GTF-S; GTF-SI; sucrose-1,6-α-glucan 3(6)-α-glucosyltransferase; sucrose:1,6-α-D-glucan 3-α- and 6-α-glucosyltransferase; sucrose:1,6-, 1,3-α-D-glucan 3-α- and 6-α-D-glucosyltransferase; sucrose:1,6-α-D-glucan 3(6)-α-D-glucosyltransferase; gtfB (gene name); gtfC (gene name); gtfD (gene name)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 2.4.1.125
CAS No.	81725-87-3
Reaction	(1) sucrose + [(1→6)-α-D-glucosyl]n = D-fructose + [(1→6)-α-D-glucosyl]n+1; (2) sucrose + [(1→6)-α-D-glucosyl]n = D-fructose + (1→3)-α-D-glucosyl[(1→6)-α-D-glucosyl]n
Notes	This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage	Store it at +4 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.