6G-fructosyltransferase

Cat. No. EXWM-2472

Lot. No. (See product label)

Introduction

Description Inulins are polysaccharides consisting of linear or branched D-fructofuranosyl chains attached to the fructosyl residue of sucrose by a β(2→1) linkage. This enzyme catalyses the transfer of the terminal (2→1)-linked -D-fructosyl group of an inulin chain onto O-6 position of the glucose residue of another inulin molecule. For example, if 1-kestose [1F-(β-D-fructofuranosyl)sucrose] is both the donor and recipient in the reaction shown above, i.e., if m = 1 and n = 1, then the products will be sucrose and 6G-di-β-D-fructofuranosylsucrose. In this notation, the superscripts F and G are used to specify whether the fructose or glucose residue of the sucrose carries the substituent. Alternatively, this may be indicated by the presence and/or absence of primes (see http://www.chem.qmul.ac.uk/iupac/2carb/36.html#362). Sucrose cannot be a donor substrate in the reaction (i.e. m cannot be zero) and inulin cannot act as an acceptor. Side reactions catalysed are transfer of a β-D-fructosyl group between compounds of the structure 1F-(1-β-D-fructofuranosyl)m-6G-(1-β-D-fructofuranosyl)n sucrose, where m ≥ 0 and n = 1 for the donor, and m ≥ 0 and n ≥ 0 for the acceptor.

Synonyms fructan:fructan 6G-fructosyltransferase; 1F(1-β-D-fructofuranosyl)m sucrose:1F(1-β-D-fructofuranosyl)nsucrose 6G-fructosyltransferase; 6G-FFT; 6G-FT; 6G-fructotransferase

Product Information

Form Liquid or lyophilized powder

EC Number EC 2.4.1.243

CAS No. 79633-28-6

Reaction [1-β-D-fructofuranosyl-(2→1)-]m+1-α-D-glucopyranoside + [1-β-D-fructofuranosyl-(2→1)-]n-α-D-glucopyranoside = [1-β-D-fructofuranosyl-(2→1)-]m-α-D-glucopyranoside + [1-β-D-fructofuranosyl-(2→1)-]n-β-D-fructofuranosyl-(2→6)-α-D-glucopyranoside (m > 0; n ≥ 0)

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 ℃.