Creative Enzymes®

galactolipid galactosyltransferase

Cat. No. EXWM-2410

Lot. No. (See product label)

Introduction

Description	The enzyme converts monogalactosyldiacylglycerol to digalactosyldiacylglycerol, trigalactosyldiacylglycerol and tetragalactosyldiacylglycerol. All residues are connected by β linkages. The activity is localized to chloroplast envelope membranes, but it does not contribute to net galactolipid synthesis in plants, which is performed by EC 2.4.1.46, monogalactosyldiacylglycerol synthase, and EC 2.4.1.241, digalactosyldiacylglycerol synthase. Note that the β,β-digalactosyldiacylglycerol formed by this enzyme is different from the more common α,β-digalactosyldiacylglycerol formed by EC 2.4.1.241. The enzyme provides an important mechanism for the stabilization of the chloroplast membranes during freezing and drought stress.
Synonyms	galactolipid-galactolipid galactosyltransferase; galactolipid:galactolipid galactosyltransferase; interlipid galactosyltransferase; GGGT; DGDG synthase (ambiguous); digalactosyldiacylglycerol synthase (ambiguous); 3-(β-D-galactosyl)-1,2-diacyl-sn-glycerol:mono-3-(β-D-galactosyl)-1,2-diacyl-sn-glycerol β-D-galactosyltransferase; 3-(β-D-galactosyl)-1,2-diacyl-sn-glycerol:3-(β-D-galactosyl)-1,2-diacyl-sn-glycerol β-D-galactosyltransferase; SFR2 (gene name)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 2.4.1.184
CAS No.	66676-74-2
Reaction	2 a 1,2-diacyl-3-O-(β-D-galactosyl)-sn-glycerol = a 1,2-diacyl-3-O-[β-D-galactosyl-(1→6)-β-D-galactosyl]-sn-glycerol + a 1,2-diacyl-sn-glycerol
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 ℃.