Creative Enzymes®

GDP-Man:Man1GlcNAc2-PP-dolichol α-1,3-mannosyltransferase

Cat. No. EXWM-2357

Lot. No. (See product label)

Introduction

Description

The biosynthesis of asparagine-linked glycoproteins utilizes a dolichyl diphosphate-linked glycosyl donor, which is assembled by the series of membrane-bound glycosyltransferases that comprise the dolichol pathway. Alg2 mannosyltransferase from Saccharomyces cerevisiae carries out an α1,3-mannosylation of D-Man-β-(1→4)-D-GlcNAc-β-(1→4)-D-GlcNAc-diphosphodolichol, followed by an α1,6-mannosylation (cf. EC 2.4.1.257), to form the first branched pentasaccharide intermediate of the dolichol pathway.

Synonyms

Alg2 mannosyltransferase (ambiguous); ALG2 (gene name, ambiguous); glycolipid 3-α-mannosyltransferase; GDP-mannose:glycolipid 3-α-D-mannosyltransferase; GDP-Man:Man1GlcNAc2-PP-Dol α-1,3-mannosyltransferase; GDP-D-mannose:D-Man-β-(1→4)-D-GlcNAc-β-(1→4)-D-GlcNAc-diphosphodolichol 3-α-mannosyltransferase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 2.4.1.132

CAS No.

81181-76-2

Reaction

GDP-α-D-mannose + β-D-Man-(1→4)-β-D-GlcNAc-(1→4)-α-D-GlcNAc-diphosphodolichol = GDP + α-D-Man-(1→3)-β-D-Man-(1→4)-β-D-GlcNAc-(1→4)-α-D-GlcNAc-diphosphodolichol

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 ℃.