Creative Enzymes®

dolichyl-P-Man:Man5GlcNAc2-PP-dolichol α-1,3-mannosyltransferase

Cat. No. EXWM-2488

Lot. No. (See product label)

Introduction

Description

The formation of N-glycosidic linkages of glycoproteins involves the ordered assembly of the common Glc3Man9GlcNAc2 core-oligosaccharide on the lipid carrier dolichyl diphosphate. Early mannosylation steps occur on the cytoplasmic side of the endoplasmic reticulum with GDP-Man as donor, the final reactions from Man5GlcNAc2-PP-dolichol to Man9Glc-NAc2-PP-dolichol on the lumenal side use dolichyl β-D-mannosyl phosphate. The first step of this assembly pathway on the luminal side of the endoplasmic reticulum is catalysed by ALG3.

Synonyms

Man5GlcNAc2-PP-Dol mannosyltransferase; ALG3; dolichyl-P-Man:Man(5)GlcNAc(2)-PP-dolichyl mannosyltransferase; Not56-like protein; Alg3 α-1,3-mannosyl transferase; Dol-P-Man:Man5GlcNAc2-PP-Dol α-1,3-mannosyltransferase; dolichyl β-D-mannosyl phosphate:D-Man-α-(1→2)-D-Man-α-(1→2)-D-Man-α-(1→3)-[D-Man-α-(1→6)]-D-Man-β-(1→4)-D-GlcNAc-β-(1→4)-D-GlcNAc-diphosphodolichol α-1,3-mannosyltransferase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 2.4.1.258

Reaction

dolichyl β-D-mannosyl phosphate + α-D-Man-(1→2)-α-D-Man-(1→2)-α-D-Man-(1→3)-[α-D-Man-(1→6)]-β-D-Man-(1→4)-β-D-GlcNAc-(1→4)-α-D-GlcNAc-diphosphodolichol = α-D-Man-(1→2)-α-D-Man-(1→2)-α-D-Man-(1→3)-[α-D-Man-(1→3)-α-D-Man-(1→6)]-β-D-Man-(1→4)-β-D-GlcNAc-(1→4)-α-D-GlcNAc-diphosphodolichol + dolichyl phosphate

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 ℃.