Creative Enzymes®

dolichyl-P-Man:Man8GlcNAc2-PP-dolichol α-1,2-mannosyltransferase

Cat. No. EXWM-2492

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-Dol to Man9Glc-NAc2-PP-Dol on the lumenal side use dolichyl β-D-mannosyl phosphate. ALG9 mannosyltransferase catalyses the addition of two different α-1,2-mannose residues: the addition of α-1,2-mannose to Man6GlcNAc2-PP-Dol (EC 2.4.1.259) and the addition of α-1,2-mannose to Man8GlcNAc2-PP-Dol (EC 2.4.1.261).

Synonyms

ALG9; ALG9 α1,2 mannosyltransferase; dolichylphosphomannose-dependent ALG9 mannosyltransferase; ALG9 mannosyltransferase; Dol-P-Man:Man8GlcNAc2-PP-Dol α-1,2-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→2)-D-Man-α-(1→3)-[D-Man-α-(1→6)]-D-Man-α-(1→6)]-D-Man-β-(1→4)-D-GlcNAc-β-(1→4)-D-GlcNAc-diphosphodolichol 2-α-D-mannosyltransferase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 2.4.1.261

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→2)-α-D-Man-(1→3)-[α-D-Man-(1→6)]-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→2)-α-D-Man-(1→3)-[α-D-Man-(1→2)-α-D-Man-(1→6)]-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 ℃.