

## dolichyl-P-Man:Man6GlcNAc2-PP-dolichol $\alpha$ -1,2-mannosyltransferase

Cat. No. EXWM-2489

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  $\beta$ -D-mannosyl phosphate. ALG9 mannosyltransferase catalyses the addition of two different  $\alpha$ -1,2-mannose residues - the addition of  $\alpha$ -1,2-mannose to Man6GlcNAc2-PP-Dol (EC 2.4.1.259) and the addition of  $\alpha$ -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:Man6GlcNAc2-PP-Dol  $\alpha$ -1,2-mannosyltransferase; dolichyl  $\beta$ -D-mannosyl phosphate:D-Man- $\alpha$ - $(1\rightarrow 2)$ -D-Man- $\alpha$ - $(1\rightarrow 2)$ -D-Man- $\alpha$ - $(1\rightarrow 3)$ -[D-Man- $\alpha$ - $(1\rightarrow 3)$ -D-Man- $\alpha$ - $(1\rightarrow 6)$ ]-D-man- $\alpha$ - $(1\rightarrow 3)$ -D-Man- $\alpha$ - $(1\rightarrow 6)$ -Man- $\alpha$ - $(1\rightarrow 6)$ -Man-

Man- $\beta$ -(1 $\rightarrow$ 4)-D-GlcNAc- $\beta$ -(1 $\rightarrow$ 4)-D-GlcNAc-diphosphodolichol α-1,2-mannosyltransferase

## **Product Information**

**Form** Liquid or lyophilized powder

**EC Number** EC 2.4.1.259

**Reaction** dolichyl  $\beta$ -D-mannosyl phosphate  $+ \alpha$ -D-Man- $(1\rightarrow 2)$ - $\alpha$ -D-Man- $(1\rightarrow 2)$ - $\alpha$ -D-Man- $(1\rightarrow 3)$ - $(1\rightarrow 3$ 

 $\begin{aligned} &\text{Man-}(1\rightarrow 6)] - \beta - D - \text{Man-}(1\rightarrow 4) - \beta - D - GlcNAc - (1\rightarrow 4) - \alpha - D - GlcNAc - diphosphodolichol } = \alpha - D - \text{Man-}(1\rightarrow 2) - \alpha - D - \text{Man-}(1\rightarrow 2) - \alpha - D - \text{Man-}(1\rightarrow 3) - [\alpha - D - \text{Man-}(1\rightarrow 2) - \alpha - D - \text{Man-}(1\rightarrow 4) - \beta - D - GlcNAc - (1\rightarrow 4) -$ 

 $\alpha$ -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

Store it at +4 °C for short term. For long term storage, store it at -20 °C∼-80 °C.

 1/1