

## dolichyl-P-Man:Man5GlcNAc2-PP-dolichol $\alpha$ -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 Man9GlcNAc2-PP-dolichol on the luminal side use dolichyl  $\beta$ -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  $\alpha$ -1,3-mannosyl transferase; Dol-P-Man:Man5GlcNAc2-PP-Dol  $\alpha$ -1,3-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 $\rightarrow$ 6)]-D-Man- $\beta$ -(1 $\rightarrow$ 4)-D-GlcNAc- $\beta$ -(1 $\rightarrow$ 4)-D-GlcNAc-diphosphodolichol  $\alpha$ -1,3-mannosyltransferase

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 2.4.1.258

**Reaction** dolichyl  $\beta$ -D-mannosyl phosphate +  $\alpha$ -D-Man-(1 $\rightarrow$ 2)- $\alpha$ -D-Man-(1 $\rightarrow$ 2)- $\alpha$ -D-Man-(1 $\rightarrow$ 3)-[ $\alpha$ -D-Man-(1 $\rightarrow$ 6)]- $\beta$ -D-Man-(1 $\rightarrow$ 4)- $\beta$ -D-GlcNAc-(1 $\rightarrow$ 4)- $\alpha$ -D-GlcNAc-diphosphodolichol =  $\alpha$ -D-Man-(1 $\rightarrow$ 2)- $\alpha$ -D-Man-(1 $\rightarrow$ 2)- $\alpha$ -D-Man-(1 $\rightarrow$ 3)-[ $\alpha$ -D-Man-(1 $\rightarrow$ 6)]- $\beta$ -D-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

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