

## 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 Man9GlcNAc2-PP-Dol on the luminal 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  $\alpha$ 1,2 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- $\beta$ -(1 $\rightarrow$ 4)-D-GlcNAc- $\beta$ -(1 $\rightarrow$ 4)-D-GlcNAc-diphosphodolichol  $\alpha$ -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)-[ $\alpha$ -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 $\rightarrow$ 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.