

## GDP-Man:Man<sub>2</sub>GlcNAc<sub>2</sub>-PP-dolichol $\alpha$ -1,6-mannosyltransferase

Cat. No. EXWM-2487

Lot. No. (See product label)

### Introduction

**Description** The biosynthesis of asparagine-linked glycoproteins utilizes a dolichyl diphosphate-linked glycosyl donor, which is assembled by the series of membrane-bound glycosyltransferases that comprise the dolichol pathway. Alg2 mannosyltransferase from *Saccharomyces cerevisiae* carries out an  $\alpha$ 1,3-mannosylation (cf. EC 2.4.1.132) of  $\beta$ -D-Man-(1 $\rightarrow$ 4)- $\beta$ -D-GlcNAc-(1 $\rightarrow$ 4)- $\alpha$ -D-GlcNAc-diphosphodolichol, followed by an  $\alpha$ 1,6-mannosylation, to form the first branched pentasaccharide intermediate of the dolichol pathway.

**Synonyms** GDP-Man:Man<sub>2</sub>GlcNAc<sub>2</sub>-PP-Dol  $\alpha$ -1,6-mannosyltransferase; Alg2 mannosyltransferase (ambiguous); ALG2 (gene name, ambiguous); GDP-Man:Man<sub>1</sub>GlcNAc<sub>2</sub>-PP-dolichol mannosyltransferase (ambiguous); GDP-D-mannose:D-Man- $\alpha$ -(1 $\rightarrow$ 3)-D-Man- $\beta$ -(1 $\rightarrow$ 4)-D-GlcNAc- $\beta$ -(1 $\rightarrow$ 4)-D-GlcNAc-diphosphodolichol  $\alpha$ -6-mannosyltransferase

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 2.4.1.257

**Reaction** GDP- $\alpha$ -D-mannose +  $\alpha$ -D-Man-(1 $\rightarrow$ 3)- $\beta$ -D-Man-(1 $\rightarrow$ 4)- $\beta$ -D-GlcNAc-(1 $\rightarrow$ 4)- $\alpha$ -D-GlcNAc-diphosphodolichol = GDP +  $\alpha$ -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

**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.