

## diglucosyl diacylglycerol synthase (1,6-linking)

Cat. No. EXWM-2551

Lot. No. (See product label)

### Introduction

**Description** The enzyme is found in several bacterial species. The enzyme from *Bacillus subtilis* is specific for glucose. The enzyme from *Mycoplasma genitalium* can incorporate galactose with similar efficiency, but forms mainly 1,2-diacyl-diglucopyranosyl-sn-glycerol in vivo. The enzyme from *Staphylococcus aureus* can also form glucosyl-glycero-3-phospho-(1'-sn-glycerol).

**Synonyms** monoglucosyl diacylglycerol (1→6) glucosyltransferase; MGlcDAG (1→6) glucosyltransferase; DGlcDAG synthase (ambiguous); UGT106B1; ypfP (gene name)

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 2.4.1.315

**Reaction** (1)  $\text{UDP-}\alpha\text{-D-glucose} + 1,2\text{-diacyl-3-O-}(\beta\text{-D-glucopyranosyl})\text{-sn-glycerol} = 1,2\text{-diacyl-3-O-}[\beta\text{-D-glucopyranosyl-(1}\rightarrow\text{6)-O-}\beta\text{-D-glucopyranosyl}]\text{-sn-glycerol} + \text{UDP}$ ; (2)  $\text{UDP-}\alpha\text{-D-glucose} + 1,2\text{-diacyl-3-O-}[\beta\text{-D-glucopyranosyl-(1}\rightarrow\text{6)-O-}\beta\text{-D-glucopyranosyl}]\text{-sn-glycerol} = 1,2\text{-diacyl-3-O-}[\beta\text{-D-glucopyranosyl-(1}\rightarrow\text{6)-}\beta\text{-D-glucopyranosyl-(1}\rightarrow\text{6)-O-}\beta\text{-D-glucopyranosyl}]\text{-sn-glycerol} + \text{UDP}$

**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.