

dTDP-4-dehydro-6-deoxyglucose reductase

Cat. No. EXWM-0172

Lot. No. (See product label)

Introduction

Description

The enzymes from the Gram-negative bacteria *Aggregatibacter actinomycetemcomitans* and *Escherichia coli* O52 are involved in activation of fucose for incorporation into capsular polysaccharide O-antigens. The enzyme from the Gram-positive bacterium *Anoxybacillus tepidamans* (*Geobacillus tepidamans*) is involved in activation of fucose for incorporation into the organism's S-layer. The enzyme from *Escherichia coli* O52 has a higher catalytic efficiency with NADH than with NADPH.

Synonyms

dTDP-4-keto-6-deoxyglucose reductase; dTDP-D-fucose:NADP⁺ oxidoreductase; Fcf1; dTDP-6-deoxy-D-xylo-hex-4-ulopyranose reductase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.1.1.266

Reaction

$\text{dTDP-}\alpha\text{-D-fucopyranose} + \text{NAD(P)}^+ = \text{dTDP-4-dehydro-6-deoxy-}\alpha\text{-D-glucose} + \text{NAD(P)H} + \text{H}^+$

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.