Creative Enzymes®

# dTDP-4-dehydro-6-deoxyglucose reductase

*Cat. No.* EXWM-0172

*Lot. No.* (See product label)

## Introduction

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| **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

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| **Form** | Liquid or lyophilized powder |
| **EC Number** | EC 1.1.1.266 |
| **Reaction** | dTDP-α-D-fucopyranose + NAD(P)+ = dTDP-4-dehydro-6-deoxy-α-D-glucose + NAD(P)H + 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

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