Creative Enzymes®

GDP-mannose 4,6-dehydratase

Cat. No. EXWM-5036

Lot. No. (See product label)

Introduction

Description	The bacterial enzyme requires bound NAD+. This enzyme forms the first step in the biosynthesis of GDP-α-D-rhamnose and GDP-β-L-fucose. In Aneurinibacillus thermoaerophilus L420-91T, this enzyme acts as a bifunctional enzyme, catalysing the above reaction as well as the reaction catalysed by EC 1.1.1.281, GDP-4-dehydro-6-deoxy-D-mannose reductase. Belongs to the short-chain dehydrogenase/reductase enzyme family, having homologous structures and a conserved catalytic triad of Lys, Tyr and Ser/Thr residues.
Synonyms	guanosine 5'-diphosphate-D-mannose oxidoreductase; guanosine diphosphomannose oxidoreductase; guanosine diphosphomannose 4,6-dehydratase; GDP-D-mannose dehydratase; GDP-D-mannose 4,6-dehydratase; Gmd; GDP-mannose 4,6-hydro-lyase; GDP-mannose 4,6-hydro-lyase (GDP-4-dehydro-6-deoxy-D-mannose-forming)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 4.2.1.47
CAS No.	37211-59-9
Reaction	GDP-α-D-mannose = GDP-4-dehydro-α-D-rhamnose + H2O
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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.