

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 °C for short term. For long term storage, store it at -20 °C~-80 °C.