Creative Enzymes®

3-O-phospho-polymannosyl GlcNAc-diphospho-ditrans,octacis-undecaprenol 3-phospho-methyltransferase

Cat. No. EXWM-1901

Lot. No. (See product label)

Introduction

Description The enzyme is involved in the biosynthesis of the polymannose O-polysaccharide in the outer leaflet of the membrane of Escherichia coli serotype O9a. O-Polysaccharide structures vary extensively because of differences in the number and type of sugars in the repeat unit. The dual kinase/methylase WbdD also catalyses the preceding phosphorylation of α-D-Man-(1→2)-α-D-Man-(1→2)-α-D-Man-(1→3)-α-D-Man-(1→3)-[α-D-Man-(1→2)-α-D-Man-(1→2)-α-D-Man-(1→3)-α-D-Man-(1→3)]n-α-D-Man-(1→3)-α-D-Man-(1→3)-α-D-GlcNAc-diphospho-ditrans,octacis-undecaprenol (cf. EC 2.7.1.181, α-D-Man-(1→2)-α-D-Man-(1→3)-α-D-Man-(1→3)-α-D-Man-diphospho-ditrans,octacis-undecaprenol 3-kinase).

Synonyms WbdD

Product Information

Form Liquid or lyophilized powder

EC Number EC 2.1.1.294

Reaction S-adenosyl-L-methionine + 3-O-phospho-α-D-Man-(1→2)-α-D-Man-(1→2)-α-D-Man-(1→3)-α-D-Man-(1→3)-[α-D-Man-(1→2)-α-D-Man-(1→2)-α-D-Man-(1→3)-α-D-Man-(1→3)]n-α-D-Man-(1→3)-α-D-Man-(1→3)-α-D-GlcNAc-diphospho-ditrans,octacis-undecaprenol = S-adenosyl-L-homocysteine + 3-O-methylphospho-α-D-Man-(1→2)-α-D-Man-(1→2)-α-D-Man-(1→3)-α-D-Man-(1→3)-[α-D-Man-(1→2)-α-D-Man-(1→2)-α-D-Man-(1→3)-α-D-Man-(1→3)]n-α-D-Man-(1→3)-α-D-Man-(1→3)-α-D-GlcNAc-diphospho-ditrans,octacis-undecaprenol

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 ℃.