Creative Enzymes®

adenosylcobinamide-GDP ribazoletransferase

Cat. No. EXWM-3325

Lot. No. (See product label)

Introduction

Description

In Salmonella typhimurium LT2, under anaerobic conditions, CobU (EC 2.7.7.62 and EC 2.7.1.156), CobT (EC 2.4.2.21), CobC (EC 3.1.3.73) and CobS (EC 2.7.8.26) catalyse reactions in the nucleotide loop assembly pathway, which convert adenosylcobinamide (AdoCbi) into adenosylcobalamin (AdoCbl). CobT and CobC are involved in 5,6-dimethylbenzimidazole activation whereby 5,6-dimethylbenzimidazole is converted to its riboside, α-ribazole. The second branch of the nucleotide loop assembly pathway is the cobinamide activation branch where AdoCbi or adenosylcobinamide-phosphate is converted to the activated intermediate AdoCbi-GDP by the bifunctional enzyme Cob U. CobS catalyses the final step in adenosylcobalamin biosynthesis, which is the condensation of AdoCbi-GDP with α-ribazole to yield adenosylcobalamin.

Synonyms

CobS; cobalamin synthase; cobalamin-5'-phosphate synthase; cobalamin (5'-phosphate) synthase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 2.7.8.26

CAS No.

137672-85-6

Reaction

(1) adenosylcobinamide-GDP + α-ribazole = GMP + adenosylcobalamin; (2)adenosylcobinamide-GDP + α-ribazole 5'-phosphate = GMP + adenosylcobalamin 5'-phosphate

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 ℃.