

## 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,  $\alpha$ -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  $\alpha$ -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 +  $\alpha$ -ribazole = GMP + adenosylcobalamin; (2) adenosylcobinamide-GDP +  $\alpha$ -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 °C for short term. For long term storage, store it at -20 °C~-80 °C.