Creative Enzymes®

ditrans,polycis-polyprenyl diphosphate synthase [(2E,6E)-farnesyl diphosphate specific]

Cat. No. EXWM-2825

Lot. No. (See product label)

Introduction

Description The enzyme is involved in biosynthesis of dolichol (a long-chain polyprenol) with a saturated α-isoprene unit, which serves as a glycosyl carrier in protein glycosylation. The yeast Saccharomyces cerevisiae has two different enzymes that catalyse this reaction. Rer2p synthesizes a well-defined family of polyprenols of 13–18 isoprene residues with dominating C80 (16 isoprene residues) extending to C120, while Srt1p synthesizes mainly polyprenol with 22 isoprene subunits. Largest Srt1p products reach C290. The enzyme from Arabidopsis thaliana catalyses the formation of polyprenyl diphosphates with predominant carbon number C120.

Synonyms RER2; Rer2p; Rer2p Z-prenyltransferase; Srt1p; Srt2p Z-prenyltransferase; ACPT; dehydrodolichyl diphosphate synthase 1

Product Information

Form Liquid or lyophilized powder

EC Number EC 2.5.1.87

Reaction (2E,6E)-farnesyl diphosphate + n isopentenyl diphosphate = n diphosphate + ditrans,polycis-polyprenyl diphosphate (n = 10–55)

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 ℃.