Creative Enzymes®

dolichyl-diphosphooligosaccharide-protein glycotransferase

Cat. No. EXWM-2702

Lot. No. (See product label)

Introduction

Description Occurs in eukaryotes that form a glycoprotein by the transfer of a glucosyl-mannosyl-glucosamine polysaccharide to the side-chain of an L-asparagine residue in the sequence -Asn-Xaa-Ser- or -Asn-Xaa-Thr- (Xaa not Pro) in nascent polypeptide chains. The basic oligosaccharide is the tetradecasaccharide Glc3Man9GlcNAc2 (for diagram click here). However, smaller oligosaccharides derived from it and oligosaccharides with additional monosaccharide units attached may be involved. See ref for a review of N-glycoproteins in eukaryotes. Man3GlcNAc2 seems to be common for all of the oligosaccharides involved with the terminal N-acetylglucosamine linked to the protein L-asparagine. Occurs on the cytosolic face of the endoplasmic reticulum. The dolichol involved normally has 14-21 isoprenoid units with two trans double-bonds at the ω end, and the rest of the double-bonds in cis form.

Synonyms dolichyldiphosphooligosaccharide-protein glycosyltransferase; asparagine N-glycosyltransferase; dolichyldiphosphooligosaccharide-protein oligosaccharyltransferase; dolichylpyrophosphodiacetylchitobiose-protein glycosyltransferase; oligomannosyltransferase; oligosaccharide transferase; dolichyldiphosphoryloligosaccharide-protein oligosaccharyltransferase; dolichyl-diphosphooligosaccharide:protein-L-asparagine oligopolysaccharidotransferase; STT3

Product Information

Form Liquid or lyophilized powder

EC Number EC 2.4.99.18

CAS No. 75302-32-8

Reaction dolichyl diphosphooligosaccharide + [protein]-L-asparagine = dolichyl diphosphate + a glycoprotein with the oligosaccharide chain attached by N-β-D-glycosyl linkage to a protein L-asparagine

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 ℃.