

globotriaosylceramide 3-β-N-acetylgalactosaminyltransferase

Cat. No. EXWM-2619

Lot. No. (See product label)

Introduction

Description

Globoside is a neutral glycosphingolipid in human erythrocytes and has blood-group-P-antigen activity. The enzyme requires a divalent cation for activity, with Mn²⁺ required for maximal activity. UDP-GalNAc is the only sugar donor that is used efficiently by the enzyme: UDP-Gal and UDP-GlcNAc result in very low enzyme activity. Lactosylceramide, globoside and gangliosides GM3 and GD3 are not substrates. For explanation of the superscripted '3' in the systematic name, see GL-5.3.4.

Synonyms

uridine diphosphoacetylgalactosamine-galactosylgalactosylglucosylceramide acetylgalactosaminyltransferase; globoside synthetase; UDP-N-acetylgalactosamine:globotriaosylceramide β-3-N-acetylgalactosaminyltransferase; galactosylgalactosylglucosylceramide β-D-acetylgalactosaminyltransferase; UDP-N-acetylgalactosamine:globotriaosylceramide β1,3-N-acetylgalactosaminyltransferase; globoside synthase; gUDP-N-acetyl-D-galactosamine:D-galactosyl-1,4-D-galactosyl-1,4-D-glucosylceramide β-N-acetyl-D-galactosaminyltransferase; β3GalNAc-T1; UDP-N-acetyl-D-galactosamine:α-D-galactosyl-(1→4)-β-D-galactosyl-(1→4)-β-D-glucosylceramide 3III-β-N-acetyl-D-galactosaminyltransferase; UDP-N-acetyl-D-galactosamine:α-D-galactosyl-(1→4)-β-D-galactosyl-(1→4)-β-D-glucosyl-(1↔1)-ceramide 3III-β-N-acetyl-D-galactosaminyltransferase; UDP-N-acetyl-D-galactosamine:α-D-galactosyl-(1→4)-β-D-galactosyl-(1→4)-β-D-glucosyl-(1↔1)-ceramide III3-β-N-acetyl-D-galactosaminyltransferase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 2.4.1.79

CAS No.

62213-46-1

Reaction

UDP-N-acetyl-α-D-galactosamine + α-D-galactosyl-(1→4)-β-D-galactosyl-(1→4)-β-D-glucosyl-(1↔1)-ceramide = UDP + N-acetyl-β-D-galactosaminyl-(1→3)-α-D-galactosyl-(1→4)-β-D-galactosyl-(1→4)-β-D-glucosyl-(1↔1)-ceramide

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.