

## (N-acetylneuraminyl)-galactosylglucosylceramide N-acetylgalactosaminyltransferase

Cat. No. EXWM-2632

Lot. No. (See product label)

### Introduction

#### Description

This enzyme catalyses the formation of the gangliosides (i.e. sialic-acid-containing glycosphingolipids) GM2, GD2 and SM2 from GM3, GD3 and SM3, respectively. Asialo-GM3 and lactosylceramide are also substrates, but glycoproteins and oligosaccharides are not substrates.

#### Synonyms

uridine diphosphoacetylgalactosamine-ganglioside GM3  
acetylgalactosaminyltransferase; ganglioside GM2 synthase; ganglioside GM3  
acetylgalactosaminyltransferase; GM2 synthase; UDP acetylgalactosamine-(N-  
acetylneuraminyl)-D-galactosyl-D-glucosylceramide  
acetylgalactosaminyltransferase; UDP-N-acetyl-D-galactosamine:1-O-[O-(N-acetyl-  
 $\alpha$ -neuraminyl)-(2 $\rightarrow$ 3)-O- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl]-ceramide  
1,4- $\beta$ -N-acetyl-D-galactosaminyltransferase acetylgalactosaminyltransferase; UDP-  
N-acetylgalactosamine GM3 N-acetylgalactosaminyltransferase; uridine  
diphosphoacetylgalactosamine-acetylneuraminylgalactosylglucosylceramide  
acetylgalactosaminyltransferase; uridine diphosphoacetylgalactosamine-  
hematoside acetylgalactosaminyltransferase; GM2/GD2-synthase;  $\beta$ -1,4N-  
acetylgalactosaminyltransferase; asialo-GM2 synthase; GalNAc-T; UDP-N-acetyl-D-  
galactosamine:(N-acetylneuraminyl)-D-galactosyl-D-glucosylceramide N-acetyl-D-  
galactosaminyltransferase; UDP-N-acetyl-D-galactosamine:1-O-[O-(N-acetyl- $\alpha$ -  
neuraminyl)-(2 $\rightarrow$ 3)-O- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl]-ceramide 4-  
 $\beta$ -N-acetyl-D-galactosaminyltransferase

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 2.4.1.92

#### CAS No.

67338-98-1

#### Reaction

UDP-N-acetyl- $\alpha$ -D-galactosamine + O-(N-acetyl- $\alpha$ -neuraminyl)-(2 $\rightarrow$ 3)-O- $\beta$ -D-  
galactopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\leftrightarrow$ 1)-ceramide = UDP + O-2-  
(acetylamino)-2-deoxy- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 4)-O-[N-acetyl- $\alpha$ -neuraminyl-  
(2 $\rightarrow$ 3)]-O- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucopyranosyl-(1 $\leftrightarrow$ 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.