

## UDP-N-acetylglucosamine 2-epimerase (hydrolysing)

Cat. No. EXWM-3867

Lot. No. (See product label)

### Introduction

#### Description

The enzyme is found in mammalian liver, as well as in some pathogenic bacteria including *Neisseria meningitidis* and *Staphylococcus aureus*. It catalyses the first step of sialic acid (N-acetylneuraminic acid) biosynthesis. The initial product formed is the  $\alpha$  anomer, which rapidly mutarotates to a mixture of anomers. The mammalian enzyme is bifunctional and also catalyses EC 2.7.1.60, N-acetylmannosamine kinase.cf. EC 5.1.3.14, UDP-N-acetylglucosamine 2-epimerase (non-hydrolysing).

#### Synonyms

UDP-N-acetylglucosamine 2-epimerase (ambiguous); GNE (gene name); siaA (gene name); neuC (gene name)

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 3.2.1.183

#### Reaction

UDP-N-acetyl- $\alpha$ -D-glucosamine + H<sub>2</sub>O = N-acetyl-D-mannosamine + UDP

#### 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.