

α-2,3-Sialyltransferase from Pasteurella multocida, Recombinant

Cat. No. NATE-1171

Lot. No. (See product label)

Introduction

Description

Sialyltransferases are enzymes that transfer sialic acid to nascent oligosaccharide. Each sialyltransferase is specific for a particular sugar substrate. Sialyltransferases add sialic acid to the terminal portions of the sialylated glycolipids (gangliosides) or to the N- or O-linked sugar chains of glycoproteins. Sialyltransferases belong to glycosyltransferase family 29 (CAZY GT_29) which use a nucleotide monophosphosugar as the donor (CMP-NeuA) instead of a nucleotide diphosphosugar.

Synonyms

α (2,3)-Sialyltransferase; Beta-galactoside alpha-2,3-sialyltransferase; Beta-galactosamide alpha-2,3-sialyltransferase; CMP-N-acetylneuraminate-beta-galactosamide-alpha-2,3-sialyltransferase

Product Information

Species

Photobacterium damsela

Source

E. coli BL21

Form

Lyophilized powder containing Tris-HCl and NaCl.

EC Number

EC 2.4.99.4

CAS No.

71124-51-1

Molecular Weight

46.4 kDa

Activity

> 2 units/mg

Isoelectric point

5.94

Optimum pH

7.5-8.5

Unit Definition

One unit will catalyze the formation of 1.0 mmole of Neu-5-Ac-a-2,3-Lac-MU from CMP-Neu-5-Ac and Lac-b-O-MU per minute at 37 °C at pH 8.0.

Usage and Packaging

Preparation Instructions

Reconstitute the lyophilized powder with water to ~5 mg/mL. Solutions can be stored at 2-8 °C for 1-2 months after reconstitution. They can also be aliquoted and frozen at -70 °C or -20 °C for 1 year. Multiple freeze-thaw cycles should be avoided.

Storage and Shipping Information

Storage

Store the product at -20 °C. It remains active for at least 1 year when stored properly.