

Native *Arthrobacter ureafaciens* α (2→3,6,8,9) Neuraminidase

Cat. No. NATE-0756

Lot. No. (See product label)

Introduction

Description

Neuraminidase enzymes are glycoside hydrolase enzymes (EC 3.2.1.18) that cleave the glycosidic linkages of neuraminic acids. Neuraminidase enzymes are a large family, found in a range of organisms. The best-known neuraminidase is the viral neuraminidase, a drug target for the prevention of the spread of influenza infection. The viral neuraminidases are frequently used as antigenic determinants found on the surface of the Influenza virus. Some variants of the influenza neuraminidase confer more virulence to the virus than others. Other homologs are found in mammalian cells, which have a range of functions.

Applications

Neuraminidase is an important deglycosylation enzyme capable of cleaving all non-reducing unbranched N-acetylneuraminic and N-glycolylneuraminic acid residues by hydrolysis of α (2→6), α (2→3), α (2→8), and α (2→9) linkages (affinity in the order given). Branched sialic acids may also be cleaved with the use of high concentrations of enzyme and prolonged incubations. Desialylated glycoproteins may then be further characterized by treatment with various exoglycosidases resulting in partial or complete O-deglycosylation. SDS-PAGE and MALDI-TOF MS are typically utilized in purification, structural analysis, and sequencing process. These techniques also remove heterogeneity and charge from the glycoprotein.

Synonyms

neuraminidase; sialidase; α -neuraminidase; acetylneuraminidase; exo- α -sialidase; EC 3.2.1.18; 9001-67-6

Product Information

Source

Arthrobacter ureafaciens

Form

. Lyophilized powder

EC Number

EC 3.2.1.18

CAS No.

9001-67-6

Unit Definition

One unit will release 1 nmole of 4-methylumbelliferone from 2-(4-methylumbelliferyl) α -D-N-acetylneuraminic acid per minute at pH 5.5 at 37° C.

Storage and Shipping Information

Storage

2-8°C