Creative Enzymes®

Native Clostridium perfringens (C. welchii) Neuraminidase

Cat. No. NATE-0480

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. At least four mammalian sialidase homologs have been described in the human genome (see NEU1, NEU2, NEU3, NEU4).

Applications Neuron-specific enolase from human brain has been used in a study to assess human amniotic mesenchymal stem cells in the treatment of f ocal cerebral ischemia. It has also been used in a study to investigate sinonasal terat ocarcinosarcoma with rhabdoid features.

Synonyms neuraminidase; sialidase; α-neuraminidase; acetylneuraminidase; exo-α-sialidase; EC 3.2.1.18

Product Information

Source Clostridium perfringens (C. welchii)

Form buffered aqueous solution; Solution in 100 mM Tris-HCl, 5 mM MgSO4, 250 mM KCl, pH 5.0-5.2

EC Number EC 3.2.1.18

Purity > 95% (SDS-PAGE)

Pathway Gluconeogenesis, organism-specific biosystem; Gluconeogenesis, oxaloacetate => fructose-6P, organism-specific biosystem; Gluconeogenesis, oxaloacetate => fructose-6P, conserved biosystem; Glucose metabolism, organism-specific biosystem; Glycolysis, organism-specific biosystem

Function lyase activity; magnesium ion binding; phosphopyruvate hydratase activity

Unit Definition One unit causes the formation of 1.0 µmole of phospho (enol)pyruvate per minute at pH 6.8 at 25°C

Storage and Shipping Information

Storage −20°C