H3N2 NA / Neuraminidase (H274Y)

Catalog Number: **40017-VNAHC4**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

NA

Protein Construction:

A DNA sequence encoding the Influenza A virus (A/Babol/36/2005 (H3N2)) neuraminidase (ACN50232.1) (His 36-Pro 459) was expressed, the cell lysates are collected, and bio-activity was tested

Source: Influenza A Virus H3N2

Expression Host: Human Cells

QC Testing

Bio-activity:

Measured by its ability to cleave a fluorogenic substrate, 2'-(4-Methylumbelliferyl)-α-D-N-acetylneuraminic acid

The specific activity is >1,000 U

One unit is defined as the amount of enzyme required to cleave 1 nmole of 2'-(4-Methylumbelliferyl)-α-D-N-acetylneuraminic acid per minute at pH 7.5 at 37℃.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Molecular Mass:

The influenza H3N2 virus Neuraminidase comprises 443 amino acids

Formulation:

Lyophilized from PBS, 0.6% Triton X-100, 7% Trehalose, 6% Mannitol, pH7.4
Please contact us for any concerns or special requirements.

Usage Guide

Storage:

Store it under sterile conditions at -70℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.
Avoid repeated freeze-thaw cycles.

Reconstitution:

It is recommended that 1 ml sterile water be added to the vial to prepare a stock solution.

Protein Description

Neuraminidase (NA) is a major membrane glycoproteins found on the surface of influenza virus. NA specifically catalyzes the hydrolysis removal of terminal sialic acid residues from viral and cellular glycoconjugates. It is known that HA binds to the sialic acid-containing receptors on the surface of host cells during initial infection, and at the end of an infectious cycle, NA cleaves the HA-sialic acid bondage from the newly formed virions and the host cell receptors during budding. NA thus is described as a receptor-destroying enzyme which facilitates virus release and efficient spread of the progeny virus from cell to cell. NA is a single-pass type I I membrane protein which exists as a homotetramer, and the transmembrane domain is involved in lipid raft association during intracellular transport. NA is suggested to play a role in the determination of host range restriction on replication and virulence. Nine subtypes of NA have been identified, and subtypes N1 and N2 have been positively linked to epidemics in man.

References

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7. Christophe F, et al., 2009, Science. 324:1557-61.