NA/Neuraminidase Protein, H1N1 (P03468, HEK293)

Cat. No.:	HY-P73778
Synonyms:	NA; Neuraminidase; NA/Neuraminidase Protein, H1N1 (A/Puerto Rico/8/1934, HEK293)
Species:	Virus
Source:	HEK293
Accession:	P03468 (M1-K454)
Gene ID:	956530
Molecular Weight:	Approximately 50.1 kDa

PROPERTIES

Biological Activity	Measured by its ability to cleave a fluorogenic substrate, 2'-(4-Methylumbelliferyl)-α-D-N-acetylneuraminic acid. 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℃.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, 1% Triton X-100, 5% Trehalose, 5% Mannitol, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	The NA/Neuraminidase Protein is responsible for catalyzing the removal of terminal sialic acid residues from viral and cellular glycoconjugates. It plays a crucial role in virus release by cleaving off the terminal sialic acids on the glycosylated HA during virus budding, facilitating virus release and aiding in virus spread through the circulation by further removing sialic acids from the cell surface. These cleavages prevent self-aggregation and ensure efficient spread of the progeny virus from cell to cell, allowing for multiple rounds of replication. Referred to as a receptor-destroying enzyme, it cleaves terminal sialic acid from cellular receptors, potentially facilitating viral invasion of the upper airways by cleaving the sialic acid moieties on the mucin of airway epithelial cells. It is likely involved in the budding process through its association with lipid rafts during intracellular transport and may also have a raft-association independent effect on budding. Furthermore, it plays a role in determining host range restriction on replication and virulence, and its sialidase activity in late endosome/lysosome traffic appears to enhance virus replication.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA