

**Synonym**

NA, Neuraminidase

**Source**

Influenza A [Sydney/5/2021] Neuraminidase (NA) Protein, His Tag (NEE-V5248) is expressed from human 293 cells (HEK293). It contains AA Ser 35 - Lys 469 (Accession # EPI\_ISL\_8767089, GISAID).

Predicted N-terminus: His

**Molecular Characterization**

Poly-his	Neuraminidase (NA)(Ser 35 - Lys 469) EPI_ISL_8767089
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This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 55.9 kDa. The protein migrates as 70-90 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>90% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

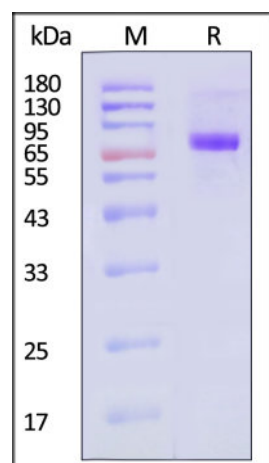
**Storage**

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

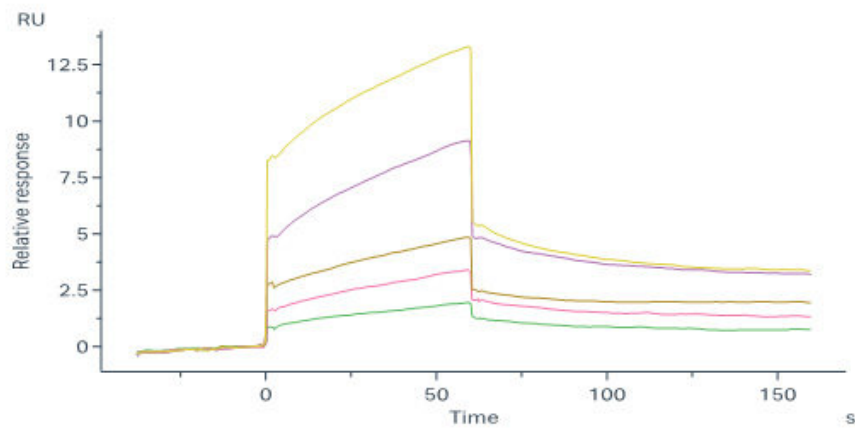
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

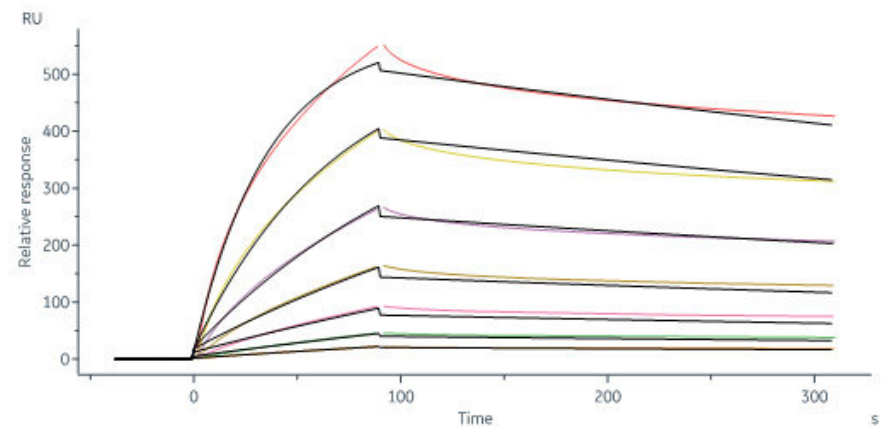
**SDS-PAGE**

Influenza A [Sydney/5/2021] Neuraminidase (NA) Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

**Bioactivity-SPR**



Influenza A [Sydney/5/2021] Neuraminidase (NA) Protein, His Tag (Cat. No. NEE-V5248) immobilized on CM5 Chip can bind N-Acetylneuraminic Acid (NANA, Neu5Ac) with an affinity constant of 0.317 mM as determined in a SPR assay (Biacore 8K) (QC tested).



a-Neu5Ac-PAA-biotin immobilized on SA Chip can bind Influenza A [Sydney/5/2021] Neuraminidase (NA) Protein, His Tag (Cat. No. NEE-V5248) with an affinity constant of 8.87 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

## Background

Neuraminidase (NA) and hemagglutinin (HA) are major membrane glycoproteins found on the surface of influenza virus. Hemagglutinin binds to the sialic acid-containing receptors on the surface of host cells during initial infection and at the end of an infectious cycle. Neuraminidase, on the other hand, cleaves the HA-sialic acid bondage from the newly formed virions and the host cell receptors during budding. Neuraminidase thus is described as a receptor-destroying enzyme which facilitates virus release and efficient spread of the progeny virus from cell to cell.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.