

Synonym

NA, Neuraminidase

Source

Influenza A [Darwin/6/2021] Neuraminidase (NA) Protein, His Tag (NEE-V5247) is expressed from human 293 cells (HEK293). It contains AA Thr 34 - Ile 469 (Accession # EPI_ISL_3534319, GISAID).

Predicted N-terminus: His

Molecular Characterization

Poly-his	Neuraminidase (NA)(Thr 34 - Ile 469) EPI_ISL_3534319
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This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 56.5 kDa. The protein migrates as 60-80 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.

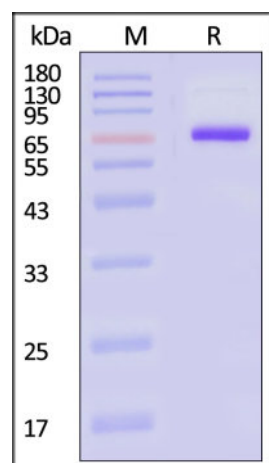
Storage

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

Please avoid repeated freeze-thaw cycles.

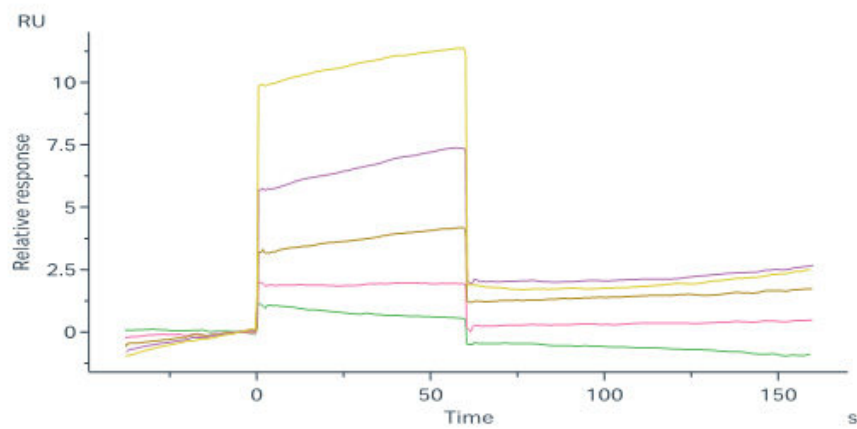
This product is stable after storage at:

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

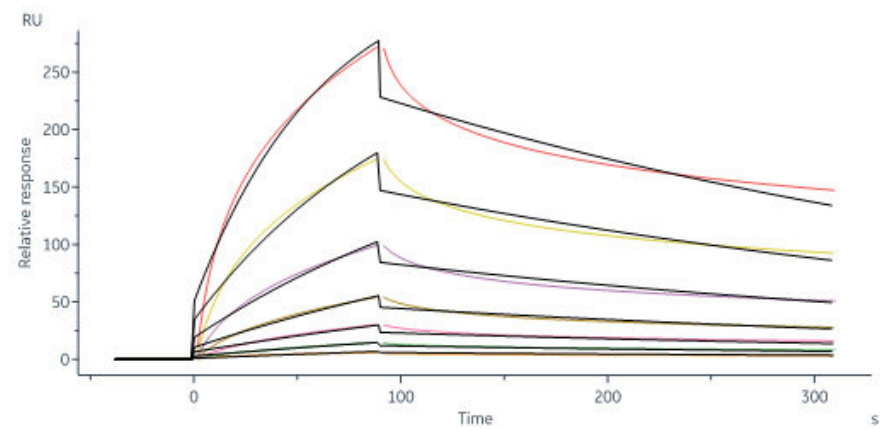
SDS-PAGE

Influenza A [Darwin/6/2021] 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 [Darwin/6/2021] Neuraminidase (NA) Protein, His Tag (Cat. No. NEE-V5247) immobilized on CM5 Chip can bind N-Acetylneuraminic Acid (NANA, Neu5Ac) with an affinity constant of 0.228 mM as determined in a SPR assay (Biacore 8K) (QC tested).



a-Neu5Ac-PAA-biotin immobilized on SA Chip can bind Influenza A [Darwin/6/2021] Neuraminidase (NA) Protein, His Tag (Cat. No. NEE-V5247) with an affinity constant of 44.0 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 if you have any question on this product.