Influenza A virus (Darwin/1415/2025) HA (H3N2) Protein, His Tag

Catalog # HA2-V52Hc

Synonym

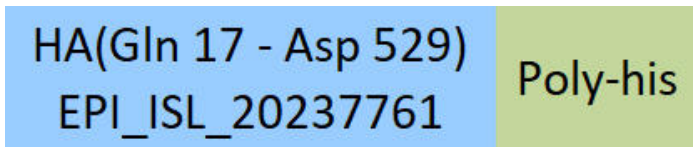
HA, Hemagglutinin

Source

Influenza A virus (Darwin/1415/2025) HA (H3N2) Protein, His Tag (HA2-V52Hc) is expressed from human 293 cells (HEK293). It contains AA Gln 17 - Asp 529 (Accession # EPI_ISL_20237761, GISAID).

Predicted N-terminus: Gln 17

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 62.8 kDa. The protein migrates as 80-95 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

The protein is designed as a trimer.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in 0.1 M Sodium citrate, pH5.5 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.

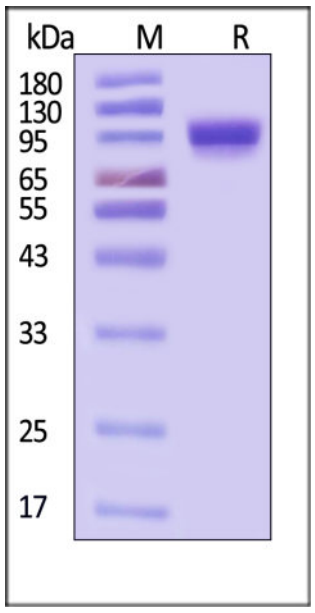
This product is stable after storage at:

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

ACRO Quality Management System

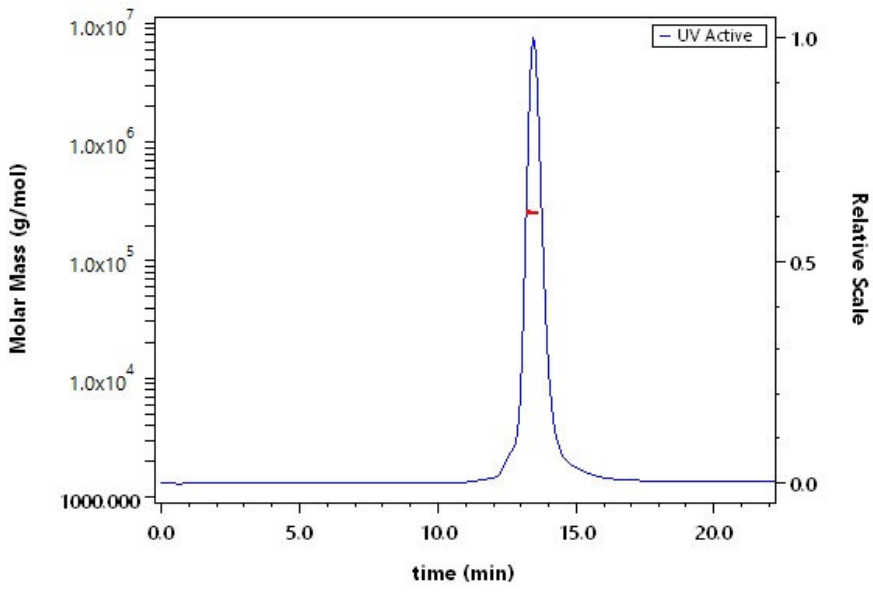
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



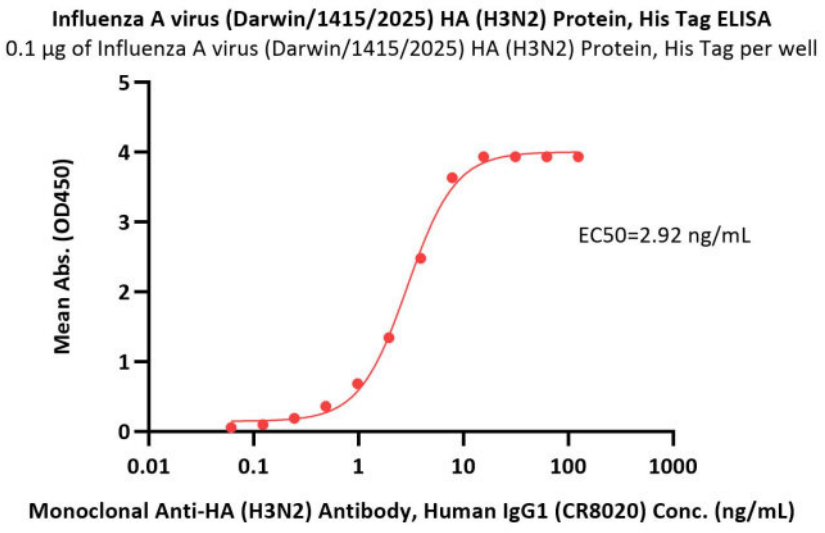
Influenza A virus (Darwin/1415/2025) HA (H3N2) Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Influenza A virus (Darwin/1415/2025) HA (H3N2) Protein, His Tag (Cat. No. HA2-V52Hc) is more than 90% and the molecular weight of this protein is around 240-270 kDa verified by SEC-MALS.

Bioactivity-ELISA



Immobilized Influenza A virus (Darwin/1415/2025) HA (H3N2) Protein, His Tag (Cat. No. HA2-V52Hc) at 1 μg/mL (100 μL/well) can bind Monoclonal Anti-HA (H3N2) Antibody, Human IgG1 (CR8020) with a linear range of 0.06-8 ng/mL (QC 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. Hemagglutinin also plays a major role in the determination of host range restriction and virulence. As a class I viral fusion protein, hemagglutinin is responsible for penetration of the virus into the cell cytoplasm by mediating the fusion of the membrane of the endocytosed virus particle with the endosomal membrane.