

Source

Influenza A (A/Georgia/12/2022) Hemagglutinin (HA) Protein, His Tag (HAE-V52H7) is expressed from human 293 cells (HEK293). It contains AA Asp 18 - Ile 530 (Accession # EPI2756236, GISAID).

Predicted N-terminus: Asp 18

Molecular Characterization

HA(Asp 18 - Ile 530) EPI2756236

Poly-his

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

The protein has a calculated MW of 59.6 kDa. The protein migrates as 75-90 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> 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 $0.22~\mu m$ 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

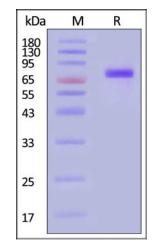
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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 (A/Georgia/12/2022) Hemagglutinin (HA) 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 <u>Star Ribbon Prestained Protein Marker</u>).

Bioactivity-ELISA

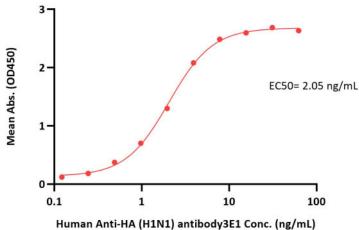


Influenza A (A/Georgia/12/2022) Hemagglutinin (HA) Protein, His Tag

Catalog # HAE-V52H7

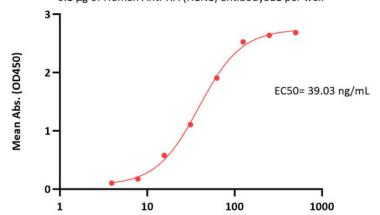


Influenza A (A/Georgia/12/2022) Hemagglutinin (HA) Protein, His Tag ELISA 0.1 μ g of Influenza A (A/Georgia/12/2022) Hemagglutinin (HA) Protein, His Tag per well



Immobilized Influenza A (A/Georgia/12/2022) Hemagglutinin (HA) Protein, His Tag (Cat. No. HAE-V52H7) at 1 μ g/mL (100 μ L/well) can bind Human Anti-HA (H1N1) antibody3E1 with a linear range of 0.1-4 ng/mL (QC tested).

Influenza A (A/Georgia/12/2022) Hemagglutinin (HA) Protein, His Tag ELISA 0.1 μ g of Human Anti-HA (H1N1) antibody3E1 per well



Influenza A (A/Georgia/12/2022) Hemagglutinin (HA) Protein, His Tag Conc. (ng/mL)

Immobilized Human Anti-HA (H1N1) antibody3E1 at 1 μ g/mL (100 μ L/well) can bind Influenza A (A/Georgia/12/2022) Hemagglutinin (HA) Protein, His Tag (Cat. No. HAE-V52H7) with a linear range of 4-63 ng/mL (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. 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.

Clinical and Translational Updates

