Monoclonal Anti-Influenza A [A/Darwin/6/2021 (H3N2)] HA Antibody, Human IgG1 (7G4) (MALS verified)

Catalog # HA2-M692

Source

Monoclonal Anti-Influenza A [A/Darwin/6/2021 (H3N2)] HA Antibody, Human IgG1 (7G4) is a chimeric monoclonal antibody recombinantly expressed from HEK293, which combines the variable region of a mouse monoclonal antibody with Human constant domain.

Clone

7G4

Isotype

Human IgG1 | Human Kappa

Conjugate

Unconjugated

Antibody Type

Recombinant Monoclonal

Reactivity

Virus

Immunogen

Recombinant Influenza A [A/Darwin/6/2021 (H3N2)] HA Protein is expressed from human 293 cells.

Specificity

Specifically recognizes Influenza A (H3N2) Viruses Hemagglutinin (HA).

Application

Application	Recommended Usage
ELISA	0.1-5 ng/mL

Cross Verification

This product is a specific antibody against
Influenza A [A/Darwin/6/2021 (H3N2)] HA Protein, His Tag (Cat. No. HA2-V52H5).
Influenza A Virus (A/Croatia/10136RV/2023) HA (H3N2) Protein, His Tag (Cat. No. H32-V52H4).
Influenza A Virus (A/District of Columbia/27/2023) HA (H3N2) Protein, His Tag (Cat. No. H32-V52H5).
No cross-reactivity in ELISA with
Influenza A [A/Shanghai/2/2013(H7N9)] HA, Fc Tag (Cat. No. HA9-V5253).
Influenza A [A/guinea fowl/Hong Kong/WF10/99(H9N2)] HA1 Protein, His Tag (Cat. No. HA1-V52H5).
Influenza A [A/guinea fowl/Hong Kong/WF10/99(H9N2)] Hemagglutinin (HA) Protein, His Tag (Cat. No. HA2-V52H7).
Influenza A [A/Hong Kong/483/97 (H5N1)] HA, His Tag (Cat. No. HA1-V5229).
Influenza A [A/Wisconsin/588/2019 (H1N1)] HA, His Tag (Cat. No. HA1-V52H3).
Influenza A [A/Darwin/9/2021 (H3N2)] HA Protein, His Tag (Cat. No. HA2-V52H6).

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Purification

Protein A purified/ Protein G purified

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.

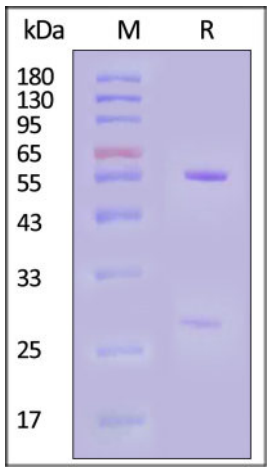
Please avoid repeated freeze-thaw cycles.

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.

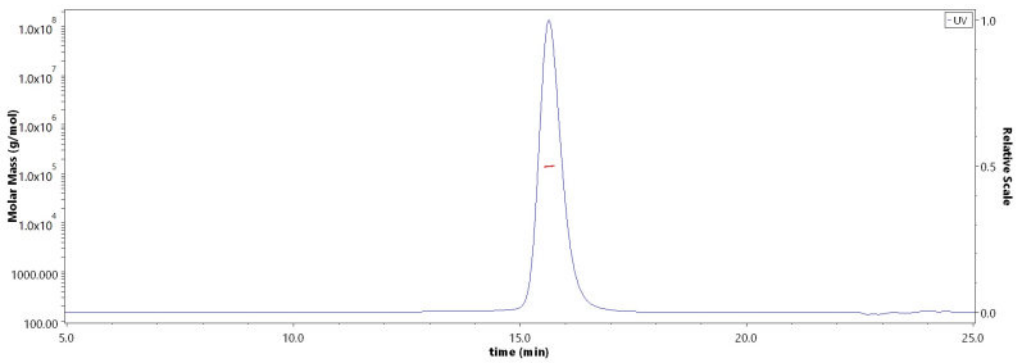
Influenza A [Sydney/5/2021 (H1N1)] Hemagglutinin (HA) Protein, His Tag (MALS verified) (Cat. No. HA1-V52H4).
Influenza B [Austria/1359417/2021 (B/Victoria lineage)] Hemagglutinin (HA) Protein, His Tag (Cat. No. HAE-V52H3).
Influenza B [Phuket/3073/2013 (B/Yamagata lineage)] Hemagglutinin (HA) Protein, His Tag (Cat. No. HAE-V52H4).
Influenza A [A/Bangkok/1/1979 (H3N2)] Hemagglutinin (HA) Protein, His Tag (MALS verified) (Cat. No. HA2-V52H3).
Influenza A [A/Victoria/2570/2019] Hemagglutinin (HA) Protein, His Tag (MALS verified) (Cat. No. HA1-V52H6).
Influenza A (A/Shanghai/02/2013(H7N9)) Hemagglutinin (HA) Protein, His Tag (Cat. No. HA1-V52H6).
Influenza A [Victoria/4897/2022] Hemagglutinin (HA) Protein, His Tag (Cat. No. HA9-V52H3).
Influenza A [Victoria/4897/2022] Hemagglutinin (HA) Protein, His Tag (Cat. No. HA1-V52H8).
Influenza A (turkey/Germany-MV/R2472/2014(H5N8)) HA Protein, His Tag (Cat. No. HA8-V52H3).
Influenza A (Guangdong/18SF020(H5N6)) Hemagglutinin (HA) Protein, His Tag (Cat. No. HA6-V52H3).
Influenza A (Vietnam/1194/2004(H5N1)) Hemagglutinin (HA) Protein, His Tag (Cat. No. HA1-V52H9).
Influenza A [Wisconsin/67/2022] Hemagglutinin (HA) Protein, His Tag (Cat. No. HA1-V52H7).

SDS-PAGE



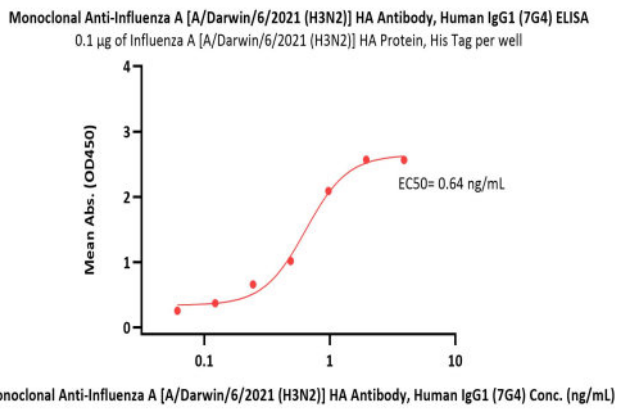
Monoclonal Anti-Influenza A [A/Darwin/6/2021 (H3N2)] HA Antibody, Human IgG1 (7G4) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS

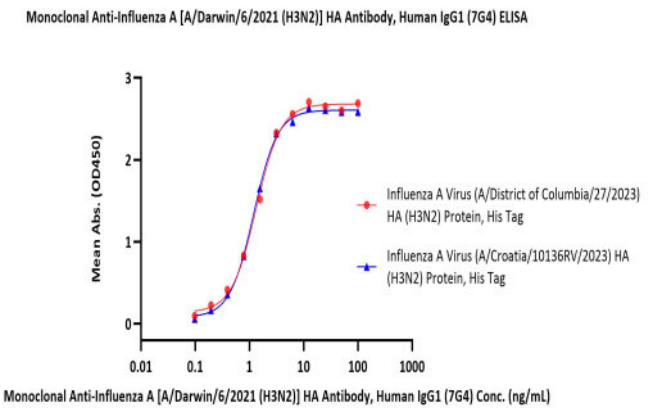


The purity of Monoclonal Anti-Influenza A [A/Darwin/6/2021 (H3N2)] HA Antibody, Human IgG1 (7G4) (Cat. No. HA2-M692) is more than 90% and the molecular weight of this protein is around 135-160 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Influenza A [A/Darwin/6/2021 (H3N2)] HA Protein, His Tag (Cat. No. HA2-V52H5) at 1 μg/mL (100 μL/well) can bind Monoclonal Anti-Influenza A [A/Darwin/6/2021 (H3N2)] HA Antibody, Human IgG1 (7G4) (Cat. No. HA2-M692) with a linear range of 0.1-1 ng/mL (QC tested).



Immobilized Influenza A Virus (A/Croatia/10136RV/2023) HA (H3N2) Protein, His Tag (Cat. No. H32-V52H4)/Influenza A Virus (A/District of Columbia/27/2023) HA (H3N2) Protein, His Tag (Cat. No. H32-V52H5) at 1 μg/mL (100 μL/well) can bind Monoclonal Anti-Influenza A [A/Darwin/6/2021 (H3N2)] HA Antibody, Human IgG1 (7G4) (Cat. No. HA2-M692) with a linear range of 0.1-3 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