# Biotinylated Influenza A [A/guinea fowl/Hong Kong/WF10/99(H9N2)] Hemagglutinin 1 (HA1) Protein, His,Avitag™ (MALS verified)

Catalaa # UA4 \/00EE



#### Synonym

HA1, Hemagglutinin 1

#### Source

Biotinylated Influenza A [A/guinea fowl/Hong Kong/WF10/99(H9N2)] HA1 Protein, His,Avitag(HA1-V82E5) is expressed from human 293 cells (HEK293). It contains AA Asp 19 - Arg 338 (Accession # Q80KD9\_9INFA). Predicted N-terminus: Asp 19

# **Molecular Characterization**

HA1(Asp 19 - Arg 338)
Q80KD9\_9INFA
Poly-his Avi

This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag<sup>TM</sup>)

The protein has a calculated MW of 42.6 kDa. The protein migrates as 55-63 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Labeling

Biotinylation of this product is performed using Avitag<sup>TM</sup> technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

#### **Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

#### **Endotoxin**

Less than  $1.0 \ EU$  per  $\mu g$  by the LAL method.

# **Purity**

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from  $0.22\ \mu m$  filtered solution in PBS 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

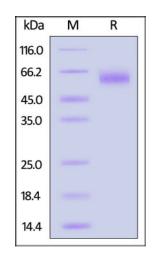
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

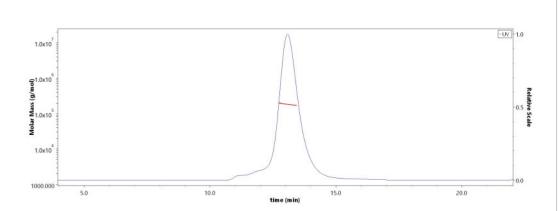
## **SDS-PAGE**



Biotinylated Influenza A [A/guinea fowl/Hong Kong/WF10/99(H9N2)] HA1 Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

# **Bioactivity-ELISA**

## **SEC-MALS**



The purity of Biotinylated Influenza A [A/guinea fowl/Hong Kong/WF10/99(H9N2)] HA1 Protein, His,Avitag (Cat. No. HA1-V82E5) is more than 90% and the molecular weight of this protein is around 175-195 kDa verified by SEC-MALS.

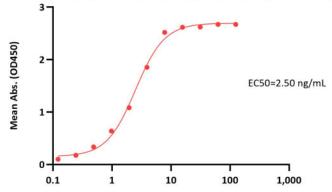
Report

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Biotinylated Influenza A [A/guinea fowl/Hong Kong/WF10/99(H9N2)] HA1 Protein, His,Avitag ELISA 0.1 µg of Biotinylated Influenza A [A/guinea fowl/Hong Kong/WF10/99(H9N2)] HA1 Protein, His,Avitag per well



Enzyme Anti-HA Monoclonal Antibody(H9N2), Mouse IgG Conc. (ng/mL)

Immobilized Biotinylated Influenza A [A/guinea fowl/Hong Kong/WF10/99(H9N2)] HA1 Protein, His,Avitag (Cat. No. HA1-V82E5) at 1  $\mu$ g/mL (100  $\mu$ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5  $\mu$ g/well) plate can bind Enzyme Anti-HA Monoclonal Antibody(H9N2), Mouse IgG with a linear range of 0.1-8 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.

## **Clinical and Translational Updates**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.