

Recombinant Influenza A H7N7 (A/Netherlands/219/2003) Hemagglutinin / HA Protein

Catalog No.: RP03133 **Recombinant**

Sequence Information

Species Influenza A
Gene ID
Swiss Prot

Tags

C-His

Synonyms

Hemagglutinin; HA

Product Information

Source Baculovirus-Insect Cells
Purification > 87% by SDS-PAGE.

Calculated MW **Observed MW**

Endotoxin

< 1.0 EU/μg of the protein by LAL method.

Formulation

Lyophilized from sterile PBS, pH 7.4.
Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening.
Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water.
Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

 | 400-999-6126

 | cn.market@abclonal.com.cn

 | www.abclonal.com.cn

Background

The influenza viral Hemagglutinin (HA) protein is a homotrimer with a receptor binding pocket on the globular head of each monomer. HA has at least 18 different antigens. These subtypes are named H1 through H18. HA has two functions. Firstly, it allows the recognition of target vertebrate cells, accomplished through the binding to these cells' sialic acid-containing receptors. Secondly, once bound it facilitates the entry of the viral genome into the target cells by causing the fusion of the host endosomal membrane with the viral membrane. The influenza virus Hemagglutinin (HA) protein is translated in cells as a single protein, HA, or hemagglutinin precursor protein. For viral activation, hemagglutinin precursor protein (HA) must be cleaved by a trypsin-like serine endoprotease at a specific site, normally coded for by a single basic amino acid (usually arginine) between the HA1 and HA2 domains of the protein. After cleavage, the two disulfide-bonded protein domains produce the mature form of the protein subunits as a prerequisite for the conformational change necessary for fusion and hence viral infectivity.

Basic Information

Description

Recombinant Influenza A H7N7 (A/Netherlands/219/2003) Hemagglutinin / HA Protein is produced by Baculovirus-Insect cells expression system. The target protein is expressed with sequence (Met8-Phe544) (Native, HA1+HA2) of Influenza A H7N7 (A/Netherlands/219/2003) Hemagglutinin/HA (Accession #AAR02640.1) fused with a polyhistidine tag at the C-terminus.

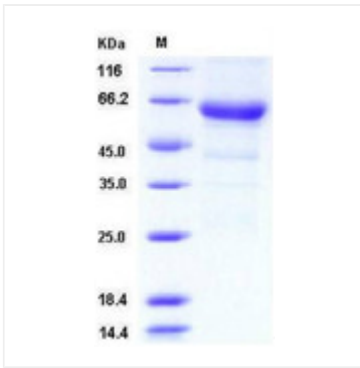
Bio-Activity

1. Measured by its ability to agglutinate guinea pig red blood cells. HA titer is 0.05-0.3 μg/ml for 1% GRBC
2. Measured by its ability to bind with Neu5Aca2-3Galb1-4GlcNAcb-PAA-biotin (01-077) using the Octet RED System.

Storage

Store the lyophilized protein at -20 °C to -80 °C for 12 months.
After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week.
Avoid repeated freeze/thaw cycles.

Validation Data



Recombinant Influenza A H7N7
(A/Netherlands/219/2003) Hemagglutinin/HA
Protein was determined by SDS-PAGE with
Coomassie Blue, showing a band at 60-65
kDa.