# Recombinant Influenza A H7N7 HA1, His-tagged

**Cat. No.** H7N7-23I **Lot. No.** (See product label)

## SPECIFICATION

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| **Product Overview** | A DNA sequence encoding the N-terminal segment( Met 8 - Arg 345 ) of Influenza A virus ( A/Netherlands/219/03 (H7N7) ) hemagglutinin (AAR02640.1), termed as HA1, was fused with a polyhistidine tag at the C-terminus |
| **Species** | H7N7 |
| **Source** | Human Cells |
| **ProteinLength** | 8-345 a.a. |
| **Description** | Hemagglutinin (HA) is a single-pass type I integral membrane glycoprotein from the influenza virus, and comprises over 80% of the envelope proteins present in the virus particle. In natural infection, inactive HA is matured into HA1 and HA2 outside the cell by one or more trypsin-like, arginine-specific endoprotease secreted by the bronchial epithelial cells. Binding of HA to sialic acid-containing receptors on the surface of its target cell brings about the attachment of the virus particle to the cell and forms a endosome. Low pH in endosomes induce an irreversible conformational change in HA2, releasing the hydrophobic portion "fusion peptide". After which, virus penetrates the cell and pours its contents including the RNA genome into the cytoplasm mediated by fusion of the endocytosed virus particle's own membrane and the endosomal membrane. Hemagglutinin plays a major role in the determination of host range restriction and virulence. HA is cleaved by tryptase clara which is restricted to lungs, and thus bud into lumen of lungs and are therefore usually pneumotropic. However, HAs of H5 and H7 pantropic avian viruses subtypes can be cleaved by furin |

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| | and subtilisin-type enzymes, allowing the virus to grow in other organs than lungs. |
| **Predicted N Terminal** | Asp 26 |
| **Form** | Lyophilized from sterile PBS , pH 7.4 |
| **Molecular Mass** | The recombinant HA1 subunit of Influenza A virus hemagglutinin (A/Netherlands/219/03(H7N7)) comprises 331 amino acids with the predicted molecular mass of 36.4 kDa. As a result of glycosylation, it migrates as an approximately 48 kDa band in SDS-PAGE under reducing conditions |
| **Endotoxin** | < 1.0 eu per μg of the protein as determined by the lal |
| **Purity** | >90 % as determined by SDS-PAGE |
| **Stability** | Samples are stable for up to twelve months from date of receipt at -70℃ |
| **Storage** | Store it under sterile conditions at -70℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. |

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