Influenza A [A/Shanghai/2/2013(H7N9)] Hemagglutinin (HA) Protein, Fc Tag

Catalog # HA9-V5253

Synonym

HA,Hemagglutinin

Source

Influenza A [A/Shanghai/2/2013(H7N9)] HA, Fc Tag (HA9-V5253) is expressed from human 293 cells (HEK293). It contains AA Asp 19 - Gly 338, Leu 341 - Asp 523 (Accession # R4NN21-1).
Predicted N-terminus: Asp 19

Molecular Characterization

HA(Asp 19 - Gly 338, Leu 341 - Asp 523) R4NN21-1	Fc(Pro 100 - Lys 330) P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 82.5 kDa. The protein migrates as 100-115 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 100 mM Glycine, pH7.5. Normally trehalose is added as protectant before lyophilization.

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

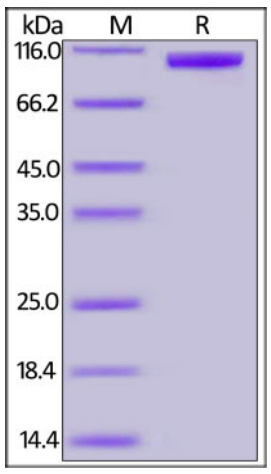
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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/Shanghai/2/2013(H7N9)] HA, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Background

Influenza, commonly known as "the flu", is an infectious disease of birds and mammals caused by RNA viruses of the family Orthomyxoviridae, the influenza viruses. The virus is divided into three main types (Influenzavirus A, Influenzavirus B, and Influenzavirus C), which are distinguished by differences in two major internal proteins (hemagglutinin (HA) and neuraminidase (NA), which are the most important targets for the immune system. The type A viruses are the most virulent human pathogens among the three influenza types and cause the most severe disease. The serotypes that have been confirmed in humans, ordered by the number of known human pandemic deaths, are: H1N1, H2N2, H3N2, H5N1, H7N7, H1N2, H9N2, H7N2, H7N3, H10N7, H7N9. H7N9 is a serotype of the species

Influenzavirus A (avian influenza virus or bird flu virus). H7 normally circulates amongst avian populations with some variants known to occasionally infect humans. An H7N9 virus was first reported to have infected humans in 2013 in China.

References

(1) Eccles, R., 2005, Lancet Infect Dis 5 (11): 718–25.

(2) Hui DS., 2008, Respirology. 13 Suppl 1: S10–3.

(3) Shadbolt, Peter. 2013, CNN. Retrieved 25 April 2013.

(4) The fight against bird flu. Nature 496 (7446): 397. April 24, 2013.

(5) Li, Q., et al., 2013, New England Journal of Medicine.

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