

HA (A/swine/Shandong/1207/2016)(H1N1)

CATALOG NUMBER: IA-H1-SD1207WP, 50 µg, 1 mg

Introduction

Influenza hemagglutinin (HA) is a type of hemagglutinin found on the surface of the influenza viruses. HA is an antigenic glycoprotein, like all other hemagglutinins, it causes red blood cells to agglutinate. HA is responsible for binding the virus to the cell that is being infected. HA proteins bind to cells with sialic acid on the membranes, such as cells in the upper respiratory tract or erythrocytes.

HA is a homotrimeric integral membrane glycoprotein. HA monomer is synthesized as a single polypeptide that is subsequently cleaved into two smaller polypeptides, the HA1 and HA2 subunits. Each HA monomer consists of a long, helical chain anchored in the membrane by HA2 and topped by a large HA1 globule.

Description

This is a new swine virus, known as G4 EA H1N1 (genotype 4 reassorted Eurasian avian-like H1N1) or simply G4, which bears 2009 pandemic (pdm/09) and triple-reassortant (TR)-derived internal genes and has been predominant in swine populations since 2016

Viral Protein

C-terminal 6xHis tagged HA (amino acid 18-530)(H1N1)(A/swine/Shandong/1207/2016) protein (GenBank accession#: QEM24709) expressed and purified from 293 cell culture

Applications

Western blot standard, antibody ELISA, antigen, etc.

Storage

Store at -20 °C; Stable for 6-months from the date of shipment when kept at 4 °C. Non-hazardous. No MSDS required.

Concentration

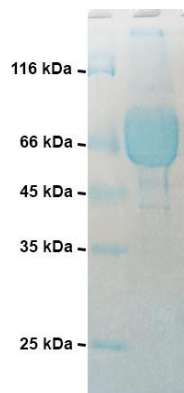
1 µg/µl in PBS

Endotoxin Level

<0.1 EU per 1 µg of the protein by LAL test

Purity

>95% pure by 12% SDS PAGE gel



SDS-PAGE: purified HA (A/swine/Shandong/1207/2016)(H1N1) protein

HA (aa 18-530)(A/swine/Shandong/1207/2016/H1N1) Seq:

DTICVGYHANNSTDVTDLTILEKNVTVTTHSVNLLNSHNGKLCSLNGKIPLQLGNCNVAGWILGNPKCDLLLTANSWSYIIETSNKNGACYPGEFADYE
ELKEQLSTVSSFERFEIFPKATSWPNHDTTRGTTVACSHSGANSFYRNLLWIVKKGNSYPKLSKSYTNNKGKEVLVIWGVHHPPTESDQQTLYQNNHTY
VSVGSSKYYKRFTPEIVARPKVREQAGRMNYYWTLLDQGDITTFEATGNLIAPWHAFALKKGSSGIMRSDAQVHNCTTKCQTPHGALKGNLFPQNVHP
VTIGKCPKYVKSTQLRMATGLRNIPSIQSRGLFGAIAAGFIEGGWTGMVDGWYGYHHRNEQSGYAADQKSTQIAIDGISNKNVNSVIEKMNIQFTSVGKE
FNSLEKRMENLNKKVDDGFLDVWTYNAELLILLENERTLDFHDLNVKNLYEKVKSQLRNNAKEIGNGCFEFYHKCDNECMESVKNGTYNYPKYSEESKL
NREEIDGVKLESMGIHQIHNNHHHH



Reference:

1. Sun, H, et al. Prevalent Eurasian avian-like H1N1 swine influenza virus with 2009 pandemic viral genes facilitating human infection. PNAS. 117: 17204-17210, 2020.

