

Recombinant Influenza A Virus H9N2 (A/guinea fowl/Hong Kong/WF10/99), His-tagged

DAG1679 H9N2

Lot. No. (See product label)

PRODUCT INFORMATION

Product overview	H9N2 (A/guinea fowl/Hong Kong/WF10/99, AAO46082, 18 a.a. - 530 a.a.) partial recombinant protein with His tag expressed in 293 cells.
Antigen Description	Hemagglutinin (HA) is a class I viral fusion protein from the Influenza virus. It is a major glycoprotein, comprising over 80% of the envelope proteins present in the virus particle. HA binds to sialic acid-containing receptors on the cell surface, bringing about the attachment of the virus particle to the cell, and 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. The HA protein is a homotrimer of disulfide-linked HA1-HA2. It also plays a major role in the determination of host range restriction and virulence. Genetic variation of hemagglutinin and/or neuraminidase genes results in the emergence of new influenza strains. Influenza A subtypes are classified based on the combination of the virus coat glycoproteins, hemagglutinin (HA) and neuraminidase (NA). H9N2 influenza A viruses circulate worldwide. Since the mid-1990s, H9 viruses have become adapted to land-based birds and have crossed sporadically to pigs and humans, causing mild respiratory disease. Importantly, some of the currently circulating H9N2 viruses bind to sialic acid receptors linked to galactose in the {alpha}-2, 6 conformation, which is the preferential binding pattern of human influenza viruses. Thus, these H9N2 viruses possess one of the key elements needed to establish stable lineages in humans.
Source	293 cells
Species	H9N2
Tag	His
Form	Liquid
Purity	> 95% by SDS-PAGE
Applications	SDS-PAGE

PACKAGING

Storage	Store at 4°C. Do not freeze.
Concentration	1 ug/uL
Buffer	In PBS (0.1% BSA, 25% glycerol)

BACKGROUND

Introduction	H9N2 is a subtype of the species Influenza A virus (bird flu virus). H9N2 influenza viruses of domestic ducks have become established in the domestic poultry of Asia. Phylogenetic and antigenic analyses of the H9N2 viruses isolated from Hong Kong markets suggest three distinct sublineages. Among the chicken H9N2 viruses, six of the gene segments were apparently derived from an earlier chicken H9N2 virus isolated in China, whereas the PB1 and PB2 genes are closely related to those of the H5N1 viruses and a quail H9N2 virus A/quail/Hong Kong/G1/97 (Qa/HK/G1/97) suggesting that many of the 1997 chicken H9 isolates in the markets were reassortants.
Keywords	Influenza A virus subtype H9N2; H9N2

REFERENCES

1. Li C, Yu K, Tian G, et al. (September 2005). "Evolution of H9N2 influenza viruses from domestic poultry in Mainland China". Virology 340 (1): 70–83.
2. Uyeki TM, Chong YH, Katz JM, et al. (February 2002). "Lack of evidence for human-to-human transmission of avian influenza A (H9N2) viruses in Hong Kong, China 1999". Emerging Infect. Dis. 8 (2): 154–9.