

## Recombinant Influenza A Virus H5N1 H5 (A/Anhui/1/2005), His-tagged

DAG1781 H5N1

Lot. No. (See product label)

### PRODUCT INFORMATION

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| <b>Product overview</b>    | H5 (H5N1) (A/Anhui/1/2005) (ABD28180, 18 a.a. - 530 a.a.) partial recombinant protein with His tag expressed in 293 cells.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Antigen Description</b> | Influenza A virus is a major public health threat. Novel influenza virus strains caused by genetic drift and viral recombination emerge periodically to which humans have little or no immunity, resulting in devastating pandemics. Influenza A can exist in a variety of animals; however it is in birds that all subtypes can be found. These subtypes are classified based on the combination of the virus coat glycoproteins hemagglutinin (HA) and neuraminidase (NA) subtypes. During 1997, an H5N1 avian influenza virus was determined to be the cause of death in 6 of 18 infected patients in Hong Kong. There was some evidence of human to human spread of this virus, but it is thought that the transmission efficiency was fairly low. HA interacts with cell surface proteins containing oligosaccharides with terminal sialyl residues. Virus isolated from a human infected with the H5N1 strain in 1997 could bind to oligosaccharides from human as well as avian sources, indicating its species jumping ability. H5 stands for the fifth of several known types of the viral protein hemagglutinin. This protein binds to sialic acid-containing receptors on the cell surface, bringing about the attachment of the virus particle to the cell. It plays a major role in the determination of host range restriction and virulence 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. |
| <b>Source</b>              | 293 cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Species</b>             | H5N1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Tag</b>                 | His                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Form</b>                | Liquid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Applications</b>        | SDS-PAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

### PACKAGING

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| <b>Storage</b>       | Store at 4°C. Do not freeze. Stable for 1 year from the date of shipment. |
| <b>Concentration</b> | 1 ug/uL                                                                   |
| <b>Buffer</b>        | In PBS                                                                    |

### BACKGROUND

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| <b>Introduction</b> | Influenza A virus subtype H5N1 is a subtype of the influenza A virus which can cause illness in humans and many other animal species. A bird-adapted strain of H5N1, called HPAI A(H5N1) for "highly pathogenic avian influenza virus of type A of subtype H5N1", is the causative agent of H5N1 flu, commonly known as "avian influenza" or "bird flu". It is enzootic in many bird populations, especially in Southeast Asia. One strain of HPAI A(H5N1) is spreading globally after first appearing in Asia. It is epizootic (an epidemic in nonhumans) and panzootic (affecting animals of many species, especially over a wide area), killing tens of millions of birds and spurring the culling of hundreds of millions of others to stem its spread. Most references to "bird flu" and H5N1 in the popular media refer to this strain. |
| <b>Keywords</b>     | Influenza A virus subtype H5N1; H5N1; Avian influenza; avian flu; bird flu; highly pathogenic avian influenza; HPAI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

### REFERENCES

1. Ungchusak K, Auewarakul P, Dowell SF, et al. (January 2005). "Probable person-to-person transmission of avian influenza A (H5N1)". N Engl J Med 352 (4): 333–40.

## IMAGES