

Avian Influenza Nonstructural Protein 1 Antibody

Catalog # ASC10458

Product Information

Application	E
Primary Accession	Q2L6Z3
Other Accession	ABC72653 , 85680915
Reactivity	Virus
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Avian Influenza Nonstructural Protein 1 antibody can be used for the detection of the avian influenza nonstructural protein 1 protein from influenza A in ELISA.

Additional Information

Other Names	Avian Influenza Nonstructural Protein 1 Antibody: , nonstructural protein 1
Reconstitution & Storage	Avian Influenza Nonstructural Protein 1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	Avian Influenza Nonstructural Protein 1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Background

Avian Influenza Nonstructural Protein 1 Antibody: Influenza A virus is a major public health threat, killing more than 30,000 people per year in the USA. 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, including the so-called "avian flu" or H5N1, can be found. These subtypes are classified based on the combination of the virus coat glycoproteins hemagglutinin (HA) and neuraminidase (NA) subtypes. One of the less studied proteins encoded by, but not incorporated in, the influenza virus is the nonstructural protein (NS) 1. NS1 counters cellular antiviral activities and acts as a virulence factor. It can bind to double-stranded RNA and sequester it from 2'-5'OAS, preventing the activation of the RNase L, which normally acts to degrade RNA and prevent virus replication. NS1 also binds to and inhibits the anti-viral protein kinase PKR.

References

Thompson WW, Shay DK, Weintraub, et al. Mortality associated with influenza and respiratory syncytial virus in the United States. *JAMA* 2003; 289:179-186.

Alexander DJ. A review of avian influenza. Proceedings of the European Society for Veterinary Virology (ESVV) Symposium on Influenza Viruses of Wild and Domestic Animals. *Vet. Microbiol.* 2000; 74:3-13.

Krug RM, Yuan W, Noah D, et al. Intracellular warfare between human influenza viruses and human cells: the role of the viral NS1 protein. *Virology* 2003; 309:181-9.

Min J-Y and Krug RM. The primary function of RNA binding by the influenza A virus NS1 protein is infected cells: inhibiting the 2'-5'oligo (A) synthase/RNase L pathway. *Proc. Natl. Acad. Sci. USA* 2006; 103:7100-5.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.