

Polyclonal Antibody to Avian Influenza Hemagglutinin 1 - Aff - Purified

Alternate names:	AFHA-1, Avian flu hemagglutinin, Avian influenza H5
Catalog No.:	AP30101PU-N
Quantity:	0.1 mg
Background:	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 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.
Isotype:	IgG
Immunogen:	Avian Influenza Hemagglutinin 1 antibody was raised against a synthetic peptide corresponding to 14 amino acids in the middle of the Avian Influenza Hemagglutinin 1 protein. Efforts were made to use relatively conserved regions of the viral sequence as the antigen. (AP30101CP-N)
Format:	State: Liquid purified Ig fraction Purification: Affinity chromatography purified via peptide column Buffer System: PBS containing 0.02% sodium azide.
Applications:	Avian Influenza Hemagglutinin 1 antibody can be used for the detection of the Avian Influenza Hemagglutinin 1 protein from the H5N1 strain of avian influenza A in ELISA. It will detect 10 ng of free peptide at 1 µg/ml. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody reacts to Avian Influenza Hemagglutinin 1.
Add. Information:	Blocking peptide available: blocking peptide (AP30101CP-N)
Storage:	Store the antibody undiluted at 2-8°C. Shelf life: one year from despatch.
General Readings:	1. Thompson WW, Shay DK, Weintraub E, Brammer L, Cox N, Anderson LJ, et al. Mortality associated with influenza and respiratory syncytial virus in the United States. JAMA. 2003 Jan 8;289(2):179-86. PubMed PMID: 12517228.

2. Shortridge KF, Zhou NN, Guan Y, Gao P, Ito T, Kawaoka Y, et al. Characterization of avian H5N1 influenza viruses from poultry in Hong Kong. *Virology*. 1998 Dec 20;252(2):331-42. PubMed PMID: 9878612.

3. Iwatsuki-Horimoto K, Kanazawa R, Sugii S, Kawaoka Y, Horimoto T. The index influenza A virus subtype H5N1 isolated from a human in 1997 differs in its receptor-binding properties from a virulent avian influenza virus. *J Gen Virol*. 2004 Apr;85(Pt 4):1001-5. PubMed PMID: 15039542.

Pictures:

AP30101PU-N Hemagglutinin antibody at 1 µg/ml specifically recognizes Avian H5N1 influenza virus but not seasonal influenza virus A H1N1 Hemagglutinin protein.

