

AFHA-4 antibody (pAb)

Goat Anti-Avian Flu Hemagglutinin 4 (Avian Influenza H5N1)

Instruction Manual

Catalog Number	PK-AB718-3913
Synonyms	Avian Influenza Hemagglutinin 4 Antibody: Avian Influenza Hemagglutinin 4, AFHA-4, Avian flu hemagglutinin, Avian influenza H5
Description	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.
Quantity	100 µg
Source / Host	Goat
Immunogen	AFHA-4 antibody was raised against a synthetic peptide corresponding to 10 amino acids near the center of the Hemagglutinin protein. Efforts were made to use relatively conserved regions of the viral sequence as the antigen.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Virus
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C 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.
Applications	E Note: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually.
Images	Avian Influenza Hemagglutinin 4 antibody can be used for the detection of the Hemagglutinin protein from the H5N1 strain of avian influenza A in ELISA. It will detect 10 ng of free peptide at 1 µg/mL.
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. Shortridge KF, Zhou NN, Guan Y, et al. Characterization of avian H5N1 influenza viruses from poultry in Hong Kong. Virol. 1998; 252:331-342. Iwatsuki-Horimoto K, Kanazawa R, Sugii S, et al. 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; 85:1001-5.
Images	Available upon request.
Related Products	AFHA-4 Peptide, Cat. No. PK-AB718-3913P

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