

Instruction Manual

Catalog Number	PK-AB718-4333
Synonyms	Avian Influenza A M2 Antibody: Avian Influenza A M2, H5N1 M2, H5N1 membrane ion channel 2
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. The more recent virulent strain of H5N1 is now seen in Africa and Europe, as well as in Southeast Asia. There is some evidence of human to human spread of this virus, but it is thought that the transmission efficiency was fairly low. The influenza membrane ion channel (M2) is a small transmembrane protein that regulates the pH inside the virion during viral entry into the cell and protects the newly synthesized hemagglutinin during their transport through low pH cellular compartments. It has been suggested as a target of neutralizing antibodies.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	M2 antibody was raised in rabbits against a 13 amino acid peptide from amino terminus of H5N1 M2.
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. M2 antibody can be used for the detection of the M2 protein from the H5N1 strain of avian influenza A in ELISA. It will detect 10 ng of free peptide at 1 mg/mL.
Images	Available upon request.
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. Buxton Bridges C, Katz JM, Seto WH, et al. Risk of influenza A (H5N1) infection among health care workers exposed to patients with influenza A (H5N1), Hong Kong. J. Inf. Dis. 2000; 181:344-8.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4333P; Avian Influenza A M2 Peptide

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