

Avian Influenza A M2 Antibody

Avian Influenza A M2: H5N1 M2, H5N1 membrane ion channel 2

CATALOG No.: 4333

BACKGROUND:

Influenza A virus is a major public health threat, killing more than 30,000 people per year in the USA (1). 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 (2). 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 (3). 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 (4). 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 (5). It has been suggested as a target of neutralizing antibodies (6).

SOURCE:

Rabbit polyclonal M2 antibody was raised against a 13 amino acid peptide from the amino terminus of H5N1 M2 (GenBank accession no. ABC74394).

APPLICATIONS:

M2 antibody can be used for the detection of the M2 protein from the H5N1 strain of avian influenza A in ELISA (optimal dilution should be determined by the user.) It will detect 10 ng of free peptide at 1 µg/ml. This M2 antibody may cross-react with M2 protein from other strains of influenza. Other applications are pending. **For research use only.**

STORAGE:

M2 antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C; stable for one year.

RELATED PRODUCTS:

Blocking Peptide: Catalog No. **4333P**
Neuraminidase Antibody (CT): Catalog No. **3423**
Hemagglutinin Antibody (IN): Catalog No. **3425**
H5N1 NS1 Antibody: Catalog No. **3915**
H5N1 NS2 Antibody: Catalog No. **3917**

REFERENCES:

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6. Szecsi J, Boson B, Johnsson P, et al. Induction of neutralising antibodies by virus-like particles harbouring surface proteins from highly pathogenic H5N1 and H7N1 influenza viruses. *Virology* 2006; 3:70-76.

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