

# Rabbit Anti-H3N2 Matrix Protein 2 antibody

## SL10331R

Product Name:	H3N2 Matrix Protein 2
Chinese Name:	A型流感病毒H3N2-M2蛋白抗体
Alias:	H3N2, matrix protein 2 [Influenza A virus (A/(A/Thailand/CU23/2006(H3N2))]; M2_I72A2; Matrix protein 2; Proton channel protein M2; M; [Influenza A virus (A/Udorn/307/1972(H3N2))].
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Influenza A virus H3N2
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	11kDa
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human H3N2 Matrix Protein 2:2-50/97
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	Influenza A virus is a major public health threat. 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.

### Function:

Forms a proton-selective ion channel that is necessary for the efficient release of the viral genome during virus entry. After attaching to the cell surface, the virion enters the cell by endocytosis. Acidification of the endosome triggers M2 ion channel activity. The influx of protons into virion interior is believed to disrupt interactions between the viral ribonucleoprotein (RNP), matrix protein 1 (M1), and lipid bilayers, thereby freeing the viral genome from interaction with viral proteins and enabling RNA segments to migrate to the host cell nucleus, where influenza virus RNA transcription and replication occur. Also plays a role in viral proteins secretory pathway. Elevates the intravesicular pH of normally acidic compartments, such as trans-Golgi network, preventing newly formed hemagglutinin from premature switching to the fusion-active conformation.

#### Subunit:

Homotetramer; composed of two disulfide-linked dimmers held together by non-covalent interactions. May interact with matrix protein 1.

#### **Subcellular Location:**

Virion membrane. Host apical cell membrane; Single-pass type III membrane protein. Note=Abundantly expressed at the apical plasma membrane in infected polarized epithelial cells, in close proximity to budding and assembled virions. Minor component of virions (only 16-20 molecules/virion).

#### Similarity:

Belongs to the influenza viruses matrix protein M2 family.

#### **SWISS:**

P63231

#### Gene ID:

N/A

#### Database links:

#### **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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