



Rabbit Anti-H1N1 Matrix Protein 1 antibody

SL4552R

Product Name:	H1N1 Matrix Protein 1
Chinese Name:	A型禽流感病毒H1N1蛋白抗体
Alias:	Influenza A virus (A/California/04/2009(H1N1))Matrix Protein-1; H1N1 M1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Influenza A virus H1N1
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from H1N1 Matrix Protein 1:51-130/252
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:	PubMed
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:

Plays critical roles in virus replication, from virus entry and uncoating to assembly and budding of the virus particle. M1 binding to ribonucleocapsids (RNPs) in nucleus seems to inhibit viral transcription. Interaction of viral NEP with M1-RNP is thought to promote nuclear export of the complex, which is targeted to the virion assembly site at the apical plasma membrane in polarized epithelial cells. Interactions with NA and HA may bring M1, a non-raft-associated protein, into lipid rafts. Forms a continuous shell on the inner side of the lipid bilayer in virion, where it binds the RNP. During virus entry into cell, the M2 ion channel acidifies the internal virion core, inducing M1 dissociation from the RNP. M1-free RNPs are transported to the nucleus, where viral transcription and replication can take place.

Determines the virion's shape: spherical or filamentous. Clinical isolates of influenza are characterized by the presence of significant proportion of filamentous virions, whereas after multiple passage on eggs or cell culture, virions have only spherical morphology. Filamentous virions are thought to be important to infect neighboring cells, and spherical virions more suited to spread through aerosol between hosts organisms.

Subunit:

Homodimer and homomultimer. Interacts with NEP. Binds ribonucleocapsid by both interacting with genomic RNA and NP protein. May interact with HA and NA. Cannot bind NP without genomic RNA.

Subcellular Location:

Virion membrane; Peripheral membrane protein; Cytoplasmic side. Host nucleus.

Similarity:

Belongs to the influenza viruses Matrix protein M1 family.

SWISS:

P03485

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.

