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Anti-M1 protein of Influenza Virus A, Rabbit-Polyclonal Antibody

Catalog No. GB-10083 **Quantity:** 250μl **Applications:** ELISA
Antigen species: Influenza virus A **Reactivity:** Human, swine, and chicken Influenza virus A
Host species: Rabbit **Form:** Antiserum

Target description

The M1 protein of influenza A virus has multiple regulatory functions during the infectious cycle, which include mediation of nuclear export of viral ribonucleoproteins, inhibition of viral transcription and a crucial role in virus assembly and budding. The filamentous phenotype was lost when the amino acid at position 41 was switched from A to V. This observation suggests that an interaction among these regions of M1 may occur during assembly.

Antigen

This polyclonal antibody was raised by immunizing rabbit with synthetic peptide mixture containing amino acids on the N-terminal domain (4-54) of matrix protein (M1) of Influenza virus A.

Application

The antibody specificity was assayed by ELISA and dot blot with the synthetic peptide of matrix protein (M1) of Influenza virus A. The antibody titer is more than 10K for ELISA and dot blot analysis. It has not been tested in the other applications. However, for the first testing, we recommend 1/10,000 dilution for ELISA, 1/3000 dilution for Western blot analysis (WB) of recombinant protein, 1/1000 dilution for tissue extracts or cell lysates, 1/100 dilution for immunohistochemistry (IHC) staining on frozen cryosections, 1/50 dilution for IHC staining on paraffin embedded sections.

Related Products

1. Anti-Influenza A Virus Matrix Protein M1 rabbit mAb (GB- 60083)

Ab dilution	Pre-bleed	Anti-serum
1:1,000	0.053	1.782
1:10,000	0.052	0.881
1:100,000	0.046	0.095
Titer		**100 K**

ELISA Protocol

Antigen is coated on EIA strips at 1μg per well. Add 200μl of blocking buffer and then wash wells with PBST buffer. Antiserum GB-10083 is diluted in series as 10^3~10^5 folds and added in separate wells. Incubate antibody for 1hr. Wash unbound antibodies and add anti-rabbit IgG-HRP conjugate. Wash the plates and add substrate to develop color for 5 min. Read absorbance (ABS) at 405 nm. Amount of color is directly proportional to the amount of antibodies. Antibody is positive at >2 folds of ABS of control/Pre-Immune serum.

Storage

It is supplied as lyophilized serum. Redissolve the powder with 250 microliter sterile water will restore to the original concentration. Store at 4°C for short-term application. For long-term storage, aliquot and store at -20°C.

References

1. Elleman, C.J., Barclay, W.S. The M1 matrix protein controls the filamentous phenotype of influenza A virus. *Virology.* 2004 Mar 30; 321(1):144-53.
2. Reinhardt, J., Wolff, T. The influenza A virus M1 protein interacts with the cellular receptor of activated C kinase (RACK) 1 and can be phosphorylated by protein kinase C. *Vet Microbiol.* 2000 May 22; 74(1-2):87-100.
3. Roberts, P.C., Lamb, R.A., Compans, R.W. The M1 and M2 proteins of influenza A virus are important determinants in filamentous particle formation. *Virology.* 1998 Jan 5; 240(1):127-37.
4. Scholtissek, C., Stech, J., Krauss S., Webster, R.G. Cooperation between the hemagglutinin of avian viruses and the matrix protein of human influenza A viruses. *J Virol.* 2002 Feb; 76(4):1781-6.