



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

Catalog No. GB-60083

Quantity: 1.2ml

Applications: ELISA

Antigen species: Influenza virus A

Reactivity: Human, swine and chicken Influenza virus A

Host species: Rabbit

Clone No.: A1C

Form: Culture medium supernatant

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 monoclonal 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. The antigen for mAb screening was located positions 4-32.

Application

The antibody specificity was assayed by ELISA with the synthetic peptide of matrix protein (M1) of Influenza virus A. It has not been tested in the other applications. However, for the first testing, we recommend 1/50 dilution for ELISA, 1/50 dilution for Western blot analysis (WB) of recombinant protein, 1/5 dilution for immunohistochemistry (IHC) staining on frozen cryosections or paraffin embedded sections.

Related Products

1. Anti-Matrix protein M1 of Influenza virus A rabbit pAb (GB- 10083)

Ab dilution	Pre-bleed	mAb culture medium
1:1	0.043	1.323
1:10	0.040	0.582
1:100	0.039	0.067

ELISA Protocol

Antigen is coated on EIA strips at 1µg per well. Add 200µl of blocking buffer and then wash wells with PBST buffer. Monoclonal antibody in culture medium GB-60083 is diluted in series as $10^0 \sim 10^2$ 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 650 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 culture medium supernatant. Redissolve the lyophilized powder with 1.2 milliliter sterile water will restore the original condition. 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.