



Anti-SARS-CoV Nucleocapsid protein, Rabbit-Monoclonal Antibody

Catalog No. GB-61170

Antigen species: SARS-CoV

Host species: Rabbit

Quantity: 1.2 ml

Reactivity: SARS-CoV

Clone No.: 17001

Applications tested: ELISA

Form: Culture medium supernatant

Target description

Severe Acute Respiratory Syndrome (SARS), an emerging disease characterized by atypical pneumonia, has recently been attributed to a novel coronavirus (SARS-CoV). The nucleocapsid protein (N) was one of the structural proteins of SARS-CoV (N, S, sE, M), which epitopes were defined by parallel comparison of SARS-CoV infected and non-infected human sera with Epitoscree™ peptide array. The N protein of SARS-CoV shares little homology with nucleocapsid proteins of other members of the coronavirus. N proteins of other coronavirus have been reported to be involved in forming the viral core and also in the packaging and transcription of the viral RNA.

Antigen

This monoclonal antibody was raised by immunizing rabbit with synthetic peptide mixture containing amino acids on the C-terminal domain (300-399) of nucleocapsid protein (N) of SARS-CoV. The antigen contained the epitope defined by Epitoscree™ peptide array (Genesis Biotech Inc.).

Application

The antibody specificity was assayed by ELISA with the synthetic peptide antigen of nucleocapsid protein (N) of SARS-CoV, which epitopes were defined by parallel comparison of SARS-CoV infected and non-infected human sera. 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, tissue extracts or cell lysates, 1/10 dilution for immunohistochemistry (IHC) staining on frozen cryosections or paraffin embedde sections.

Related Products

1. Anti-SARS- CoV spike protein, rabbit pAb (GB-10311)
2. Anti-SARS-CoV spike protein, rabbit pAb (GB-10314)
3. Anti-SARS-CoV spike protein, rabbit pAb (GB-10314)
4. Anti-SARS- CoV spike protein, rabbit pAb (GB-10322)
5. Anti-SARS- CoV spike protein, rabbit pAb (GB-10326)

Ab dilution	Pre-bleed	mAb culture medium
1:1	0.065	1.416
1:10	0.056	0.426
1:100	0.051	0.078
Titer		~50

ELISA Protocol

Antigen is coated on EIA strips at 1µg per well. Add 100µl of blocking buffer and then wash wells with PBS buffer. Preimmune serum and culture supernatant of GB-61170 is diluted from 1K to 100K and added in separate wells. Incubate at RT for 1hr. Wash unbound antibodies and add HRP conjugated anti-rabbit IgG. Incubate at RT for 1 hr. Wash the plates and add substrate to develop color for 5 min. Read absorbance (ABS) at 650 nm. Antibody is positive at >0.1 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. Huang JP, Chen LH. The epitope profile of the SARS-CoV infected and non-infected sera. US Patent and Taiwan Patent pending (2003).
2. He,R., Dobie,F., Ballantine,M., Leeson,A., Li,Y., Bastien,N., Cutts,T., Andonov,A., Cao,J., Booth,T.F., Plummer,F.A., Tyler,S., Baker,L. and Li,X. BCCA Genome Sciences Centre, British Columbia Centre for Disease Control and National Microbiology Laboratory Canada. Analysis of multimerization of the SARS coronavirus nucleocapsid protein. *Biochem. Biophys. Res. Commun.* 316 (2): 476-483, 2004.
3. Snijder,E.J., Bredenbeek,P.J., Dobbe,J.C., Thiel,V., Ziebuhr,J., Poon,L.L., Guan,Y., Rozanov,M., Spaan,W.J. and Gorbalenya,A.E. Unique and conserved features of genome and proteome of SARS-coronavirus, an early split-off from the coronavirus group 2 lineage. *J. Mol. Biol.* 331 (5): 991-1004, 2003.