



Genesis Biotech Inc.

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## Anti-SARS-CoV Nucleocapsid protein, Rabbit-Polyclonal Antibody

**Catalog No:** GB-10168M **Quantity:** 250 µl **Antigen species:** Synthetic SARS-CoV peptide **Reactivity:** SARS-CoV **Applications tested:** ELISA, epitope mapping **Host species:** rabbit **Type:** polyclonal antibodies **Form:** lyophilized serum

### 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 EpiScreen™ 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 polyclonal 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 EpiScreen™ 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. The antibody titer is more than 90K for ELISA. It has not been tested in the other applications. However, for the first testing, we recommend 1/5,000 dilution for ELISA, 1/1000 dilution for Western blot analysis (WB) of recombinant protein, 1/400 dilution for tissue extracts or cell lysates, 1/100 dilution for immunohistochemistry (IHC) staining on frozen cryosections or paraffin embedded sections.

| coated<br>Ab<br>dilution | GA168    |            | GA170    |            |
|--------------------------|----------|------------|----------|------------|
|                          | prebleed | Anti-serum | prebleed | Anti-serum |
| 1:0.1K                   | 0.436    | 2.585      | 0.483    | 2.752      |
| 1:1K                     | 0.138    | 2.406      | 0.156    | 2.633      |
| 1:10K                    | 0.071    | 1.669      | 0.072    | 1.784      |
| 1:100K                   | 0.055    | 0.362      | 0.059    | 0.421      |
| 1:1,000K                 | 0.052    | 0.080      | 0.054    | 0.092      |
| Titer                    |          | ~915.6K    |          | ~943.8K    |

### Related Products

1. Anti-SARS-CoV N protein rabbit mAb (GB-61170)
2. Anti-SARS-CoV N protein rabbit pAb (GB-10168M)
3. Anti-SARS-CoV protein X2 (3b) rabbit pAb (GB-10230M)
4. Anti-SARS-CoV spike protein rabbit pAb (GB-10311M)
5. Anti-SARS-CoV spike protein rabbit pAb (GB-10314M)
6. Anti-SARS-CoV spike protein rabbit pAb (GB-10326M)
7. Anti-SARS-CoV spike protein rabbit pAb (GB-10333M)
8. Anti-SARS-CoV 3CL mouse mAb (PG-20001)

### Storage

It is supplied as lyophilized serum of polyclonal antibody. Rehydrate the lyophilized powder with 250 µl sterile water will have the same concentration with original serum. 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.