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# Anti-SARS-CoV Protein X2 (3b), Rabbit-Polyclonal Antibody

**Reactivity:** SARS-CoV **Applications tested:** ELISA, epitope mapping

Host species: rabbit Type: polyclonal antibodies Form: lyophilized antiserum

## **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 protein X2 was one of the nonstructural proteins of SARS-CoV (X1~X5), which epitopes were defined by parallel comparison of SARS-CoV infected and non-infected human sera with Epitoscreen<sup>TM</sup> peptide array. The protein X2 of SARS-CoV, also named SARS 3b, shares little homology with proteins of other members of the coronavirus. SARS 3b protein is a putative uncharacterized protein.

### **Antigen**

This polyclonal antibody was raised by immunizing rabbit with synthetic peptide mixture containing amino acids on the C-terminal domain (119-149) of protein X2 (3b) of SARS-CoV. The antigen contained the epitope defined by Epitoscreen<sup>TM</sup> peptide array (Genesis Biotech Inc.).

# **Application**

The antibody specificity was assayed by ELISA with the synthetic peptide antigen of protein X2 (3b) of SARS-CoV., which epitopes were defined by parallel comparison of SARS-CoV infected and non-infected human sera. antibody titer is more than 5.5K 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.

Ab dilution	Pre-	Antiserum
	bleed	
1:1K	0.064	0.786
1: 10K	0.038	0.139
1: 100K	0.055	0.050
Titer		55k

### **Related Products**

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

#### **Storage**

It is supplied as lyophilized antiserum of polyclonal antibody. Rehydrate the lyophilized powder with 250  $\mu$ l sterile water will have the same concentration with original antiserum. Store at 4°C for short term application. For long-term storage, aliquot and store at -20°C.

#### References

- Huang JP, Chen LH. The epitope profile of the SARS-CoV infected and non-infected sera. US Patent and Taiwan Patent pending (2003).
- 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.
- 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 SARScoronavirus, an early split-off from the coronavirus group 2 lineage. *J. Mol. Biol.* 331 (5): 991-1004, 2003.