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Anti-SARS-CoV Spike Protein, Rabbit-Polyclonal Antibody

Catalog No. GB-10322 **Quantity:** 250μl **Applications tested:** ELISA
Antigen species: SARS-CoV **Reactivity:** SARS-CoV
Host species: Rabbit **Form:** 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 spike (S) protein 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 Epitoscreen™ peptide array. The S glycoprotein of SARS-CoV is not only responsible for receptor binding and virus fusion, but also a major antigen among the SARS-CoV proteins that induces protective antibody responses.

Antigen

This polyclonal antibody was raised by immunizing rabbit with synthetic peptide mixture containing amino acids on the C-terminal domain of spike protein (S) of SARS-CoV. The antigen contained the epitope defined by Epitoscreen™ peptide array (Genesis Biotech Inc.).

Application

The antibody specificity was assayed by ELISA with the synthetic peptide antigen of spike protein 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 100K 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.

Related Products

1. Anti-SARS- CoV spike protein, rabbitp Ab (GB- 10311)
2. Anti-SARS-CoV spike protein, rabbitpAb (GB- 10314)
3. Anti-SARS- CoV spike protein, rabbit pAb (GB- 10326)
4. Anti-SARS- CoV spike protein, rabbit pAb (GB- 10333)
5. Anti-SARS nucleocapsid protein, mouse pAb (GB- 10139)

Ab dilution	Pre-bleed	Anti-serum
1:1K	0.329	1.245
1:10K	0.074	0.572
1:100K	0.046	0.128
Titer		~550K

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 antiserum of GB-10322 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 serum. Redissolve the lyophilized powder with 250 microliter 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. Buchholz UJ, Bukreyev A, Yang L, Lamirande EW, Murphy BR, Subbarao K, Collins PL. Contributions of the structural proteins of severe acute respiratory syndrome coronavirus to protective immunity. Proc Natl Acad Sci U S A. 2004 Jun 29;101(26):9804-9. Epub 2004 Jun 21.
3. He Y, Zhou Y, Wu H, Luo B, Chen J, Li W, Jiang S. Identification of immunodominant sites on the spike protein of severe acute respiratory syndrome (SARS) coronavirus: implication for developing SARS diagnostics and vaccines. J Immunol. 2004 Sep 15;173(6):4050-7.