

## SARS virus Spike Antibody (N-term D204)

Catalog\_no: AB2363

Reactivity: S

Category: 抗原抗体

Size:  $100\mu L/50\mu L$ 

Immunogen: CVHSA:197-226

Specificity: This SARS virus Spike antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 197~226 amino acids from the N-terminus of

SARS CoV Spike protein.

Purification: Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This

antibody is purified through a protein G column, eluted with high and low pH buffers

and neutralized immediately, followed by dialysis against PBS.

Other\_name: Spike glycoprotein, S glycoprotein, E2, Peplomer protein, Spike protein S1, Spike protein

S2, S

Isotype: Rabbit Ig

Background : An outbreak of atypical pneumonia, referred to as severe acute respiratory syndrome

(SARS) and first identified in Guangdong Province, China, has spread to several

countries. The severity of this disease is such that the mortality rate appears to be ~3 to 6%. A number of laboratories worldwidehave undertaken the identification of the causative agent. The National Microbiology Laboratory in Canada obtained the Tor2 isolate from a patient in Toronto, and succeeded in growing a coronavirus-like agent in African Green Monkey Kidney (Vero E6) cells. This coronavirus has been named publicly by the World Health Organization and member laboratories as ?SARS virus? The SARS membrane proteins, including the major proteins S (Spike) and M (Membrane), are inserted into the endoplasmic reticulum Golgi intermediate compartment (ERGIC) while full length replicated RNA (+ strands) assemble with the N (nucleocapsid) protein. The virus then migrates through the Golgi complex and eventually exits the cell, likely by exocytosis. The site of viral attachment to the host cell resides within the S protein. Oligomeric spike (S) glycoproteins extend from SARS membranes. These integral membrane proteins assemble within the endoplasmic reticulum of infected cells and are subsequently endoproteolyzed in the Golgi, generating noncovalently associated S1 and S2 fragments. Once on the surface of infected cells and virions, peripheral S1 fragments bind carcinoembryonic antigen-related cell adhesion molecule (CEACAM) receptors, and this triggers membrane fusion reactions mediated by integral membrane

S2 fragments.

reference: He, R., et al., Biochem. Biophys. Res. Commun. 316(2):476-483 (2004). Snijder, E.J., et al.,

J. Mol. Biol. 331(5):991-1004 (2003). Marra, M.A., et al., Science 300(5624):1399-1404

(2003). Krokhin, O., et al., Mol Cell Proteomics 2(5):346-356 (2003).