

Anti-SARS Coronavirus spike glycoprotein antibody (clone 3A2)

65-101 50 ug,

A novel type of coronavirus has been identified as the causative agent of SARS (Severe Acute Respiratory Syndrome). Spike glycoprotein is essential for the infection and directly binds to the virus receptor, ACE2 (Angiotensin-Converting Enzyme 2). Hybridoma 3A2 has been isolated by injecting mouse with SARS virus and as the clone which produces antibody that specifically reacts with the virus-infected cell (Fig. 1), in the laboratory of Prof. K. Ikuta of Osaka University. Monoclonal antibody 3A2 recognizes the spike protein consisting of 1181 amino acids, which migrates at 200 kDa position on SDS-PAGE (Fig. 2) due to its glyco-chains.

Applications:

- 1) Western blotting (0.1~0.3 µg/ml)
- 2) Immunofluorescence staining (IHC)
- 3) ELISA

Isoform: IgG2b (kappa)

Form: Purified IgG 1 mg/ml in PBS (-), 50% glycerol, filter-sterilized, azide free

Storage: -20°C(long period, -80°C)

References: This product has been used in reference 2.

1. Satija N and Lal SK "The molecular biology of SARS coronavirus" *Ann N Y Acad Sci* **1102**: 26-38 (2007) PMID: [17470909](https://pubmed.ncbi.nlm.nih.gov/17470909/)
2. Yamate M *et al* "Establishment of Vero E6 cell clones persistently infected with severe acute respiratory syndrome coronavirus" *Microbes and Infect* **7**:1530-1540 (2005) PMID: [16269264](https://pubmed.ncbi.nlm.nih.gov/16269264/)

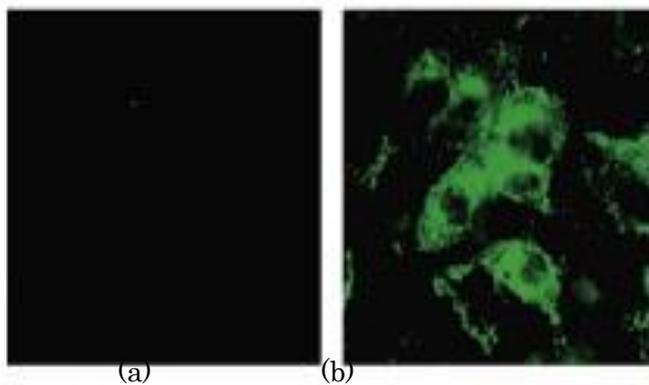


Fig 1. Identification of the spike antigen in the SARS virus infected cells by indirect immunostaining with 3A2 antibody. (a) Uninfected Vero E6 cells. (b) SARS virus infected Vero E6 cells.

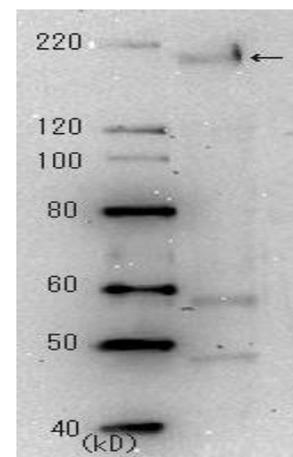


Fig 2. Identification of the spike glycoprotein in the crude extract of the SARS virus infected cells by Western blotting using 3A2 antibody at 10,000 fold dilution.