Datasheet for ABIN1882129

anti-SARS-CoV Spike antibody (AA 13-42)

1 Image | 6 Publications

Go to Product page

Overview

Quantity:	400 µL
Target:	SARS-CoV Spike (SARS-CoV S)
Binding Specificity:	AA 13-42
Reactivity:	SARS Coronavirus (SARS-CoV)
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SARS-CoV Spike antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	This SARS virus Sn antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 13-42 amino acids from the N-terminus of SARS CoV Spike protein.
Clone:	RB3977-3978
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS. Purified Rabbit Polyclonal Antibody (Pab)

Target Details

Target:	SARS-CoV Spike (SARS-CoV S)
Abstract:	SARS-CoV S Products
Target Type:	Viral Protein

Target Details

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 approx. 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. Synonyms: S, Spike glycoprotein, E2, Peplomer protein, Spike protein S1, Spike protein S2
UniProt:	P59594

Application Details

Application Notes:	WB: 1:1000
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	2 mg/mL
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	WARNING: Reagents contain sodium azide. Sodium azide is very toxic if ingested or inhaled. Avoid contact with skin, eyes, or clothing. Wear eye or face protection when handling. If skin or

Handling

eye contact occurs, wash with copious amounts of water. If ingested or inhaled, contact a physician immediately. Sodium azide yields toxic hydrazoic acid under acidic conditions. Dilute azide-containing compounds in running water before discarding to avoid accumulation of potentially explosive deposits in lead or copper plumbing.

Publications

Product cited in:

Lokugamage, Yoshikawa-Iwata, Ito, Watts, Wyde, Wang, Newman, Kent Tseng, Peters, Makino: " Chimeric coronavirus-like particles carrying severe acute respiratory syndrome coronavirus (SCoV) S protein protect mice against challenge with SCoV." in: **Vaccine**, Vol. 26, Issue 6, pp. 797-808, (2008) (PubMed).

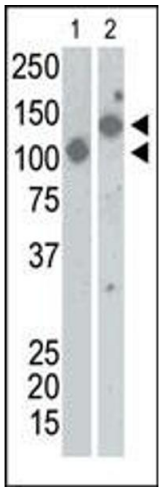
Chan, Wu, Chow, Cheung, To, Leung, Chan, Lee, Ng, Au, Lo: "Coronaviral hypothetical and structural proteins were found in the intestinal surface enterocytes and pneumocytes of severe acute respiratory syndrome (SARS)." in: **Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc**, Vol. 18, Issue 11, pp. 1432-9, (2005) (PubMed).

Pogrebnyak, Golovkin, Andrianov, Spitsin, Smirnov, Egolf, Koprowski: "Severe acute respiratory syndrome (SARS) S protein production in plants: development of recombinant vaccine." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 102, Issue 25, pp. 9062-7, (2005) (PubMed).

Faber, Lamirande, Roberts, Rice, Koprowski, Dietzschold, Schnell et al.: "A single immunization with a rhabdovirus-based vector expressing severe acute respiratory syndrome coronavirus (SARS-CoV) S protein results in the production of high levels of SARS-CoV-neutralizing ..." in: **The Journal of general virology**, Vol. 86, Issue Pt 5, pp. 1435-40, (2005) (PubMed).

He, Dobie, Ballantine, Leeson, Li, Bastien, Cutts, Andonov, Cao, Booth, Plummer, Tyler, Baker, Li: " Analysis of multimerization of the SARS coronavirus nucleocapsid protein." in: **Biochemical and biophysical research communications**, Vol. 316, Issue 2, pp. 476-83, (2004) (PubMed).

There are more publications referencing this product on: Product page



Western Blotting

Image 1. The anti-SARS-Sn Pab (ABIN1882129 and ABIN2840580) is used in Western blot to detect recombinant Spike proteins, aa17-537 (Lane 1) and aa17-756 (Lane 2).