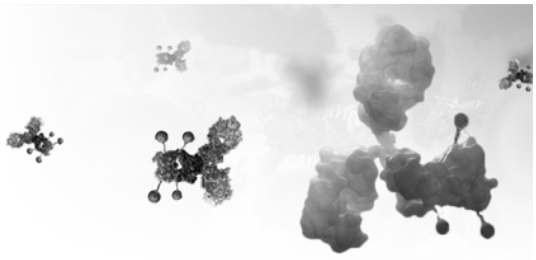

Rabbit anti-SARS-CoV S1 polyclonal antibody (CABT-RM318)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	SARS CoV spike, shows cross reactivity with 2019-nCoV Spike RBD
Target	SARS CoV
Immunogen	Recombinant Human SARS Coronavirus Spike S1 Subunit Protein
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	SARS CoV
Purification	Protein A & Antigen Affinity
Conjugate	unconjugated
Applications	ELISA, WB Recommended dilution: ELISA: 1:5000-1:10000; WB: 1:1000-1:5000
Format	liquid
Size	100 µl
Buffer	0.2 µm filtered solution in PBS
Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.

BACKGROUND

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221
© Creative Diagnostics All Rights Reserved

Introduction	The spike (S) glycoprotein of coronaviruses contains protrusions that will only bind to certain receptors on the host cell. Known receptors bind S1 are ACE2, angiotensin-converting enzyme 2; DPP4, dipeptidyl peptidase-4; APN, aminopeptidase N; CEACAM, carcinoembryonic antigen-related cell adhesion molecule 1; Sia, sialic acid; O-ac Sia, O-acetylated sialic acid. The spike is essential for both host specificity and viral infectivity. The term 'peplomer' is typically used to refer to a grouping of heterologous proteins on the virus surface that function together. The spike (S) glycoprotein of coronaviruses is known to be essential in the binding of the virus to the host cell at the advent of the infection process. It's been reported that 2019-nCoV can infect the human respiratory epithelial cells through interaction with the human ACE2 receptor. The spike protein is a large type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which is responsible for recognizing the cell surface receptor. S2 contains basic elements needed for the membrane fusion.The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity. The main functions for the Spike protein are summarized as: Mediate receptor binding and membrane fusion; Defines the range of the hosts and specificity of the virus; Main component to bind with the neutralizing antibody; Key target for vaccine design; Can be transmitted between different hosts through gene recombination or mutation of the receptor binding domain (RBD), leading to a higher mortality rate.
Keywords	SARS-CoV Spike Protein S1;SARS;SARS-CoV;CoV;Coronavirus;SARS S1;SARS Spike protein;SARS CoV Spike Protein S

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221
© Creative Diagnostics All Rights Reserved