SARS-CoV-2 Spike RBD Recombinant Nanobody, Biotin conjugated

Product Code	CSB-RA33245D2GMY
Abbreviation	S
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P0DTC2
Immunogen	Recombinant Human Novel Coronavirus Spike glycoprotein(S) (319-541aa) (CSB-YP3324GMY1 and CSB-MP3324GMY1b1)
Species Reactivity	Human Novel Coronavirus (SARS-CoV-2/ 2019-nCoV)
Tested Applications	ELISA; Recommended dilution: ELISA:1:10000-1:50000
Form	Liquid
Conjugate	Biotin
Storage Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, pH 7.4
Purification Method	Affinity-chromatography
Isotype	VHH fusion with human IgG1 Fc
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Human Novel Coronavirus (SARS-CoV-2/ 2019-nCoV)
Research Area	Microbiology
Clone No.	A1

Description

The synthesis of the SARS-CoV-2 Spike RBD recombinant monoclonal antibody is an intricate process that involves several stages. Initially, the SARS-CoV-2 Spike RBD monoclonal antibody is obtained, and its gene sequence is analyzed. Next, a vector carrying the SARS-CoV-2 Spike RBD monoclonal antibody gene is produced and transfected into a host cell line for culturing. During the SARS-CoV-2 Spike RBD monoclonal antibody synthesis, a recombinant human SARS-CoV-2 Spike glycoprotein (S) (319-541aa) (CSB-YP3324GMY1 and CSB-MP3324GMY1b1) is used as an immunogen. The SARS-CoV-2 Spike RBD recombinant monoclonal antibody is then purified using affinity chromatography and verified for specificity using ELISA. It is conjugated with a Biotin tag.

The SARS-CoV-2 spike RBD is a crucial component in COVID-19 infection. The interaction between the RBD and ACE2 is the initial step in the infection process, allowing the virus to enter and infect human cells. Once inside the host cell, the virus uses its own genetic material to hijack the host cell's machinery to

replicate and spread throughout the body. Mutations in the RBD can affect its ability to bind to ACE2, impacting the virus's infectivity and virulence. Furthermore, the RBD also plays a role in immune evasion, as it undergoes rapid mutations, allowing the virus to evade the immune system's recognition and response.