



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

Product Code	CSB-RA33245B2GMV
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-YP3324GMV1 and CSB-MP3324GMV1b1)
Species Reactivity	Human Novel Coronavirus (SARS-CoV-2/ 2019-nCoV)
Tested Applications	ELISA; Recommended dilution: ELISA:1:1000-1:500000
Form	Liquid
Conjugate	HRP
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 generation of the SARS-CoV-2 Spike RBD recombinant monoclonal antibody involves a multistep process. Initially, the SARS-CoV-2 Spike RBD monoclonal antibody is harvested, and its gene sequence is analyzed. Next, a vector that carries the SARS-CoV-2 Spike RBD monoclonal antibody gene is created and transfected into a host cell line for culturing. During the SARS-CoV-2 Spike RBD monoclonal antibody production, a recombinant human SARS-CoV-2 Spike glycoprotein (S) (319-541aa) (CSB-YP3324GMV1 and CSB-MP3324GMV1b1) is used as an immunogen. The SARS-CoV-2 Spike RBD recombinant monoclonal antibody is then purified via affinity chromatography and assessed for specificity using ELISA. It is labeled with an HRP tag.

The spike protein of SARS-CoV-2, including the receptor-binding domain (RBD) on the spike protein, plays a crucial role in the virus's entry into human cells. The RBD specifically binds to the human cell surface receptor ACE2, allowing the virus to enter and infect the cell. The RBD is a highly specific and critical



component of the virus's ability to infect human cells. Mutations in the RBD have been shown to impact the virus's ability to infect cells and the severity of the disease it causes. It is a significant target for vaccine development and therapeutics aimed at preventing or treating COVID-19.