

Rabbit COVID 19 Spike Coronavirus Polyclonal Antibody | anti-COVID-19 antibody

SARS-CoV-2 (COVID-19) Spike Antibody (cleavage site) (biotin)

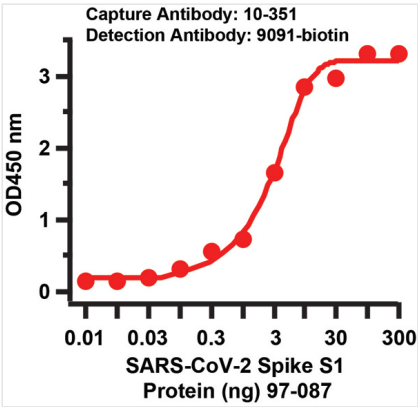
CATALOG # AAA40917	HOST Rabbit	REACTIVITY Virus
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PRODUCT SYNONYMS

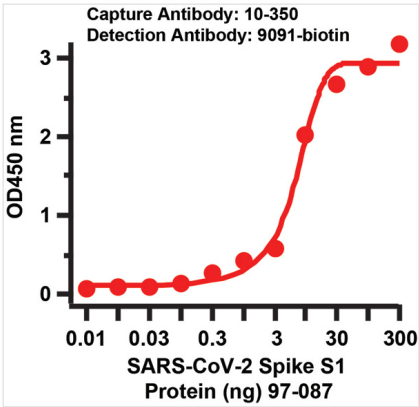
COVID 19 Spike Coronavirus; Polyclonal Antibody; SARS-CoV-2 (COVID-19) Spike Antibody (cleavage site) (biotin); 2019 Novel Coronavirus; Coronavirus; CoV; COVID-19 virus; HCoV-2; Human Coronavirus 2019; SARS2; SARS-CoV-2; Severe acute respiratory syndrome coronavirus 2; Spike; anti-COVID-19 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Virus
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	SARS-CoV-2 (COVID-19) Spike Antibody (cleavage site) (biotin) is affinity chromatography purified via peptide column
Form/Format	Liquid SARS-CoV-2 (COVID-19) Spike Antibody (cleavage site) (biotin) is supplied in PBS containing 0.02% sodium azide.
Concentration	1mg/mL (varies by lot)
Source	SARS-CoV-2
Immunogen	Anti-SARS-CoV-2 (COVID-19) Spike Antibody (cleavage site) (biotin) (9091-biotin) was raised against a peptide corresponding to 12 amino acids near the center of SARS-CoV-2 (COVID-19) Spike glycoprotein. The immunogen is located within 650-700 amino acids of SARS-CoV-2 (COVID-19) Spike protein.
Homology	Predicted reactivity based on immunogen sequence: SARS-CoV Spike proteins: (25%)
Isoforms	SARS-CoV-2 (COVID-19) Spike has one isoform (1273aa)
Conjugation	Biotin
Preparation and Storage	SARS-CoV-2 (COVID-19) Spike antibody (cleavage site) (biotin) can be stored at 4 degree C for three months and -20 degree C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.



ELISA
Figure 2 Sandwich ELISA for SARS-CoV-2 (COVID-19) Matched Pair Spike S1 AntibodiesAntibodies: SARS-CoV-2 (COVID-19) Spike Antibodies, 10-351 and 9091-biotin. A sandwich ELISA was performed using SARS-CoV-2 Spike S1 antibody (10-351, 2ug/ml) as capture antibody, the Spike S1 recombinant protein as the binding protein (97-087), and the anti-SARS-CoV-2 Spike S1 antibody (9091-biotin, 1ug/ml) as the detection antibody. Secondary: Streptavidin-HRP at 1:10000 dilution. Detection range is from 0.03 ng to 300 ng. EC50 = 3.14 ng



ELISA
Figure 1 Sandwich ELISA for SARS-CoV-2 (COVID-19) Matched Pair Spike S1 AntibodiesAntibodies: SARS-CoV-2 (COVID-19) Spike Antibodies, 10-350 and 9091-biotin. A sandwich ELISA was performed using SARS-CoV-2 Spike S1 antibody (10-350, 2ug/ml) as capture antibody, the Spike S1 recombinant protein as the binding protein (97-087), and the anti-SARS-CoV-2 Spike S1 antibody (9091-biotin, 1ug/ml) as the detection antibody. Secondary: Streptavidin-HRP at 1:10000 dilution. Detection range is from 0.03 ng to 300 ng. EC50 = 7.37 ng

ADDITIONAL INFORMATION

Related Product Information for anti-COVID-19 antibody	Coronavirus disease 2019 (COVID-19), formerly known as 2019-nCoV acute respiratory disease, is an infectious disease caused by SARS-CoV-2, a virus closely related to the SARS virus (1). The disease is the cause of the 2019-20 coronavirus outbreak (2). The structure of 2019-nCoV consists of the following: a Spike protein (S), hemagglutinin-esterase dimer (HE), a membrane glycoprotein (M), an envelope protein (E) a nucleocapid protein (N) and RNA. Coronavirus invades cells through Spike (S) glycoproteins, a class I fusion protein. It is the major viral surface protein that coronavirus uses to bind to the human cell surface receptor. It also mediates the fusion of host and viral cell membrane, allowing the virus to enter human cells and begin infection (3). The spike protein is the major target for neutralizing antibodies and vaccine development (4). The protein modeling suggests that there is strong interaction between Spike protein receptor-binding domain and its host receptor angiotensin-converting enzyme 2 (ACE2), which regulate both the cross-species and human-to-human transmissions of COVID-19 (5). The recent study has shown that the SARS-CoV-2 spike protein binds ACE2 with higher affinity than SARS-CoV spike protein (6).
Product Categories/Family for anti-COVID-19 antibody	Infectious Disease; COVID-19
References	Gorbalenya. bioRxiv: 2020. Hui et al. Int J Infect Dis. 2020;91:264-266. Belouzard et al. Viruses. 2012;4(6):1011-33. Lee et al. J Virol. 2006;80(8):4079-87. Wan et al. J Virol. 2020.

NCBI AND UNIPROT INFORMATION

NCBI GI #	1791269090
NCBI GeneID	43740568
NCBI Official Full Name	Spike glycoprotein

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.