PRODUCT INFORMATION

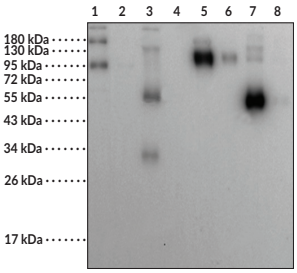
SARS-CoV-2 Spike Glycoprotein Receptor Binding Domain Polyclonal Antibody

Item No. 31997

Overview and Properties

Contents:	This vial contains 50 or 100 µl of protein A-affinity purified polyclonal antibody.
Synonyms:	SARS-CoV-2 Spike RBD, SARS-CoV-2 Spike Receptor Binding Domain, Severe Acute Respiratory Syndrome Coronavirus 2 Spike Glycoprotein Receptor Binding Domain, Spike S1 RBD
Immunogen:	Recombinant SARS-CoV-2 spike glycoprotein RBD
Cross Reactivity:	(+) SARS-CoV-2 spike glycoprotein RBD (mouse Fc-tagged), SARS-CoV spike glycoprotein RBD (His-tagged), SARS-CoV-2 spike glycoprotein S1 subunit (His-tagged), SARS-CoV spike glycoprotein S1 subunit (His-tagged)
Species Reactivity:	(+) SARS-CoV-2, SARS-CoV; other species not tested
Form:	Liquid
Storage:	-80°C (as supplied)
Stability:	≥1 year
Storage Buffer:	0.2 µm filtered solution in PBS
Host:	Rabbit
Isotype:	IgG
Applications:	ELISA and Western blot (WB); the recommended starting dilution is 1:5,000-1:10,000 for ELISA and 1:1,000-1:5,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically

Image



Lane 1: SARS-CoV Spike Glycoprotein S1 Subunit (His Tag) (30 ng)
Lane 2: SARS-CoV Spike Glycoprotein S1 Subunit (His Tag) (5 ng)
Lane 3: SARS-CoV Spike Glycoprotein RBD (His Tag) (30 ng)
Lane 4: SARS-CoV Spike Glycoprotein RBD (His Tag) (5 ng)
Lane 5: SARS-CoV-2 Spike Glycoprotein S1 Subunit (His Tag) (30 ng)
Lane 6: SARS-CoV-2 Spike Glycoprotein S1 Subunit (His Tag) (5 ng)
Lane 7: SARS-CoV-2 Spike Glycoprotein RBD (mFc Tag) (30 ng)
Lane 8: SARS-CoV-2 Spike Glycoprotein RBD (mFc Tag) (5 ng)

WB of SARS-CoV-2 Spike Glycoprotein Receptor Binding Domain Polyclonal Antibody at 1:2,000 dilution.

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Description

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is an enveloped positive-stranded RNA virus, a member of the *Betacoronavirus* genus, and the causative agent of COVID-19.[1-5] The SARS-CoV-2 spike glycoprotein, also known as the surface glycoprotein, is located on the outer envelope of the virion.[1] It is composed of an S1 and S2 subunit divided by a furin S-cleavage site not found in other SARS-CoVs.[6,7] The S1 subunit contains the receptor-binding domain (RBD), which binds to the carboxypeptidase angiotensin-converting enzyme 2 (ACE2), and the S1 and S2 subunits are cleaved by the protease TMPRSS2 to facilitate viral fusion with the host cell membrane.[8-10] Cayman's SARS-CoV-2 Spike Glycoprotein Receptor Binding Domain Polyclonal Antibody can be used for ELISA and Western blot (WB) applications. The antibody recognizes the spike glycoprotein RBD from SARS-CoV-2 and SARS-CoV.

References

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6. Liu, Z., Xiao, X., Wei, X., *et al.* Composition and divergence of coronavirus spike proteins and host ACE2 receptors predict potential intermediate hosts of SARS-CoV-2. *J. Med. Virol.* **92(6),** 595-601 (2020).
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