

COVID 19 Spike Coronavirus Detection Kit | COVID-19 detection kit

SARS-CoV-2 (COVID-19) Spike Matched Pair

CATALOG # AAA40946	REACTIVITY Virus	APPLICATIONS ELISA
------------------------------	----------------------------	------------------------------

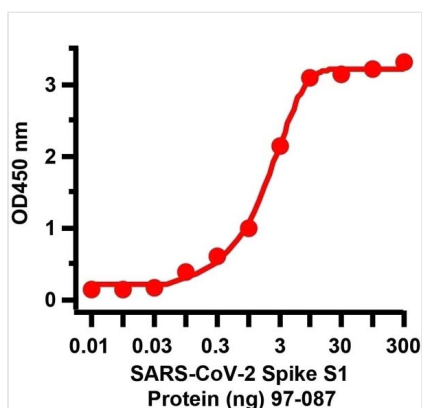
PRODUCT SYNONYMS

COVID 19 Spike Coronavirus; SARS-CoV-2 (COVID-19) Spike Matched Pair; 2019 Novel Coronavirus; Coronavirus; CoV; COVID-19 virus; HCoV-2; Human Coronavirus 2019; SARS2; SARS-CoV-2; Severe acute respiratory syndrome coronavirus 2; Spike; COVID-19 detection kit

PRODUCT SPECIFICATIONS

Reactivity	Virus
Form/Format	Liquid
Applicable Applications for COVID-19 detection kit	ELISA
Preparation and Storage	Store at -20 degree C, stable for up to one year.

IMAGES



ELISA

Antibodies: SARS-CoV-2 (COVID-19) Spike Antibodies, 10-351 and 9083-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 (9083-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 = 1.96 ng

ADDITIONAL INFORMATION

Related Product Information for COVID-19 detection kit	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 nucleocapsid 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).
References	Gorbalenya. bioRxiv: 2020. Hui et al. Int J Infect Dis. 2020;91:264-266. Belouzard et al. Viruses. 2012;4(6):1011-33. ee et al. J Virol. 2006;80(8):4079-87.

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://www.aaabiotech.com/covid-19-detection-kits/covid-19-spike-coronavirus/40946>