

SARS-CoV-2 COVID 19 Spike S1+S2 ECD (S-ECD) Coronavirus ELISA Kit | COVID-19 elisa kit

SARS-CoV-2 S1+S2 ECD (S-ECD) Protein ELISA Kit

CATALOG #
AAA281555

REACTIVITY
SARS-CoV-2

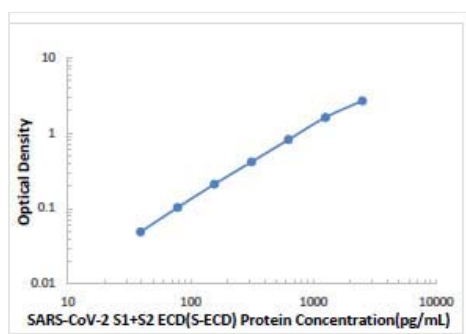
PRODUCT SYNONYMS

COVID 19 Spike S1+S2 ECD (S-ECD) Coronavirus; SARS-CoV-2 S1+S2 ECD (S-ECD) Protein ELISA Kit; 2019 Novel Coronavirus; Coronavirus; CoV; COVID-19 virus; HCoV-2; Human Coronavirus 2019; SARS2; SARS-CoV-2; Severe acute respiratory syndrome coronavirus 2; Nucleocapsid; Spike S1+S2 ECD (S-ECD); COVID-19 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	SARS-CoV-2
Specificity	This assay recognizes both recombinant and natural S1+S2 ECD(S-ECD)Protein.
Samples	Cell culture supernates, serum and plasma
Assay Type	Quantitative Sandwich
Sensitivity	< 14.2 pg/mL
Intra-assay Precision	Three samples of known concentration were tested 20 times on one plate to evaluate the Intra-plate precision.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for COVID-19 elisa kit

Principle of the Assay: This assay employs the quantitative sandwich enzyme immunoassay technique. A monoclonal antibody specific for S1+S2 ECD(S-ECD)Protein has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any S1+S2 ECD(S-ECD)Protein present is bound by the immobilized antibody. Following incubation unbound samples are removed during a wash step, and then a detection antibody specific for S1+S2 ECD(S-ECD)Protein is added to the wells and binds to the combination of capture antibody-S1+S2 ECD(S-ECD)Protein in sample. Following a wash to remove any unbound combination, and enzyme conjugate is added to the wells. Following incubation and wash steps, a substrate is added. A colored product TMB is formed in proportion to the amount of S1+S2 ECD(S-ECD)Protein present in the sample. The reaction is terminated by addition of acid and absorbance is measured. A standard curve is prepared from seven S1+S2 ECD(S-ECD)Protein standard dilutions and S1+S2 ECD(S-ECD)Protein sample concentration determined.

Background/Introduction: The spike (S) glycoprotein of coronaviruses contains protrusions that will only bind to certain receptors on the host cell. Known receptors bind S1 are ACE2, angiotensin-converting enzyme 2; DPP4, dipeptidyl peptidase-4; APN, aminopeptidase N; CEACAM, carcinoembryonic antigen-related cell adhesion molecule 1; Sia, sialic acid; O-ac Sia, O-acetylated sialic acid. The spike is essential for both host specificity and viral infectivity. The term 'peplomer' is typically used to refer to a grouping of heterologous proteins on the virus surface that function together. The spike (S) glycoprotein of coronaviruses is known to be essential in the binding of the virus to the host cell at the advent of the infection process. It's been reported that 2019-nCoV can infect the human respiratory epithelial cells through interaction with the human ACE2 receptor. The spike protein is a large type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (S1), which is responsible for recognizing the cell surface receptor. S2 contains basic elements needed for the membrane fusion. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity. The main functions for the Spike protein are summarized as: Mediate receptor binding and membrane fusion; Defines the range of the hosts and specificity of the virus; Main component to bind with the neutralizing antibody; Key target for vaccine design; Can be transmitted between different hosts through gene recombination or mutation of the receptor binding domain (S1), leading to a higher mortality rate.

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.

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Online datasheet: <https://stage.aaabiotech.com/covid-19-elisa-kits/covid-19-spike-s1s2-ecd-s-ecd-coronavirus/281555>