

17-3001: SARS-CoV-2 Inhibitor Screening Kit

Application : Functional Assay

Alternative Name : COVID-19 Inhibitor Screening Kit; 2019-nCoV Inhibitor Screening Kit; 2019-nCoV Spike Protein S1 (RBD)/ACE2 Inhibitor Screening Kit

Description

Coronaviruses (CoVs) are enveloped non-segmented positive-sense single-stranded RNA viruses and can infect respiratory, gastrointestinal, hepatic and central nervous system of human and many other wild animals. Recently, a new severe acute respiratory syndrome β -coronavirus called SARS-CoV-2 (or 2019-nCoV) has emerged, which causes an epidemic of acute respiratory syndrome (called coronavirus human disease 2019 or COVID-19). SARS-CoV-2 contains 4 structural proteins, including Envelope (E), Membrane (M), Nucleocapsid (N) and Spike (S), which is a transmembrane protein, composed of two subunits S1 and S2. The S1 subunit contains a receptor binding domain (RBD), which binds to the cell surface receptor. Angiotensin-Converting Enzyme 2 (ACE2) present at the surface of epithelial cells, causing mainly infection of human respiratory cells.

Product Info

Amount : 6 Å— 16 Tests

Content : 6x16 well Format (96 tests)

Storage condition : Please refer to the Manual

Application Note

This inhibitor screening assay is based on a colorimetric ELISA kit, which measures the binding of the RBD of the Spike S protein from SARS-CoV-2 to its human receptor ACE2. Thus, this assay allows to identify and characterize the effect of different inhibitory molecules including antibodies or chemicals on the inhibition of the binding of SARS-CoV-2 virus to human ACE2.

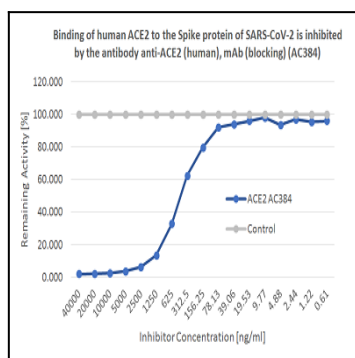


Figure-1: Binding of human ACE2 to the Spike protein of SARS-CoV-2 is inhibited by anti-ACE2 (human), mAb (blocking) (AC384) Azide free (Cat No# 29-1005).