

ACE2:SARS-CoV-2 Spike Inhibitor Screening Assay Kit



96 rxns.

Rating: Not Rated Yet

Price

Sales price 10200 ?

Discount

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Manufacturer [BPS Bioscience](#)

Description

Description

This kit is based on binding to the mouse Fc region. If your sample includes human serum, it may interfere with the assay and create a false positive signal. In this instance, we suggest using the [SARS-CoV-2 Spike:ACE2 Inhibitor Screening Assay Kit, BPS Bioscience #79945](#).

Coronavirus disease 2019 (COVID-19) increases the risk of developing Acute Respiratory Distress Syndrome (ARDS), which is often fatal at the late stages of the infection when the SAR-CoV-2 virus causes significant damage to the lungs. As a first step of the viral replication strategy, the virus attaches to the host cell surface before entering the cell. The Spike protein receptor binding domain (RBD) recognizes and attaches to the Angiotensin-Converting Enzyme 2 (ACE2) receptor found on the surface of type I and II pneumocytes, endothelial cells, and ciliated bronchial epithelial cells. Drugs targeting the interaction between the Spike protein of SARS-CoV-2 and ACE2 may offer some protection against the viral infection.



The ACE2:SARS-CoV-2 Spike Inhibitor Screening Assay Kit is designed for screening and profiling inhibitors of this interaction. The key to this kit is the high sensitivity of detection of Fc-tagged Spike protein by HRP-labeled Anti-mouse-Fc. Only a few simple steps on a microtiter plate are required for the assay. First, ACE2 protein is attached to a nickel-coated 96-well plate. Next, SARS-CoV-2 Spike-Fc is incubated with ACE2 on the plate. Finally, the plate is treated with Anti-mouse-Fc-HRP followed by addition of an HRP substrate to produce chemiluminescence, which then can be measured using a chemiluminescence reader.

Assay Kits: ACE2:SARS-CoV-2 Spike Inhibitor Screening Assay Kit

Materials Required But Not Supplied

PBS (Phosphate buffered saline)
Luminometer or fluorescent microplate reader capable of reading chemiluminescence
Adjustable micropipettor and sterile tips

Applications

This kit is useful for screening for inhibitors of ACE2 binding to SARS-CoV-2 Spike.

Supplied As

This kit comes in a convenient 96-well format, with purified ACE2 and SARS-CoV-2 Spike proteins, HRP-labeled anti-mouse Fc region antibody, and assay buffer for 100 binding reactions.

Storage/Stability

Up to 6 months from date of receipt, when stored as recommended.

Synonym(s)

ACEH, covid, covid-19, covid19, and coronavirus

Format

Catalog Number	Component	Amount	Storage	
79932	SARS-CoV-2 Spike Protein (RBD), mFc Tag	5 ?g	-80°C	Avoid multiple freeze/thaw cycles!
11003	ACE2, His-Tag	5 ?g	-80°C	
79311	3x Immuno Buffer 1	50 ml	-20°C	
79728	Blocking Buffer 2	50 ml	+4°C	
52130H	Secondary HRP-labeled antibody 1 (mouse)	15 ?l	-80°C	
79670	ELISA ECL substrate A (transparent bottle)	6 ml	Room Temp	
	ELISA ECL substrate B	6 ml	Room	

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(brown bottle)		Temp	
Nickel-coated 96-well white microplate	1	+4°C	

Instructions for Use

See assay kit protocol for detailed instructions.

References

Hoffmann, M. *et al.* 2020. *Cell*, **181(2)**:271-280.e1-e5
Yan, R. *et al.* 2020. *Science*, **367(6485)**:1444-1448

Application Reference(s):

1. [Hijacking SARS-Cov-2/ACE2 receptor interaction by natural and semi-synthetic steroidal agents acting on functional pockets on receptor binding region \(2020\)](#)

Warnings

Avoid multiple freez/thaw cycles.

Scientific Category

Coronavirus

Reviews

There are yet no reviews for this product.

