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



96 rxns.

Rating: Not Rated Yet **Price** Sales price 10200 ?

Discount

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Manufacturer
BPS Bioscience

Description

Description

The pandemic coronavirus disease 2019 (COVID-19) is caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). 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 SARS-CoV-2 Spike:ACE2 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 bound His-labeled ACE2 by HRP-labeled Anti-His. Only a few simple steps on a microtiter plate are required for the assay. First, SARS-CoV-2 Spike is coated on a 96-well plate. Next, ACE2-His is incubated with SARS-CoV-2 Spike on the plate. Finally, the plate is treated with Anti-His-HRP followed by addition of an HRP substrate to produce chemiluminescence, which then can be measured using a chemiluminescence reader.



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 inhibitors of SARS-CoV-2 Spike binding to ACE2.

Supplied As

This kit comes in a convenient 96-well format, with His-labeled ACE2, purified SARS-CoV-2 Spike protein, HRP-labeled anti-His 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, coronavirus

Format

Catalog	Component	Amount	Storage	
Number				
79932	SARS-CoV-2 Spike Protein	5 ?g	-80°C	
	(RBD), mFc Tag			Avoid
<u>11003</u>	ACE2, His-Tag	5 ?g	-80°C	multiple
<u>79311</u>	<u>3x Immuno Buffer 1</u>	50 ml	-20°C	freeze/
<u>79728</u>	Blocking Buffer 2	50 ml	+4°C	thaw
	Anti-His-HRP	15 ?l	-80°C	cycles!
<u>79670</u>	ELISA ECL substrate A	6 ml	Room	
	(transparent bottle)		Temp	
	ELISA ECL substrate B	6 ml	Room	
	(brown bottle)		Temp	
79699	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**:1-10 Yan, R. *et al. Science*, In Press 4 March 2020. DOI: 10.1126/science.abb2762

Warnings

Avoid freeze/thaw cycles.

Scientific Category

Infectious Disease

Reviews

There are yet no reviews for this product.