Technical support: order@acebiolab.com
Phone: 886-3-2870051

Datasheet

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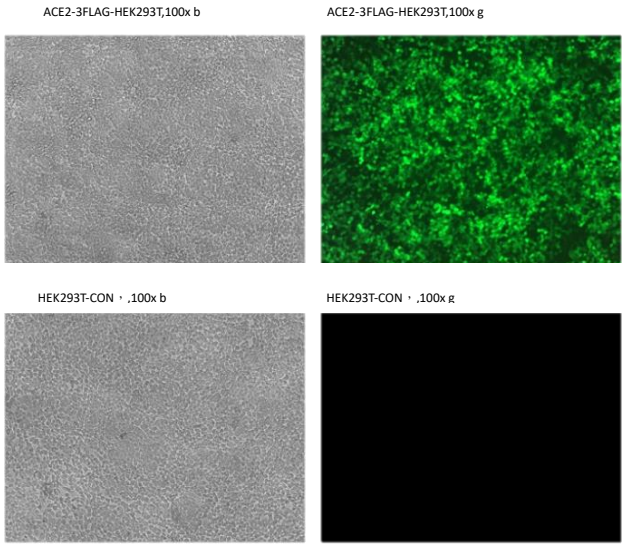
Pseudovirus-SARS-COV-2 (A701V)

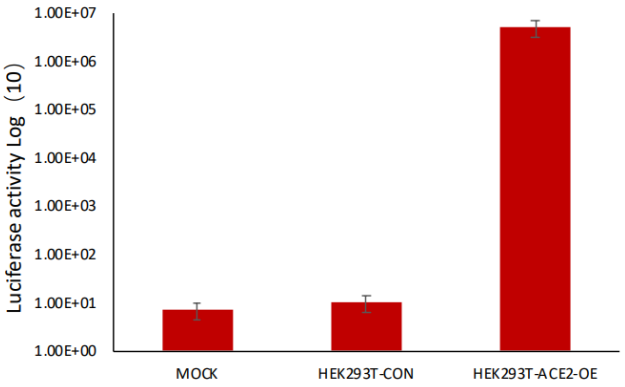
Cat# PV052

Store at -80°C for 6 months

INFORMATION

DESCRIPTION:	ACE Biolabs used the lentiviral packaging system to package the SARS-CoV-2 (2019-nCoV, COVID-19 virus) A701V mutation protein as a surface capsid glycoprotein and containing GFP and Luciferase dual reporter genes as a pseudovirus model. The virus can infect cell lines overexpressing the ACE2 gene. Researchers can determine the infection efficiency by observing GFP through a microscope and detecting the value of Luciferase. 
PRODUCT NAME:	Pseudovirus-SARS-COV-2 (A701V)
APPLICATIONS:	Research use only. Recommended amount: 2-10 µl/well of 96-well plate. According to experimental conditions, it can be adjusted. The infection efficiency of pseudoviruses highly depends on cell types. It is recommended to conduct a pre-experiment before the formal experiment to determine the optimal amount of virus.
Titer:	> 10^7 TU/ml (The functional titer is determined by GFP-positive ACE2 overexpressing HEK293T cells.)
Main ingredient:	glucose、KH_2PO_4、Na_2HPO_4、NaCl、KCl、pseudovirus
FORMULATION:	Liquid
STORAGE & STABILITY:	The product can be stored at -80°C or below for 6 months. Avoid repeated freezing and thawing cycles.
IMAGE:	





HEK293-ACE2-OE cell infected by Pseudovirus-SARS-CoV-2, can be observed the expression of green fluorescent protein and detected the activity of luciferase.

PROTOCOL

1. Cell preparation: the day before the experiment, inoculate the cells to be infected in a 96-well cell culture plate with an inoculation volume of approximately $1x10^4$ cells/well. When the virus is infected the next day, the cell density is preferably around 40%.
2. Pseudovirus infection: take out the frozen pseudovirus and thaw it on ice or melt it naturally at 4±1℃. After it is completely melted, absorb the required amount of virus (concentration gradient can be designed) and add it to the cell culture system to infect the target cell. Taking HEK293T-ACE2 cells as an

example, the amount of virus added is 2-10 μL/well, and the culture medium is replaced by fresh medium 6-8H after virus infection to continue cultivation.

3. Infection detection: After the cells are infected with pseudovirus 48-72H, the infection efficiency is determined by observing the expression of green fluorescent protein and detecting the activity of luciferase.
4. Supplement: The infection efficiency of pseudoviruses on different cells is different. It is recommended to conduct a pre-experiment before the formal experiment to determine the optimal amount of virus.

NOTE

1. The pseudovirus-SARS-CoV-2 we provided is a replication-defective virus, that is, the virus does not use the host cell to generate new virus particles after infecting the target cells.
2. The experimental operation needs to be carried out in the BSL-2 laboratory and Class II biological safety cabinet, and wear personal protective equipment such as laboratory clothes, masks and gloves.
3. If this product is accidentally spilled during the experiment, please use disinfectant to inactivate it immediately. If it splashes on the eyes, skin or other body parts, immediately rinse with plenty of water.
4. The experimental waste generated by using this product needs to be autoclaved and treated according to the medical waste treatment requirements.

PRODUCT USE LIMITATION

These products are intended for research use only.