

# Anti-2019-nCoV Spike Neutralizing Antibody

catalog number: E-AB-V1024

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

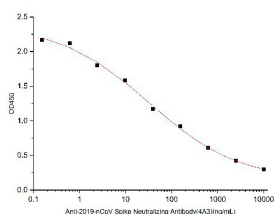
## Description

<b>Reactivity</b>	SARS-COV2
<b>Immunogen</b>	Recombinant 2019-nCoV S1 Protein (mFc Tag)
<b>Host</b>	Mouse
<b>Isotype</b>	IgG1
<b>Clone</b>	4A3
<b>Conjugation</b>	Unconjugated
<b>buffer</b>	0.2 $\mu$ m filtered solution in PBS.

## Applications

<b>ELISA</b>	1:1000-1:2000
--------------	---------------

## Data



Anti-2019-nCoV Spike Neutralizing Antibody(4A3) can block Human ACE2 Protein (His Tag)(Cat#PKSR030508) and 2019-nCoV Spike Protein (RBD, mFc Tag) (Cat#PKSR030500) interaction, the IC50 for this effect is 231 ng/mL.

## Preparation & Storage

<b>Storage</b>	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
<b>Shipping</b>	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

## Background

Protein S (PROS1) is glycoprotein and expressed in many cell types supporting its reported involvement in multiple biological processes that include coagulation, apoptosis, cancer development and progression, and the innate immune response. Known receptors bind S1 are ACE2, angiotensin-converting enzyme 2, DPP4, CEACAM etc. 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. Most notable is severe acute respiratory syndrome (SARS). The severe acute respiratory syndrome-coronavirus (SARS-CoV) spike (S) glycoprotein alone can mediate the membrane fusion required for virus entry and cell fusion. It is also a major immunogen and a target for entry inhibitors. 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 (RBD), 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.

## For Research Use Only