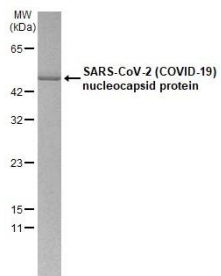
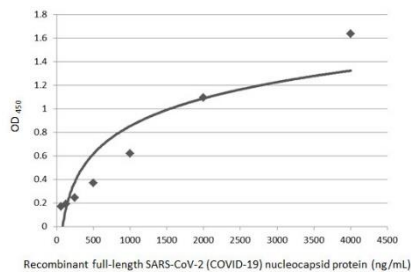


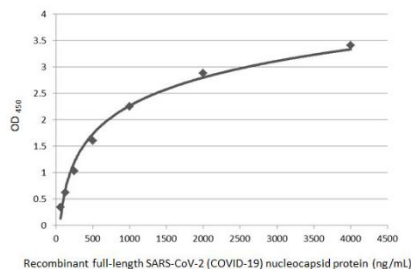
PRODUCT DATASHEET

Catalog No:	BSV-COV-PR-30
Pack Size	500 µg
Product Name:	SARS-CoV-2 (COVID-19) nucleocapsid protein
Description:	Full length SARS-CoV-2 (COVID-19) nucleocapsid protein expressed in <i>E.coli</i> cells.
Species:	2019-nCoV, COVID-19
Molecular weight:	46 kDa  Image 3µg of His tag-tagged SARS-CoV-2 (COVID-19) nucleocapsid protein analyzed using SDS-PAGE and stained with coomassie blue
Purity:	>90 %
Accession No.:	YP_009724397.2
Tag:	His-tag
Source:	<i>E.coli</i>
Buffer:	PBS
Storage:	Store as concentrated solution. Aliquot and store at -20°C or below.

Application:



ELISA Image Sandwich ELISA detection of recombinant full-length SARS-CoV-2 (COVID-19) nucleocapsid protein using BSV-COV-AB-03 as capture antibody at concentration of 5 µg/mL and a detection antibody at concentration of 1 µg/mL. Mouse IgG antibody (HRP) was diluted at 1:10000 and used to detect the primary antibody.



ELISA Image Indirect ELISA analysis was performed by coating plate with 50 µL of recombinant full-length SARS-CoV-2 (COVID-19) nucleocapsid protein at concentrations ranging from 0.0625 µg/mL to 4 µg/mL. The coated protein is detected with SARS-CoV-2 (COVID-19) nucleocapsid antibody at 1 µg/mL. Rabbit IgG antibody (HRP) was diluted at 1:10000 and used to detect the primary antibody.

Background:

Coronaviruses (CoVs) are a diverse family of viruses which cause a variety of diseases in mammals and birds ranging from enteritis in cows and pigs and upper respiratory disease in chickens to potentially lethal human respiratory infections. Coronaviruses can cause a range of symptoms varying from mild symptoms such as the common cold to more serious respiratory illnesses. They primarily cause respiratory and enteric diseases in mammals and birds. Coronavirus symptoms include rhinorrhea, sneezing, cough, nasal obstruction, and bronchitis.

SARS coronavirus (SARS-CoV) was identified in 2003. SARS-CoV is thought to be an animal virus from an as-yet-uncertain animal reservoir, perhaps bats, that spread to other animals (civet cats) and first infected humans in the Guangdong province of southern China in 2002. An epidemic of SARS affected 26 countries and resulted in more than 8000 cases in 2003. Since then, a small number of cases have occurred as a result of laboratory accidents or, possibly, through animal-to-human transmission ([WHO, 2020](http://www.who.int/news-room/fact-sheets/detail/sars-cov-2)).

FOR RESEARCH LABORATORY TEST USE ONLY!

REFERENCES

1. Tok and Tatar (2017). Structures and Functions of Coronavirus Proteins: Molecular Modeling of Viral Nucleoprotein International Journal of Virology & Infectious Diseases. Vol 2, 1.
2. Yu et al. (2006). Crystal Structure of the Severe Acute Respiratory Syndrome (SARS) Coronavirus Nucleocapsid Protein Dimerization Domain Reveals Evolutionary Linkage between Corona- and Arteriviridae. The Journal of Biological Chemistry, Vol. 281, No. 25, pp. 17134 –17139.
3. SARS (Severe Acute Respiratory Syndrome) factsheet. World Health Organisation (WHO), 2020.