

For Research Use Only

# Virus SARS-CoV-2 Nucleocapsid Phosphoprotein Recombinant antibody, PBS Only

Catalog Number: 80027-1-PBS



## Basic Information

<b>Catalog Number:</b> 80027-1-PBS	<b>GenBank Accession Number:</b> NC_045512	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1mg/ml	<b>GeneID (NCBI):</b> 43740575	<b>CloneNo.:</b> 8C20
<b>Source:</b> Rabbit	<b>Full Name:</b> COVID-19 N Protein	
<b>Isotype:</b> IgG		
<b>Immunogen Catalog Number:</b> AG30676		

## Applications

**Tested Applications:**  
WB, ELISA, Indirect ELISA

**Species Specificity:**  
virus, recombinant protein

## Background Information

The nucleocapsid (N) protein has multiple functions including formation of nucleocapsids, signal transduction virus budding, RNA replication, and mRNA transcription. N protein is an important antigen for coronavirus, and it is normally highly conserved, with a molecular weight of about 50 kDa. It can be used as a marker in diagnostic assays due to its high immunogenicity (PMID: 32416961, PMID: 32235387). A sandwich ELISA for COVID-19 N Protein can be assembled by using 80027-1-RR as capture antibody and conjugated 80026-1-RR for detection.

## Storage

**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS Only

For technical support and original validation data for this product please contact:

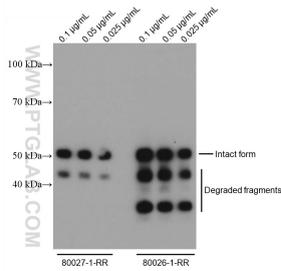
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

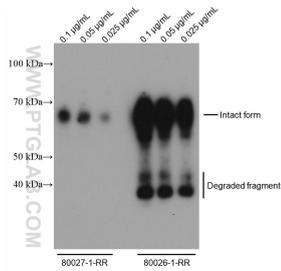
W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

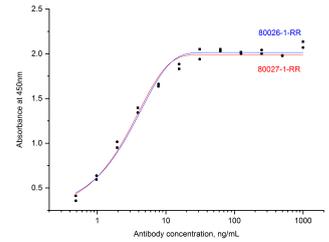
## Selected Validation Data



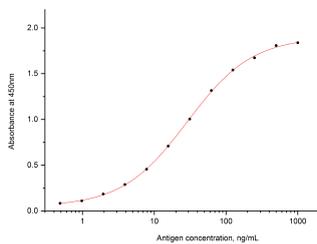
E.coli expressed SARS-CoV-2 Nucleocapsid Phosphoprotein (Cat.NO. Ag30676) was subjected to SDS-PAGE followed by western blot with 80027-1-RR and 80026-1-RR at various work concentration. This data was developed using the same antibody clone with 80027-1-PBS in a different storage buffer formulation.



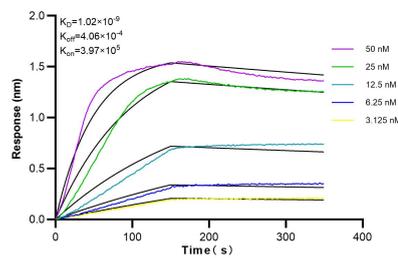
Eukaryotic expressed SARS-CoV-2 Nucleocapsid Phosphoprotein was subjected to SDS-PAGE followed by western blot with 80027-1-RR and 80026-1-RR at various work concentration. This data was developed using the same antibody clone with 80027-1-PBS in a different storage buffer formulation.



Indirect ELISA was carried out by coating eukaryotic expressed N protein at 70 ng/well followed by blocking and adding serial diluted primary antibody 80026-1-RR and 80027-1-RR respectively. Signal was developed with TMB and stopped by H<sub>2</sub>SO<sub>4</sub>. Signal strength was measured by absorbance at 450 nm. This data was developed using the same antibody clone with 80027-1-PBS in a different storage buffer formulation.



Sandwich ELISA was carried out by coating 80027-1-RR at 80 ng/well followed by blocking and adding different concentration of eukaryotic expressed N protein (0.5-1000 ng/mL). HRP-conjugated 80026-1-RR was used at 1 µg/mL for detection. Signal was developed with TMB and stopped by H<sub>2</sub>SO<sub>4</sub>. Signal strength was measured by absorbance at 450 nm. This data was developed using the same antibody clone with 80027-1-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 80027-1-RR against SARS-CoV-2 Nucleocapsid Phosphoprotein were performed. The affinity constant is 1.02 nM.