For Research Use Only

SARS-CoV-2 Nucleocapsid Phosphoprotein Recombinant antibody

Catalog Number:80027-1-RR 1 Publications

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Basic Information

Catalog Number:
80027-1-RR

Concentration:
1000 ug/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG30676

GenBank Accession Number:
NC_045512

GeneID (NCBI):
43740575

Full Name:
COVID-19 N Protein

Purification Method:
Protein A purification

CloneNo.:
8C20

Recommended Dilutions:
WB: 1:5000-1:50000
ELISA: 1:10-1:100

Applications

Tested Applications:
WB, ELISA

Cited Applications:
WB

Species Specificity:
virus, recombinant protein

Cited Species:
human

Positive Controls:

WB : Eukaryotic nucleocapsid phosphoprotein, Recombinant protein

ELISA : 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.

Notable Publications

Author	Pubmed ID	Journal	Application
Yecheng Zhang	40118151	Virol Sin	WB

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

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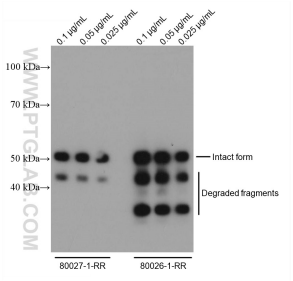
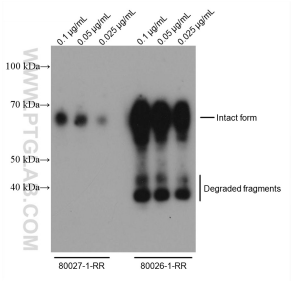
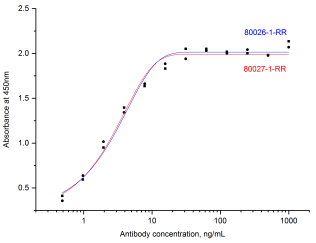
Selected Validation Data



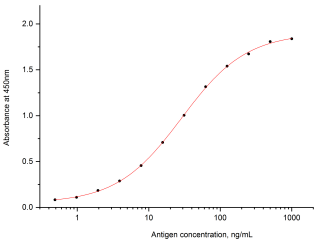
E.coli expressed SARS-CoV-2 Nucleocapsid Phosphoprotein (Cat.NO. Ag30676) was subjected to SDS-PAGE followed by western blot with 80027-1-RR and 80026-1-RR at various work concentration.



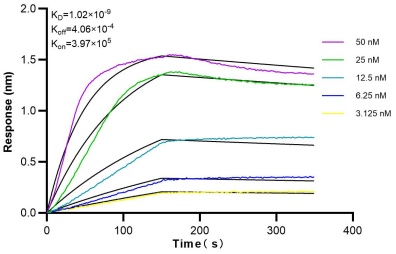
Eukaryotic expressed SARS-CoV-2 Nucleocapsid Phosphoprotein was subjected to SDS-PAGE followed by western blot with 80027-1-RR and 80026-1-RR at various work concentration.



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 H2SO4. Signal strength was measured by absorbance at 450 nm.



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-conjugated80026-1-RR was used at 1 μg/mL for detection. Signal was developed with TMB and stopped by H2SO4. Signal strength was measured by absorbance at 450 nm.



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