For Research Use Only

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



Catalog Number:80027-1-PBS

Basic Information

Catalog Number:

80027-1-PBS

100ug, Concentration: 1mg/ml by

Nanodrop:

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

Applications

Tested Applications: WB, ELISA, Indirect ELISA

Species Specificity:

virus, recombinant protein

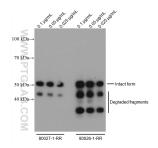
Background Information

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.

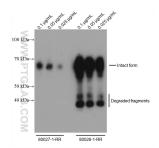
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

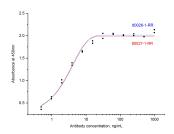
Selected Validation Data



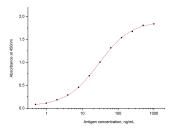
E.coli expressed SARS-CoV-2 Nucleocapsid Phosphoprotein (Cat.NO. Ag30676) was subjected to SDS-PAGE followed by western blot with 80027-1-RR and 80026-1-RR at various work concentration. This data was developed using the same antibody clone with 80027-1-PBS in a different storage buffer formulation.



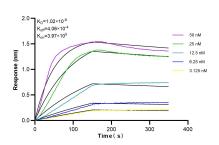
Eukaryotic expressed SARS-CoV-2 Nucleocapsid Phosphoprotein was subjected to SDS-PAGE followed by western blot with 80027-1-RR and 80026-1-RR at various work concentration. This data was developed using the same antibody clone with 80027-1-PBS in a different storage buffer formulation



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 H2SO4. 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-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. 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.