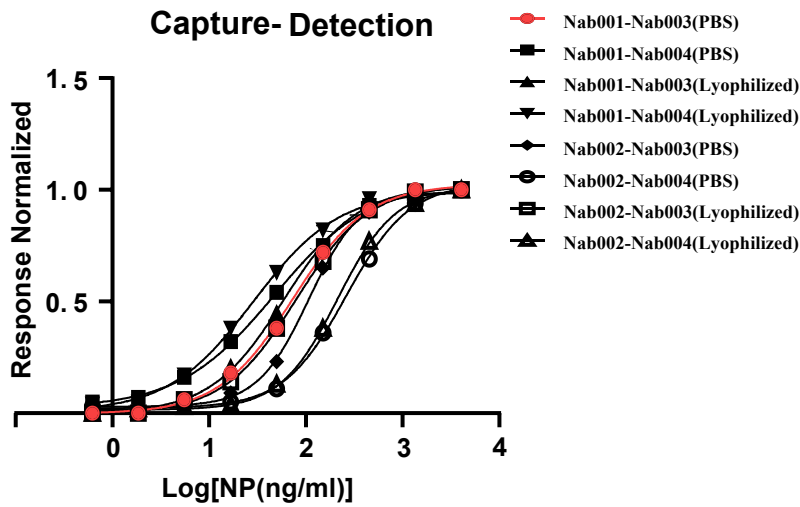
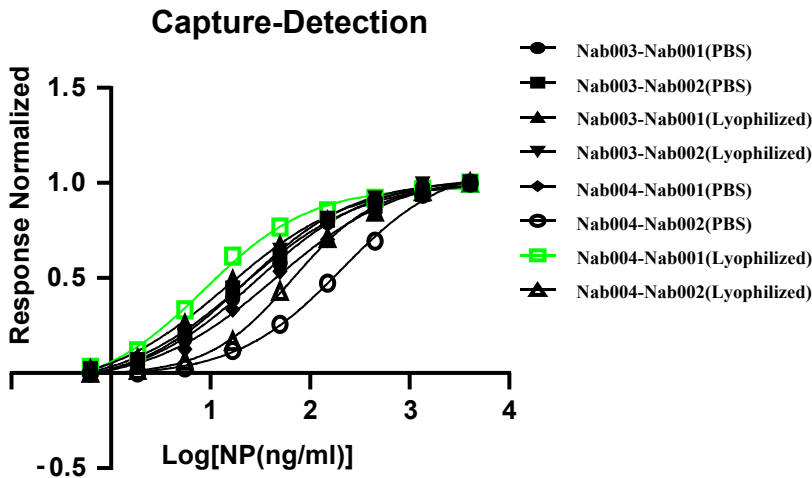




GeneMedi's SARS-CoV-2 NP Antibody Pair And Stability Validation with NP antigen In Sandwich ELISA



| Capture | Detect | E C 5 0 (ng/ml) |
|--------------------|--------------------|-----------------|
| Nab001 in PBS | Nab003 in PBS | 73 |
| Nab001 in PBS | Nab004 in PBS | 47.12 |
| Nab001 lyophilized | Nab003 lyophilized | 58.84 |
| Nab001 lyophilized | Nab004 lyophilized | 28.47 |
| NAb002 in PBS | Nab003 in PBS | 107.2 |
| NAb002 in PBS | Nab004 in PBS | 261.7 |
| Nab002 lyophilized | Nab003 lyophilized | 79.31 |
| Nab002 lyophilized | Nab004 lyophilized | 212.7 |



| Capture | Detect | E C 5 0 (ng/ml) |
|--------------------|--------------------|-----------------|
| Nab003 in PBS | NAb001 in PBS | 28.36 |
| Nab003 in PBS | NAb002 in PBS | 21.23 |
| Nab003 lyophilized | Nab001 lyophilized | 14.65 |
| Nab003 lyophilized | Nab002 lyophilized | 22.3 |
| Nab004 in PBS | NAb001 in PBS | 44.14 |
| Nab004 in PBS | NAb002 in PBS | 206.1 |
| Nab004 lyophilized | Nab001 lyophilized | 8.656 |
| Nab004 lyophilized | Nab002 lyophilized | 66.43 |

Figure. GeneMedi's SARS-CoV2 [NP antibody](#)(Nab) pair validation with NP antigen([GMP-V-2019nCoV-N002](#)) in sandwich ELISA. Nabs were either in PBS solution (stocked in -20 for 7days) or **lyophilized (stock at room temperature for 7 days)**. GeneMedi's lyophilized antibodies presented excellent stability in the room temperature condition.

Abbreviation

[Nab001](#)

[Nab002](#)

[Nab003](#)

[Nab004](#)

PBS

lyophilized

[NP](#)

Response Normalized

Description

[GMP-V-2019nCoV-NAb001](#)

[GMP-V-2019nCoV-NAb002](#)

[GMP-V-2019nCoV-NAb003](#)

[GMP-V-2019nCoV-NAb004](#)

liquid in PBS buffer

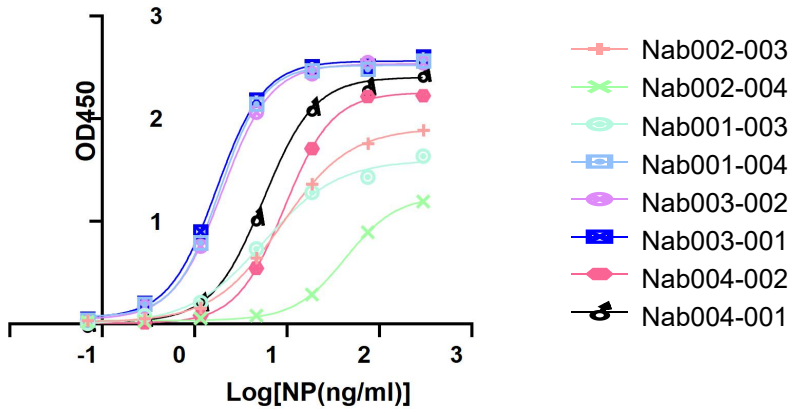
lyophilized and stock at room temperature for 7 days before reconstitution

[SARS-CoV-2 NP antigen \(GMP-V-2019nCoV-N002\)](#)

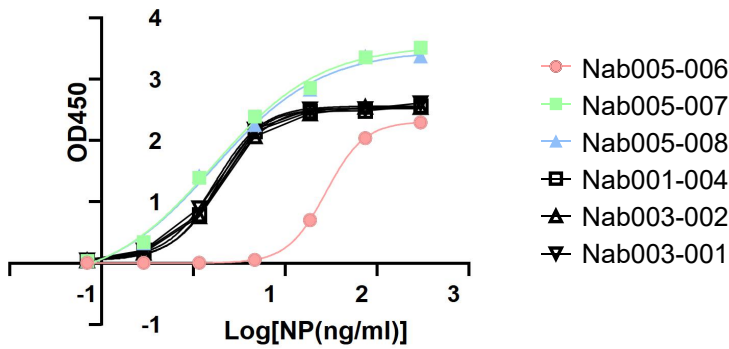
Normalized by Max OD450



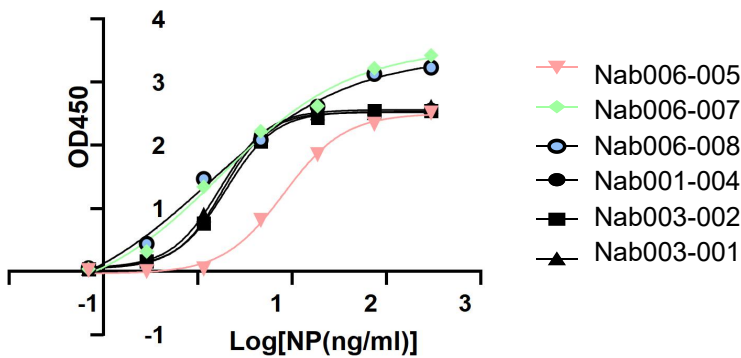
Nab001-004



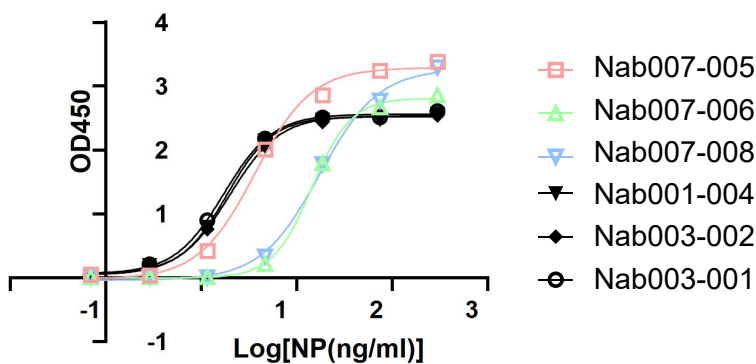
Nab005 (new product)

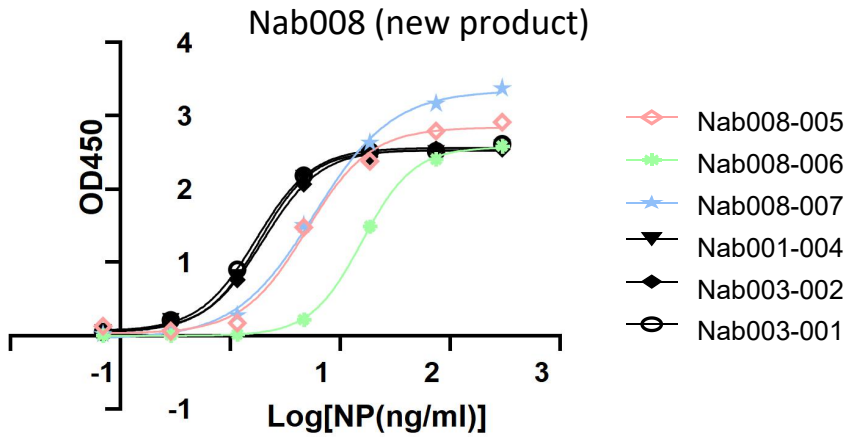


Nab006 (new product)



Nab007 (new product)





ED50 of Nab pairs validation with NP antigen in sandwich ELISA

| Pair (capture-detect) | ED50 (ng/ml) |
|-----------------------|--------------|
| Nab005-Nab006 | 280 |
| Nab005-Nab007 | 16.68 |
| Nab005-Nab008 | 16.78 |
| Nab006-Nab005 | 82.51 |
| Nab006-Nab007 | 17.35 |
| Nab006-Nab008 | 12.81 |
| Nab007-Nab005 | 36.87 |
| Nab007-Nab006 | 145 |
| Nab007-Nab008 | 175.1 |
| Nab008-Nab005 | 49.7 |
| Nab008-Nab006 | 159.6 |
| Nab008-Nab007 | 58.46 |
| Nab002-Nab003 | 87.07 |
| Nab002-Nab004 | 431.8 |
| Nab001-Nab003 | 56.27 |
| Nab001-Nab004 | 18.71 |
| Nab003-Nab002 | 19.97 |
| Nab003-Nab001 | 17.33 |
| Nab004-Nab002 | 94.04 |
| Nab004-Nab001 | 55.9 |

Figure. GeneMedi's SARS-CoV2 NP antibody (Nab) pairs validation with NP antigen (GMP-V-2019nCoV-N002) in sandwich ELISA. The Nab005-007, Nab005-008, Nab006-007, Nab006-008 pairs represent the best ED50.



RELATED PRODUCTS

2019 nCoV (SARS2 coronavirus) Antibodies for COVID-19

| Cat No. | Antibody Name of 2019-nCoV(SARS-CoV-2) | Isotype | Source | Bioactivity validation |
|------------------------|---|------------|------------------------|---|
| GMP-V-2019nCoV-NAb001 | Anti-2019-nCoV NP human monoclonal antibody | Human IgG1 | Mammalian (human cell) | N protein binding, ELISA validated as capture antibody and detection antibody. Pair recommendation with GMP-V-2019nCoV-NAb002 , GMP-V-2019nCoV-NAb003 , GMP-V-2019nCoV-NAb004. |
| GMP-V-2019nCoV-NAb002 | Anti-2019-nCoV NP human scFv-Fc antibody | Scfv | Mammalian (human cell) | N protein binding, ELISA validated as capture antibody and detection antibody. Pair recommendation with GMP-V-2019nCoV-NAb001, GMP-V-2019nCoV-NAb003 , GMP-V-2019nCoV-NAb004. |
| GMP-V-2019nCoV-NAb003 | Anti-2019-nCoV NP mouse monoclonal antibody(mAb) | Mouse IgG | Hybridoma | N protein binding, ELISA validated as capture antibody and detection antibody. Pair recommendation with GMP-V-2019nCoV-NAb001, GMP-V-2019nCoV-NAb002, GMP-V-2019nCoV-NAb004. |
| GMP-V-2019nCoV-NAb004 | Anti-2019-nCoV NP mouse monoclonal antibody(mAb) | Mouse IgG | Hybridoma | N protein binding, ELISA validated as capture antibody and detection antibody. Pair recommendation with GMP-V-2019nCoV-NAb001, GMP-V-2019nCoV-NAb002 , GMP-V-2019nCoV-NAb003. |
| GMP-V-2019nCoV-S1Ab001 | Anti-2019-nCoV Spike (S1 protein) monoclonal antibody | Human IgG1 | Mammalian (human cell) | S-RBD protein binding, ELISA validated |
| GMP-V-2019nCoV-S1Ab002 | Anti-2019-nCoV Spike (S1 protein) monoclonal antibody | Human IgG1 | Mammalian (human cell) | S-RBD protein binding, ELISA validated,Western Blot validated |

SARS-CoV-2 (2019nCoV) Pseudotyped virus production & Pseudotyped Virus Based Neutralization Assay Service

1. SARS-CoV-2 Pseudotyped virus packaging and production (Cat.GM-2019nCoV-PSV01)
2. Effector cells: human ACE2 overexpression stable HEK293T cell lines
3. SARS-CoV-2(2019nCoV) Pseudotyped Virus Based Neutralization Assay Service for evaluating:
 - 1) Neutralizing antibodies
 - 2) Peptides blockers(peptide inhibitors)
 - 3) Types of Vaccines3(by testing immunized serum from mouse, NHP etc.)
 - 4) Compounds targeting Spike induced cell-fusion.

For details and price please [click here](#) or send email to support@genemedi.net

Recombinant 2019 nCoV (SARS2 coronavirus) Antigens reagents

| Cat No. | Antigen Name of 2019-nCoV(SARS-CoV-2) | Source (Expression Host) | Tag |
|-------------------------|---|--------------------------|-------|
| GMP-V-2019nCoV-N002 | Recombinant 2019-nCoV(SARS-CoV-2) Nucleocapsid Protein (N protein,N-His tag) | E.coli | N-His |
| GMP-V-2019nCoV-SRBD001 | Recombinant 2019-nCoV(SARS-CoV-2) Spike Protein (RBD, C-His Tag) | Mamamlian (human cell) | C-His |
| GMP-V-2019nCoV-SRBD002 | Recombinant 2019-nCoV(SARS-CoV-2) Spike Protein (RBD, C-mFC Tag) | Mamamlian (human cell) | C-mFc |
| GMP-V-2019nCoV-S1001 | Recombinant 2019-nCoV(SARS-CoV-2) Spike Protein (S1, His Tag) | Baculovirus-Insect Cells | C-His |
| GMP-V-2019nCoV-S1S2001 | Recombinant 2019-nCoV(SARS-CoV-2) Spike Protein (S1+S2 ECD, His tag) | Baculovirus-Insect Cells | C-His |
| GMP-V-2019nCoV-E001 | Recombinant 2019-nCoV(SARS-CoV-2) Envelope Protein (E protein,His Tag) | E.coli | N-His |
| GMP-H-ACE2001 | Recombinant human soluble ACE2 protein (soluble hACE2,extracellular hACE2,C-His) | Mamamlian (human cell) | C-His |
| GMP-H-ACE2002 | Recombinant human soluble ACE2 protein (soluble hACE2, extracellular hACE2, C-FC) | Mamamlian (human cell) | C-Fc |
| GMP-V-2019nCoV-Mpro001 | Recombinant 2019-nCoV(SARS-CoV-2) Main Proteinase (Mpro,3CLpro, His Tag) | E.coli | N-His |
| GMP-V-2019nCoV-PLpro001 | Recombinant 2019-nCoV(SARS-CoV-2) papain-like proteinase (PLpro, Nsp3, His Tag) | E.coli | N-His |
| GMP-V-2019nCoV-RdRP001 | Recombinant 2019-nCoV(SARS-CoV-2) RNA-directed RNA polymerase(RdRP, Nsp12, His Tag) | E.coli | C-His |
| GMP-V-2019nCoV-Nsp3X-01 | Recombinant 2019-nCoV(SARS-CoV-2)Nsp3-X domain(Macro domain, His tag) | E.coli | N-His |
| GMP-V-2019nCoV-Nsp10-01 | Recombinant 2019-nCoV(SARS-CoV-2) nsp10 (nsp10-CysHis,GFL protein,His Tag) | E.coli | N-His |
| GMP-V-2019nCoV-Nsp16-01 | Recombinant 2019-nCoV(SARS-CoV-2) nsp16 (nsp16-OMT,2'-o-MT,His Tag) | E.coli | N-His |

2019 nCoV (SARS2 coronavirus) gene and vectors

| Cat No. | 2019 nCoV related Gene | Gene & Vector description of 2019 nCoV | Vector | Reporter | Tag | Coden Optimized |
|---------------------|------------------------|---|---------------------|----------|---------|-------------------------------|
| GMV-V-2019 nCoV-051 | Spike(S1+S2) | pGMLV-2019nCoV-spike (S1+S2,C-6His) | Lentiviral vector | Zsgreen | C-6His | coden optimized for mamamlian |
| GMV-V-2019 nCoV-001 | Spike(S1+S2) | pGMLV-2019nCoV-spike(S1+S2,C-6His) | Lentiviral vector | Zsgreen | C-6His | No |
| GMV-V-2019 nCoV-017 | Spike(S1+S2) | pGM-2019nCoV-spike protein (Sprotein,S1+S2) | pcDNA3.1(+) | null | No tag | No |
| GMV-V-2019 nCoV-008 | Spike(S1+S2) | pGM-2019nCoV-spike protein (S protein,S1+S2) | pcDNA3.1(+) | null | No tag | coden optimized for mamamlian |
| GMV-V-2019 nCoV-053 | Spike(S1+S2) | Ad-2019nCoV-Spike(S1+S2,C-3FLAG) | Pre-made adenovirus | EGFP | C-3FLAG | coden optimized for mamamlian |
| GMV-V-2019 nCoV-047 | Spike(S1+S2) | Ad-2019nCoV-Spike(S1+S2,C-3FLAG) | Pre-made adenovirus | EGFP | C-3FLAG | No |
| GMV-V-2019 nCoV-052 | Spike(S1+S2) | pGMAD-2019nCoV-pGMAD-2019nCoV-spike (S protein,S1+S2,C-3FLAG) | Adenoviral vector | EGFP | C-3FLAG | coden optimized for mamamlian |
| GMV-V-2019 nCoV-004 | Spike(S1+S2) | pGMAD-2019nCoV-pGMAD-2019nCoV-spike (S protein,S1+S2,C-3FLAG) | Adenoviral vector | EGFP | C-3FLAG | No |
| GMV-V-2019 nCoV-035 | Spike(S1+S2) | pGM-2019nCoV-spike protein (S protein, S1+S2) | pET21a | null | C-His | coden optimized for E.coli |
| GMV-V-2019 nCoV-037 | Spike(S1+S2) | pGM-2019nCoV-spike protein (S protein, S1+S2) | pET-28a(+) | null | His | No |
| GMV-V-2019 nCoV-002 | Spike(S1) | pGMLV-2019nCoV-S1(C-6His) | Lentiviral vector | Zsgreen | C-6His | No |
| GMV-V-2019 nCoV-005 | Spike(S1) | pGMAD-2019nCoV-S1(C-3FLAG) | Adenoviral vector | EGFP | C-3FLAG | No |
| GMV-V-2019 nCoV-048 | Spike(S1) | Ad-2019nCoV-Spike(S1 protein, C-3FLAG) | Pre-made adenovirus | EGFP | C-3FLAG | No |
| GMV-V-2019 nCoV-003 | Spike RBD | pGMLV-2019nCoV-Spike RBD(C-6His) | Lentiviral vector | Zsgreen | C-6His | No |
| GMV-V-2019 nCoV-007 | Spike RBD | pGMAAV-2019nCoV-Spike RBD(C-3FLAG) | AAV vector | Zsgreen | C-3FLAG | No |
| GMV-V-2019 nCoV-050 | Spike RBD | AAV-2019nCoV-Spike (S protein RBD, C-3FLAG) | Pre-made AAV | Zsgreen | C-3FLAG | No |
| GMV-V-2019 nCoV-006 | Spike RBD | pGMAD-2019nCoV-Spike RBD(C-3FLAG) | Adenoviral vector | EGFP | C-3FLAG | No |
| GMV-V-2019 nCoV-049 | Spike RBD | Ad-2019nCoV-Spike(S protein RBD, C-3FLAG) | Pre-made adenovirus | EGFP | C-3FLAG | No |

2019 nCoV (SARS2 coronavirus) gene and vectors

| Cat No. | 2019 nCoV related Gene | Gene & Vector description of 2019 nCoV | Vector | Reporter | Tag | Coden Optimized |
|---------------------|------------------------|---|-------------|----------|--------|-------------------------------|
| GMV-V-2019 nCoV-015 | ORF8 | pGM-2019nCoV-ORF8 | pcDNA3.1(+) | null | No tag | No |
| GMV-V-2019 nCoV-024 | ORF8 | pGM-H2019nCoV-ORF8 | pCDNA3.1(+) | null | No tag | coden optimized for mamamlian |
| GMV-V-2019 nCoV-033 | ORF8 | pGM-E2019nCoV-ORF8 | pET21a | null | C-His | coden optimized for E.coli |
| GMV-V-2019 nCoV-014 | ORF7 | pGM-2019nCoV-ORF7a | pcDNA3.1(+) | null | No tag | No |
| GMV-V-2019 nCoV-023 | ORF7 | pGM-H2019nCoV-ORF7a | pCDNA3.1(+) | null | No tag | coden optimized for mamamlian |
| GMV-V-2019 nCoV-032 | ORF7 | pGM-E2019nCoV-ORF7a | pET21a | null | C-His | coden optimized for E.coli |
| GMV-V-2019 nCoV-013 | ORF6 | pGM-2019nCoV-ORF6 | pcDNA3.1(+) | null | No tag | No |
| GMV-V-2019 nCoV-022 | ORF6 | pGM-H2019nCoV-ORF6 | pCDNA3.1(+) | null | No tag | coden optimized for mamamlian |
| GMV-V-2019 nCoV-031 | ORF6 | pGM-E2019nCoV-ORF6 | pET21a | null | C-His | coden optimized for E.coli |
| GMV-V-2019 nCoV-012 | ORF3a | pGM-2019nCoV-ORF3a | pcDNA3.1(+) | null | No tag | No |
| GMV-V-2019 nCoV-021 | ORF3a | pGM-H2019nCoV-ORF3a | pCDNA3.1(+) | null | No tag | coden optimized for mamamlian |
| GMV-V-2019 nCoV-030 | ORF3a | pGM-E2019nCoV-ORF3a | pET21a | null | C-His | coden optimized for E.coli |
| GMV-V-2019 nCoV-016 | ORF10 | pGM-2019nCoV-ORF10 | pcDNA3.1(+) | null | No tag | No |
| GMV-V-2019 nCoV-025 | ORF10 | pGM-H2019nCoV-ORF10 | pCDNA3.1(+) | null | No tag | coden optimized or mamamlian |
| GMV-V-2019 nCoV-034 | ORF10 | pGM-E2019nCoV-ORF10 | pET21a | null | C-His | coden optimized for E.coli |
| GMV-V-2019 nCoV-011 | N protein | pGM-2019nCoV-Nucleocapsid Protein (N protein) | pcDNA3.1(+) | null | No tag | No |
| GMV-V-2019 nCoV-020 | N protein | pGM-2019nCoV-Nucleocapsid Protein (N protein) | pCDNA3.1(+) | null | No tag | coden optimized for mamamlian |
| GMV-V-2019 nCoV-029 | N protein | pGM-2019nCoV-Nucleocapsid Protein (N protein) | pET21a | null | C-His | coden optimized for E.coli |

2019 nCoV (SARS2 coronavirus) gene and vectors

| Cat No. | 2019 nCoV related Gene | Gene & Vector description of 2019 nCoV | Vector | Reporter | Tag | Coden Optimized |
|---------------------|------------------------|---|---------------------|----------|---------|-------------------------------|
| GMV-V-2019 nCoV-010 | M protein | pGM-2019nCoV-Membrane protein (M protein) | pcDNA3.1(+) | null | No tag | No |
| GMV-V-2019 nCoV-019 | M protein | pGM-2019nCoV-Membrane protein (M protein) | pCDNA3.1(+) | null | No tag | coden optimized for mamamlian |
| GMV-V-2019 nCoV-028 | M protein | pGM-2019nCoV-Membrane protein (M protein) | pET21a | null | C-His | coden optimized for E.coli |
| GMV-V-2019 nCoV-009 | E protein | pGM-2019nCoV-Envelope Protein (E protein) | pcDNA3.1(+) | null | No tag | No |
| GMV-V-2019 nCoV-018 | E protein | pGM-2019nCoV-Envelope Protein (E protein) | pCDNA3.1(+) | null | No tag | coden optimized for mamamlian |
| GMV-V-2019 nCoV-027 | E protein | pGM-2019nCoV-Envelope Protein (E protein) | pET21a | null | C-His | coden optimized for E.coli |
| GMV-V-2019 nCoV-045 | TMPRSS2 | pGMLv-hTMPRSS2(C-3FLAG) | Lentiviral vector | Zsgreen | C-3FLAG | No |
| GMV-V-2019 nCoV-041 | ACE2 | pGMLV-hACE2(C-3FLAG) | Lentiviral vector | Zsgreen | C-3FLAG | No |
| GMV-V-2019 nCoV-042 | ACE2 | pAD-hACE2(C-3FLAG) | Pre-made Adenovirus | EGFP | C-3FLAG | No |
| GMV-V-2019 nCoV-046 | TMPRSS2 | pGMLv-mtmprss2(C-3FLAG) | Lentiviral vector | Zsgreen | C-3FLAG | No |
| GMV-V-2019 nCoV-043 | ACE2 | pAD-mACE2(C-3FLAG) | Pre-made Adenovirus | EGFP | C-3FLAG | No |
| GMV-V-2019 nCoV-044 | ACE2 | pGMLV-mACE2(C-3FLAG) | Lentiviral vector | Zsgreen | C-3FLAG | No |