



Member of Hackensack Meridian Health

Virology Core

for Antiviral Drug Screening

For more information contact

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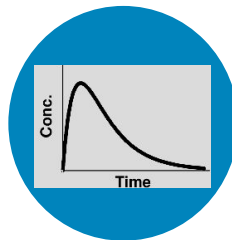
Antiviral Assessment



In vitro antiviral testing including cytopathic effect, plaque assay, virus yield reduction and/or replicon assays.



In vivo antiviral testing of candidates in well-established rodent infection models (See Animal Models Core for more details).



Supportive drug metabolism and pharmacokinetics (PK) studies are also available to inform study design (See Pharmacology Core for more details).



BioTek EL406
Washer Dispenser



Cellink I.DOT
non-contact liquid handler



Integra Biosciences Viaflow
96 electronic dispenser



HAMILTON STARlet
automated liquid handler



Nexcelom Celigo
Image Cytometer



BioTek Cytation C10
Confocal Imaging Reader



QIAcube HT



AriaMx Real-time
PCR System Agilent



Contact Us for More Information

Please contact CDI staff at e-mail below for specific details since available models change periodically. Additional viral and fungal pathogens beyond those listed in this document are also available for assessing broader spectrum for candidates.

No.	SARS-CoV-2 REPORTER VIRUS STRAINS	Pango lineage	Source
1	mNeongreen-SARS-CoV-2	WT	University of Texas Medical Branch at Galveston
2	SARS-Related Coronavirus 2, Isolate USA-WA1/2020, Recombinant Infectious Clone with Nanoluciferase Gene (icSARS-CoV-2-nLuc)	WT	BEI Resources NR-54003
3	SARS-Related Coronavirus 2, Isolate USA-WA1/2020, Recombinant Infectious Clone with Enhanced Green Fluorescent Protein (icSARS-CoV-2-eGFP)	WT	BEI Resources NR-54002
No.	SARS-CoV-2 WILD-TYPE	Pango lineage	Source
1	Washington SARS-Related Coronavirus 2, Isolate USA-WA1/2020	WT	BEI Resources NR-52281
No.	SARS-CoV-2 SUBVARIANT STRAINS	Pango lineage	Source
1	Omicron subvariant BA.2 , Lineage B.1.1.529 (SARS-Related Coronavirus 2, Isolate hCoV-19/USA/CO-CDPHE-2102544747/2021)	Omicron BA.2	BEI Resources NR-56520
2	Omicron subvariant BA.2.75 (SARS-Related Coronavirus 2, Isolate hCoV-19/Japan/TY41-716/2022)	Omicron BA.2.75	BEI Resources NR-58706
3	Omicron subvariant BA.5 (SARS-Related Coronavirus 2 -- Isolate hCoV-19/South Africa/CERI-KRISP-K040013/2022)	Omicron BA.5	BEI Resources NR-56798
4	Omicron subvariant BA.5 (SARS-Related Coronavirus 2 -- Isolate hCoV-19/USA/COR-22-063113/2022)	Omicron BA.5	BEI Resources NR-58616
5	Omicron subvariant BF.5 (SARS-Related Coronavirus 2, Omicron subvariant BF.5 Isolate hCoV-19/USA/MD-HP34985/2022)	Omicron BF.5	BEI Resources NR-58716
6	Omicron subvariant BQ.1 (SARS-Related Coronavirus 2, Isolate hCoV-19/USA/MD-HP38960/2022)	Omicron BQ.1	BEI Resources NR-58975
7	Omicron subvariant XBB.1.5 (SARS-Related Coronavirus 2, Omicron subvariant XBB 1.5 Isolate hCoV-19/USA/MD-HP40900/2022)	Omicron XBB	BEI Resources NR-59104
8	Omicron subvariant XBB.2.3 (SARS-Related Coronavirus 2 -- Isolate hCoV-19/USA/MD-HP47865/2023)	Omicron XBB	BEI Resources NR-59501
9	Omicron subvariant EG.5.1 (SARS-Related Coronavirus 2 -- Isolate hCoV-19/USA/MD-HP47946/2023)	Omicron XBB	BEI Resources NR-59503
10	Omicron subvariant BA.2.86 (SARS-Related Coronavirus 2 -- SARS-Related Coronavirus 2, Isolate hCoV-19/USA/MI-UM-10052670540/2023 (Lineage BA.2.86) in VTA Cells)	Omicron BA.2.86	BEI Resources NR-59638
11	Omicron subvariant BA.1	Omicron BA.1	Patient nasal swab CVD 219
12	Omicron subvariant BA.1	Omicron BA.1	Patient nasal swab CVD 221
13	Omicron subvariant BA.1	Omicron BA.1	Patient nasal swab CVD 225
14	Omicron subvariant BA.2	Omicron BA.2	Patient nasal swab CVD 238
15	Omicron subvariant BA5.5	Omicron BA.5.5	Patient nasal swab CVD 299
16	Omicron subvariant BF.13	Omicron BF.13	Patient nasal swab CVD 336
17	Omicron subvariant XBB 1.5	Omicron XBB	Patient nasal swab CVD 357
18	Omicron subvariant XBB.1.9.2	Omicron XBB	Patient nasal swab CVD 369
19	Omicron subvariant XBB.1.9.2	Omicron XBB	Patient nasal swab CVD 374
20	Omicron subvariant XBB.1.16.1	Omicron XBB	Patient nasal swab CVD 372
21	Omicron subvariant EG.5.1	Omicron XBB	Patient nasal swab CVD 385
22	Omicron subvariant FL.1.5.1	Omicron XBB	Patient nasal swab CVD 388
23	Omicron subvariant HV.1	Omicron XBB	Patient nasal swab CVD 401
24	Omicron subvariant JN.1	Omicron BA.2.86.1.1	Patient nasal swab CVD 408
25	Delta subvariant	Delta	Patient nasal swab CVD 198
No.	HUMAN CORONAVIRUSES	Source	
1	Human Coronavirus, NL63	BEI Resources NR-470	
2	Human Coronavirus, 229E	BEI Resources NR-52726	
3	Human Coronavirus, OC43	BEI Resources NR-56241	

No.	MERS-CoV STRAINS	Source
1	Middle East Respiratory Syndrome Coronavirus (MERS-CoV), EMC/2012	BEI Resources NR-44260
2	Middle East Respiratory Syndrome Coronavirus, EMC/2012, Recombinant Infectious Clone [icMERS-CoV (WT)]	BEI Resources NR-48811
3	Middle East Respiratory Syndrome Coronavirus, Recombinant Infectious Clone with T1015N Tissue Culture Adaptation Mutation (icMERS-CoV-T1015N)	BEI Resources NR-48812
4	Middle East Respiratory Syndrome Coronavirus, Recombinant Infectious Clone with T1015N Tissue Culture Adaptation Mutation (icMERS-CoV-T1015N) Clone with ORF5 Red Fluorescent Protein Replacement (icMERS-CoV-RFP-ΔORF5)	BEI Resources NR-48813
5	Middle East Respiratory Syndrome Coronavirus, Florida/USA-2_ Saudi Arabia_2014	BEI Resources NR-50415
6	Mouse-adapted MERS-CoV strain	University of Iowa

No.	OTHER RESPIRATORY VIRUSES	Source
1	Influenza A (H1N1)	BEI Resources NR-3169
2	Respiratory Syncytial Virus (RSV)	BEI Resources NR-12149

No.	MONKEYPOX STRAINS	Source
1	Monkeypox virus, USA-2003	BEI Resources NR-2500
2	Monkeypox Virus, hMPXV/USA/MA001/2022	BEI Resources NR-58622