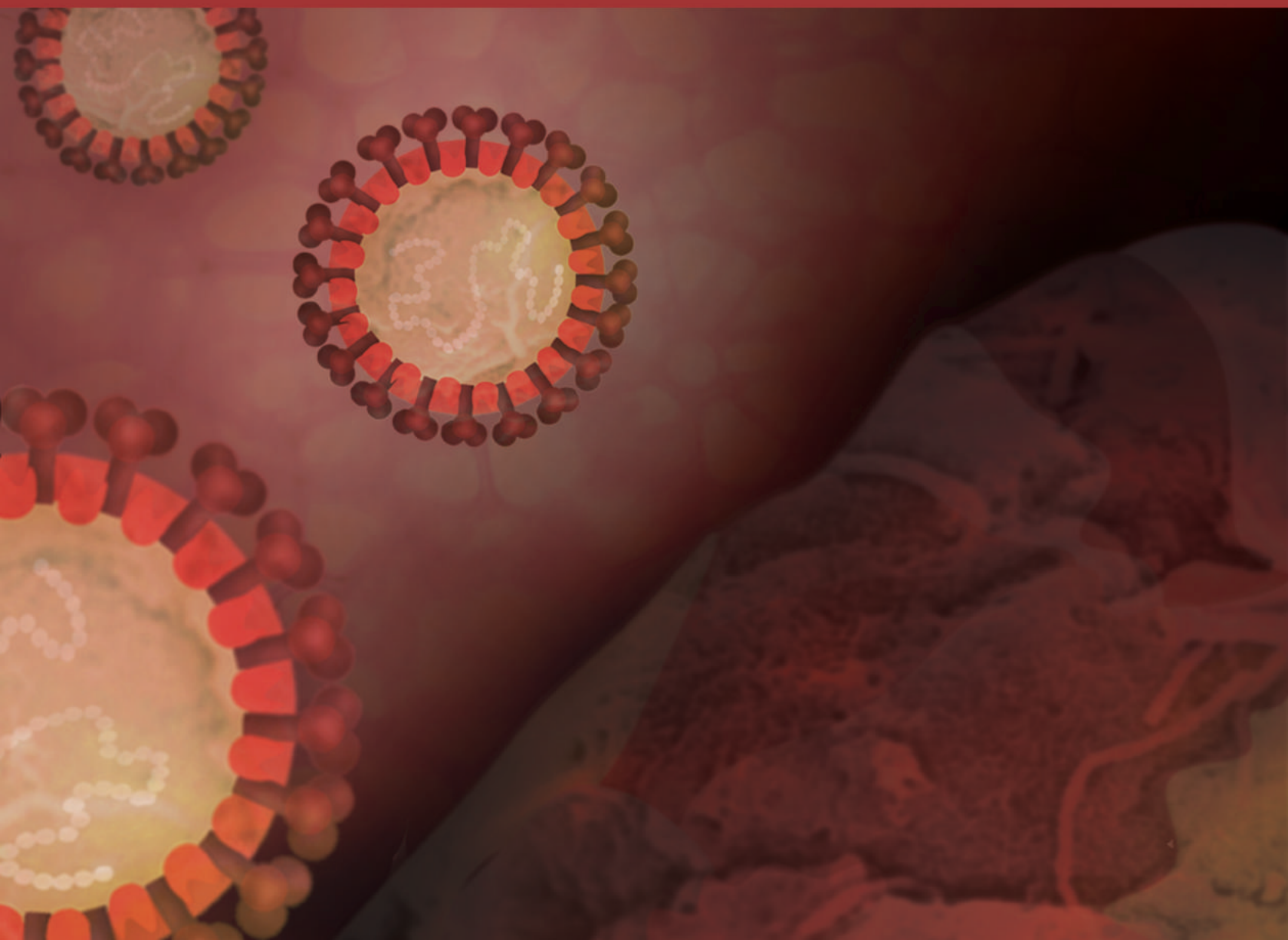
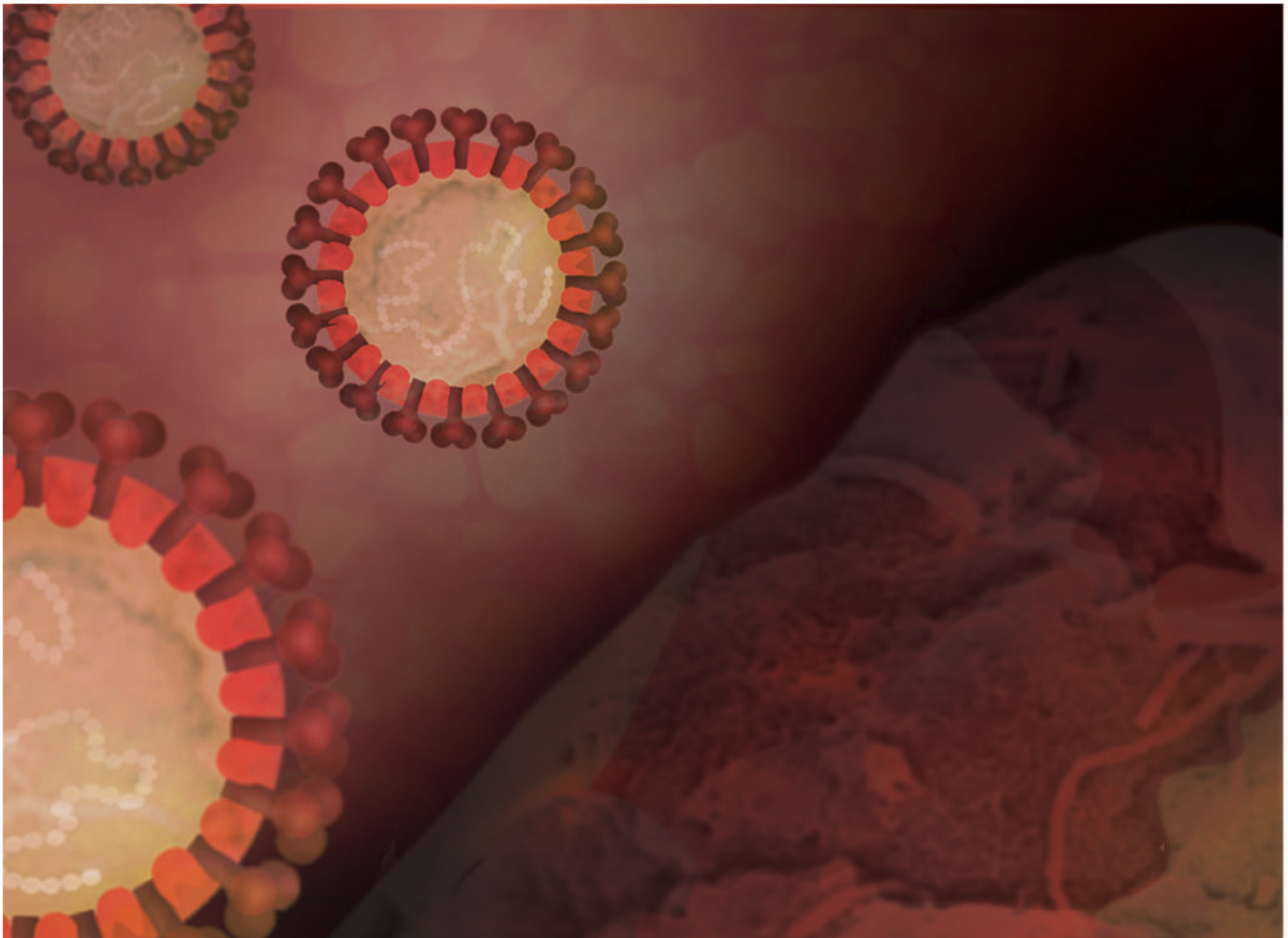


CORONAVIRUS

Proteins | Kits | Lentiviruses | Antibodies | Custom Services

RESEARCH,
DRUG DISCOVERY,
DIAGNOSTICS & VACCINES





Advance & Accelerate COVID-19 Research

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BPS Bioscience Advantages

Scientist Founded, Scientist Driven



Produced In-house

- Made in the USA at our San Diego, California laboratory
- Get customized, personal support directly from the source



Broad Portfolio

- Full range of solutions for drug discovery, diagnostics, and vaccine development
- Cell lines, lentiviruses, proteins, screening assay kits, & antibodies
- Products in a variety of related categories including immunotherapy & proteases

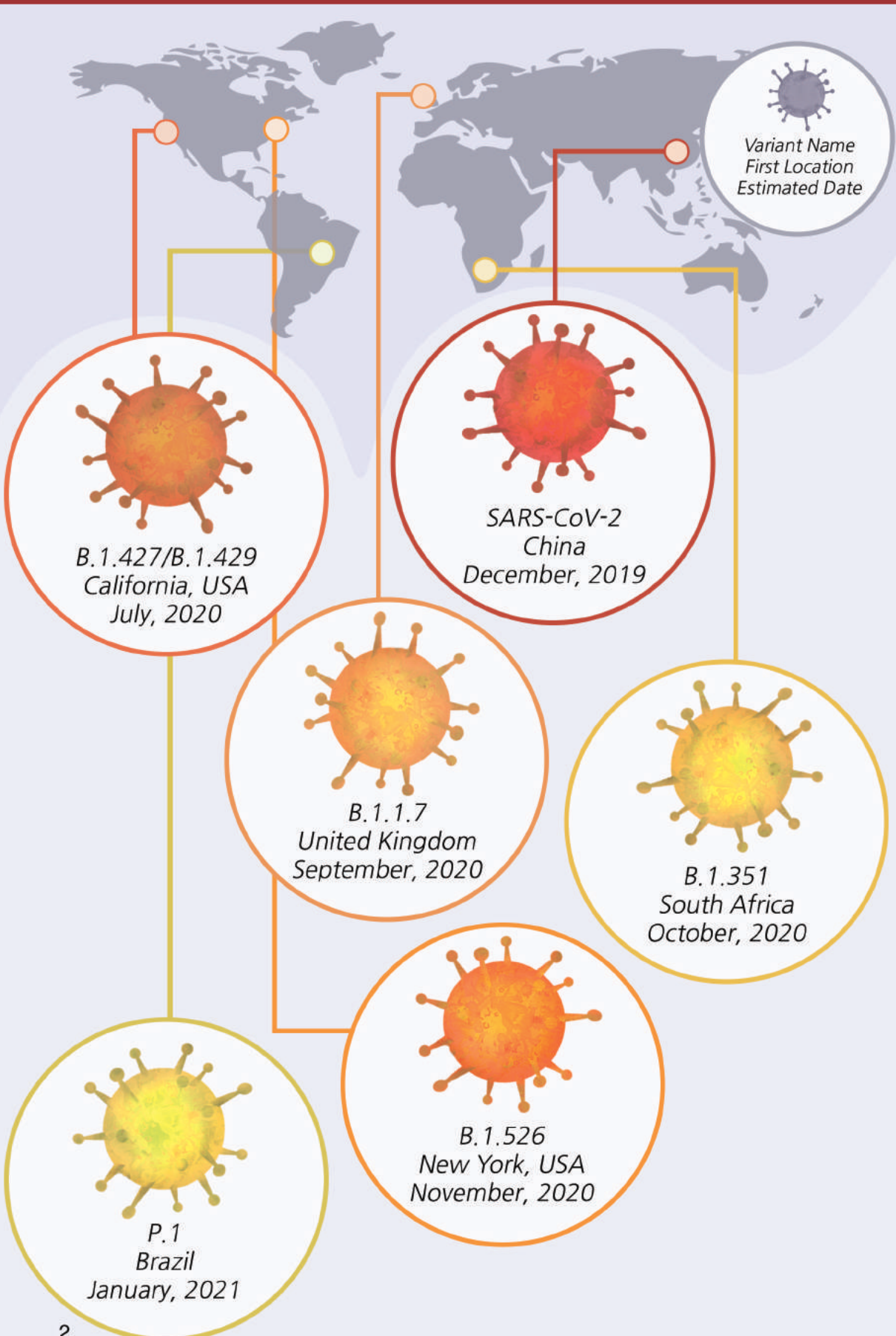


Services Available

- CRISPR, screening & profiling, & custom development
- Custom cell line development services, custom knock-out and knock-in cell lines
- Unique panels of assays for evaluation of lead compounds

Coronavirus Variants

Mutants, Variants, and WT Products to Research COVID-19



BPS has developed a collection of

recombinant proteins,
unique assay kits,
pseudovirions,
lentiviruses,
and antibodies

to help intensify research
on emerging variants
and their effects on
pathogenesis,
therapeutic drugs,
and vaccines

Coronavirus Products

Tools to Investigate COVID-19

PROTEINS



SARS-CoV-2 | SARS-CoV | Human | Monkey

| Worldwide Variants | Mutants | EU and Biotin-Labeled | Various Tags

3CL Protease | ACE2 | Spike (S1, RBD) | PLPro | Nucleocapsid | Others

ASSAY KITS



- Convenient activity assay kits for screening enzyme inhibitors and target molecules impacting SARS-CoV2 pathologic mechanisms

- Validation made simple with multiple detection formats

Chemiluminescent | Colorimetric | Fluorogenic | TR-FRET

CELL LINES



- Utilize cell lines for binding assays, flow cytometry, and for screening antibodies

- Multiple host cell line options: HeLa, HEK293, CHO, and Vero E6

- Screen for antibodies against human ACE2, for competition binding studies with ACE2 soluble protein, and to determine the Spike-ACE2 locking effects of neutralizing antibodies

ANTIBODIES



Binding studies | FACS | ELISA | Neutralization

Anti-Spike | Anti-Nucleocapsid | IgG & IgM unconjugated | Others

Coronavirus Products

Lentiviruses

Options



Reporters	Cell Types	Variants & Mutants	Advantages
eGFP Luciferase Dual (Luc & eGFP)	Hela CHO HEK293 Vero E6	D614G B.1.1.7 B.1.351 P.1 B.1.427/B.1.429 & more	Off-the-shelf BSL2 safety level Multiple Mutants Reporter Cell Lines

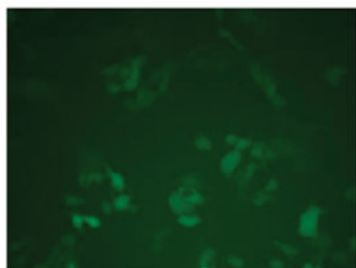
Uses and Advantages

- Study the mechanism of viral transduction
- Screen for neutralizing antibodies for SARS-CoV-2 Spike and ACE2
- ACE2, Spike, TMRPSS2, and Bald lentiviruses available with different reporters
- Mutated Lentiviruses: D614G, K417T, E484K, N501Y, & more
- SARS-CoV-2 Variant Lentiviruses: B.1.1.7, B.1.351, P.1, & more
- Wild-type and variant Spike protein used as ENV for lentivirus infection
- Reporter eGFP and/or Luciferase under the control of a CMV promoter (constitutive expression)
- Bald virus control: no VSV-G or Spike

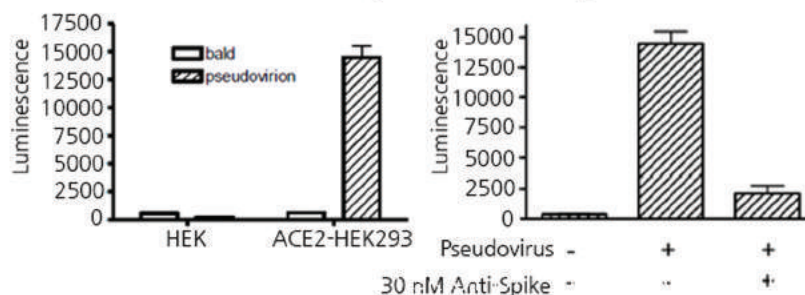
Example Data

Spike (SARS-CoV-2) Pseudotyped Lentivirus (Luc-eGFP Dual Reporter) - BPS Bioscience #79982

Transduction of ACE2-HEK293 Cells
Monitored by eGFP Expression



Transduction of ACE2-HEK293
Monitored by Luciferase Activity






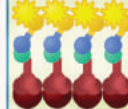







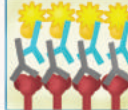





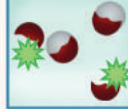



Screening & Profiling

Biochemical Assays

BPS Bioscience has developed innovative assays and screening services for investigating potential COVID-19 antiviral drugs. Identify antibodies or small molecule inhibitors that bind to either viral or target proteins.

- Screening and Profiling Services
- Assay Design & Optimization
- Validation Studies

Assay Formats

Type of Assay	Example Protocol			
Chemiluminescent	 ACE2	 Spike -Biotin	 Strep -HRP	 HRP Substrate
Colorimetric	 Spike	 ACE2 -Biotin	 Strep -HRP	 HRP Substrate
Colorimetric IgG Detection	 Spike	 Serum Sample	 Anti-Fc -HRP	 HRP Substrate
TR-FRET	 ACE2-EU Dye Labeled Acceptor	 Spike -Biotin	 Blocking Compound	
Fluorogenic	 ACE2 or 3CL	 Inhibitor	 Fluorogenic Substrate	
Homogeneous	 Digoxigenin-labeled RNA Duplex	 ATP-Biotin	 Acceptor & Donor Beads	

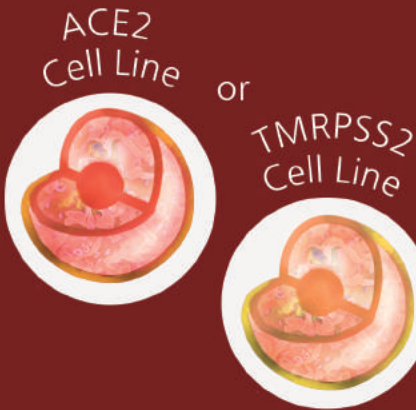
Screening & Profiling

Cell-Based Assays

Custom Assay Development & Screening Services

- Cell-based assay services are available using the SARS-CoV-2 Spike-pseudovirus and the ACE2-HEK293 cell line or the TMPRSS2 - Vero E6 cell line
- Screen for neutralization of antibodies/small molecules which target the interactions between Spike and ACE2/TMPRSS2
- Custom development of cell-based assays available for screenings services

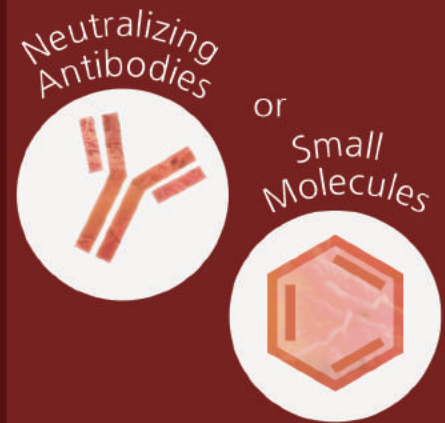
Transduce



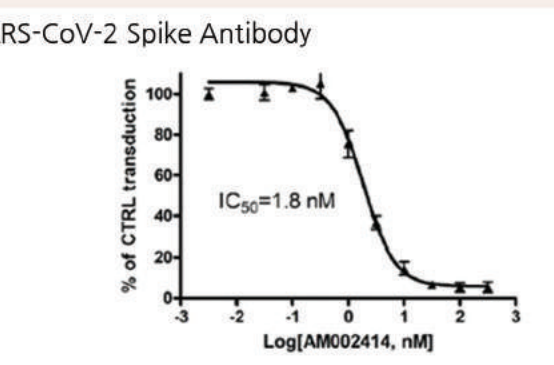
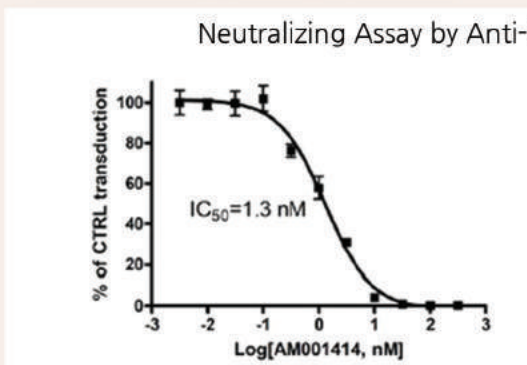
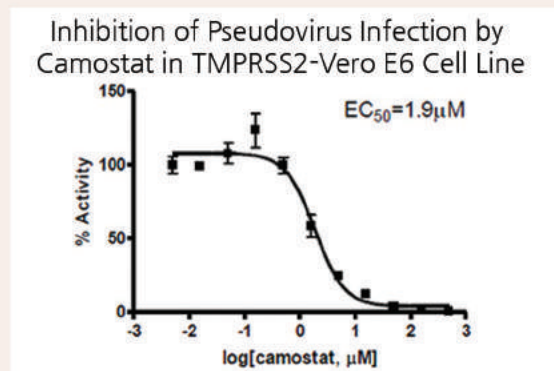
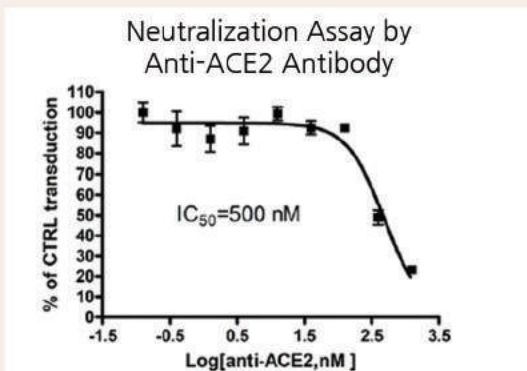
Using



To Screen For



Example Data

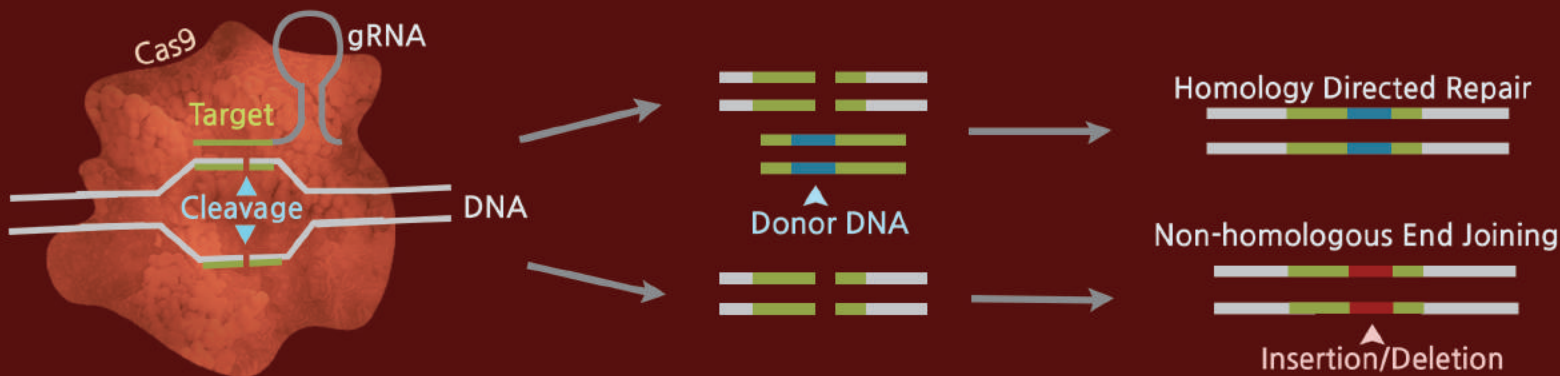


CRISPR-Cas9 & Cell Line Development

Knock-out or Knock-in Cell Lines

- Introduce a specific point mutation or add a tag to your endogenous gene of interest
- Knock-out your gene(s) of interest for mechanistic or screening studies
- Customized lentivirus can be used to quickly generate knock-down or knock-out cell pools

Knock-out or Knock-in



Project Milestones



1

Molecular Biology

BPS will synthesize three short guide RNA sequences for knock-out cell lines. BPS can also design the HDR template for knock-in cell lines.



4

Confirmation of Expression

The expression level of the gene of interest will be analyzed via Western Blot or FACS.



2

CRISPR Transfection

Depending on the cell-type, cells can be transfected via electroporation, liposome-based transfection, or viral infection.



5

Confirmation

Genes showing loss of expression will be analyzed through genomic sequencing. For knock-in mutations, functional validation is available.



3

Limiting Dilution

Based upon the results of the initial pool testing, the cell pool will be clonally diluted and the single cell-derived clones will be expanded.

Protein Binding Studies

Analytics with BLI Services

BPS Bioscience offers Bio-Layer Interferometry (BLI) services to evaluate and analyze protein interactions. Label free analysis is a critical research method to determine the binding kinetic parameters of compounds. These studies are of key importance for pharmaceutical and biotechnological preclinical drug development.

Utilize BPS Bioscience's BLI services for deeper insight into your protein studies through measuring binding kinetics, steady state affinity, and through target validation. BPS will provide accurate and sensitive kinetic studies in a timely manner to further progress your research.

BLI Binding Analysis

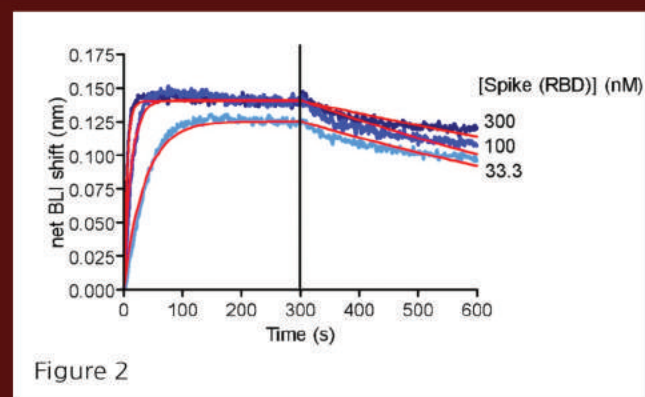
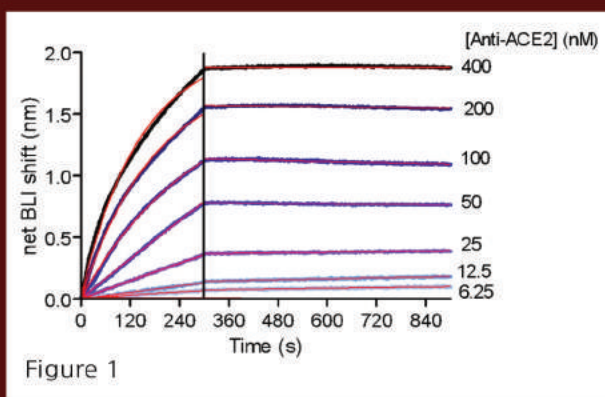


Figure 1: BLI binding analysis of polyclonal human anti-ACE2 antibody to immobilized ACE2-His (BPS Bioscience #11003) via anti-His probes. $K_d = 144$ nM.

Figure 2: BLI binding analysis of SARS-CoV-2 Spike (RBD) to immobilized ACE2-His (BPS Bioscience #11003) via anti-His probes. $K_d = 1.2$ nM.

Available Services

- Protein immobilization
- Binding affinity measurements
- Data fitting and reporting
- Access to BPS Bioscience's extensive protein portfolio of target proteins
- Detailed final report includes all data, methods, and results

Antibodies, Assay Kits Coronavirus

Antibodies	Catalog#	Size
Anti-Human IgG, Unconjugated Antibody	100736	100 µg 500 µg
Anti-Human IgM, Unconjugated Antibody	100737	100 µg 500 µg
Anti-Nucleocapsid Antibody (SARS-CoV-2)	100861	20 µg 100 µg
Anti-Spike S1 Monoclonal Antibody (SARS-CoV-2)	100715	20 µg 100 µg
Spike Neutralizing Antibody (Clone G10xA1) (SARS-CoV-2)	101326	100 µg
Spike Neutralizing Antibody (Clone G10xA5) (SARS-CoV-2)	101327	100 µg
Spike Neutralizing Antibody (Clone LxC1-G10) (SARS-CoV-2)	101246	100 µg
Spike S1 Neutralizing Antibody (B.1.617.2, B.1.617.2.1, B.1.1.7, B.1.351, B.1.429, and P.1 Variants) (Clone C-A11) (SARS-CoV-2)	101024	100 µg
Spike S1 Neutralizing Antibody (SARS-CoV-2) (Clone: 414-1)	100793	100 µg
Spike S1 Neutralizing Antibody (SARS-CoV-2) (Clone: 414-2)	100792	100 µg
Spike S1 Neutralizing Antibody (VHH), Fc-fusion (IgG1), Avi-Tag (SARS-CoV-1)	100784	100 µg
Spike S1 Neutralizing Antibody (VHH), Fc-fusion (IgG1), Avi-Tag (SARS-CoV-1), Biotin-labeled	100785	50 µg 100 µg
Spike Trimer Neutralizing Antibody (B.1.617.2, B.1.617.2.1, WT and B.1.1.7 Variants) (Clone hC-A11) (SARS-CoV-2)	101061	100 µg

Assay Kits	Catalog#	Size
3CL Protease (B.1.1.529, Omicron Variant) (SARS-CoV-2) Assay Kit	78350	96 reactions 384 reactions
3CL Protease (MERS-CoV) Assay Buffer	78022	25 ml
3CL Protease (MERS-CoV) Inhibitor Screening Assay Kit	78278	96 reactions
3CL Protease (SARS-CoV-1) Assay Kit	78015	96 reactions
3CL Protease Assay Buffer	79956	25 ml
3CL Protease, MBP-tagged (SARS-CoV-2) Assay Kit	79955	96 reactions 384 reactions
3CL Protease, Untagged (SARS-CoV-2) Assay Kit	78042	96 reactions 384 reactions

Assay Kits	Catalog#	Size
3x ACE2-Spike TR-FRET Buffer	79953	4 ml
ACE2 Inhibitor Screening Assay Kit	79923	96 reactions
ACE2: Spike S1 RBD (SARS-CoV-2) Inhibitor Screening Assay Kit	79936	96 reactions
ACE2: Spike S1 RBD, Mouse Fc-fusion (SARS-CoV-2) Inhibitor Screening Colorimetric Assay Kit	78031	96 reactions
ACE2: Spike S1-Biotin (SARS-CoV-2) Inhibitor Screening Assay Kit	79945	96 reactions
Cathepsin B Inhibitor Screening Assay Kit	79590	96 reactions
Cathepsin L Inhibitor Screening Assay Kit	79591	96 reactions
Furin Protease Assay Kit	78040	96 reactions
IL-6:IL-6R Inhibitor Screening Assay Kit	78027	96 reactions
Papain-like Protease (SARS-CoV-2) Assay Kit: Deubiquitinase Activity	79996	96 reactions
Papain-like Protease (SARS-CoV-2) Assay Kit: Protease Activity	79995	96 reactions 384 reactions
Papain-like Protease Assay Buffer	78039	25 ml 1 L
SARS-CoV-1 Spike Trimer (S1+S2):ACE2 Inhibitor Screening Colorimetric Assay Kit	78012	96 reactions
SARS-CoV-2 IgG Detection Kit (Colorimetric Anti-Spike S1 RBD IgG detection)	79985	96 reactions
SARS-CoV-2 IgG Detection Kit (Colorimetric Trimer Anti-Spike IgG detection)	79975	96 reactions
SARS-CoV-2 Spike Trimer (S1+S2):ACE2 Inhibitor Screening Colorimetric Assay Kit	79999	96 reactions
Spike S1 (B.1.1.529 BA.1, Omicron Variant) (SARS-CoV-2): ACE2 TR-FRET Assay Kit	78358	384 reactions
Spike S1 (B.1.1.7, Alpha Variant) (SARS-CoV-2): ACE2 Inhibitor Screening Chemiluminescence Assay Kit	78154	96 reactions
Spike S1 (B.1.1.7, Alpha Variant) (SARS-CoV-2): ACE2 Inhibitor Screening Colorimetric Assay Kit	78155	96 reactions
Spike S1 (B.1.1.7; Alpha Variant) (SARS-CoV-2): ACE2 TR-FRET Assay Kit	78282	384 reactions
Spike S1 (B.1.351; Beta Variant) (SARS-CoV-2): ACE2 TR-FRET Assay Kit	78287	384 reactions
Spike S1 (B.1.429; Epsilon Variant) (SARS-CoV-2): ACE2 TR-FRET Assay Kit	78292	384 reactions

Assay Kits, Coronavirus Cell Lines, Inhibitors, Lentiviruses

Coronavirus

Assay Kits	Catalog#	Size
Spike S1 (B.1.617 Variant) (SARS-CoV-2): ACE2 TR-FRET Assay Kit	78288	384 reactions
Spike S1 (B.1.617.1; Kappa Variant) (SARS-CoV-2): ACE2 TR-FRET Assay Kit	78283	384 reactions
Spike S1 (B.1.617.2.1; Delta Plus Variant) (SARS-CoV-2): ACE2 TR-FRET Assay Kit	78295	384 reactions
Spike S1 (B.1.617.2; Delta Variant) (SARS-CoV-2): ACE2 TR-FRET Assay Kit	78291	384 reactions
Spike S1 (B.1.618 Variant) (SARS-CoV-2): ACE2 TR-FRET Assay Kit	78289	384 reactions
Spike S1 (K417T, E484K, N501Y) (SARS-CoV-2): ACE2 TR-FRET Assay Kit	78293	384 reactions
Spike S1 (P.1; Gamma Variant) (SARS-CoV-2): ACE2 TR-FRET Assay Kit	78284	384 reactions
Spike S1 (SARS-CoV-2): ACE2 Inhibitor Screening Colorimetric Assay Kit	79954	96 reactions
Spike S1 (Wild-Type) (SARS-CoV-2): ACE2 TR-FRET Assay Kit	78281	384 reactions
Spike S1 RBD (B.1.1.529 BA.1, Omicron Variant) (SARS-CoV-2): ACE2 Inhibitor Screening Chemiluminescence Assay Kit	78357	96 reactions
Spike S1 RBD (B.1.1.529 BA.1, Omicron Variant) (SARS-CoV-2): ACE2 Inhibitor Screening Colorimetric Assay Kit	78339	96 reactions
Spike S1 RBD (B.1.1.7, Alpha Variant) (N501Y) (SARS-CoV-2): ACE2 Inhibitor Screening Chemiluminescence Assay Kit	78140	96 reactions
Spike S1 RBD (B.1.1.7, Alpha Variant) (N501Y) (SARS-CoV-2): ACE2 Inhibitor Screening Colorimetric Assay Kit	78133	96 reactions
Spike S1 RBD (B.1.351, Beta Variant) (SARS-CoV-2): ACE2 Inhibitor Screening Chemiluminescence Assay Kit	78151	96 reactions
Spike S1 RBD (B.1.351, Beta Variant) (SARS-CoV-2): ACE2 Inhibitor Screening Colorimetric Assay Kit	78152	96 reactions
Spike S1 RBD (B.1.617.2; Delta Variant) (SARS-CoV-2): ACE2 Inhibitor Screening Colorimetric Assay Kit	78277	96 reactions
Spike S1 RBD (SARS-CoV-2): ACE2 Inhibitor Screening Assay Kit	79931	96 reactions
Spike S1 RBD (SARS-CoV-2): ACE2 Inhibitor Screening Colorimetric Assay Kit	78018	96 reactions
Spike S1-Biotin (SARS-CoV-2): ACE2 TR-FRET Assay Kit	79949	96 reactions 384 reactions
Spike Trimer (S1+S2) (B.1.1.529 BA.1, Omicron Variant) (SARS-CoV-2): ACE2 Inhibitor Screening Chemiluminescence Assay Kit	78369	96 reactions
Spike Trimer (S1+S2) (B.1.1.529 BA.1, Omicron Variant) (SARS-CoV-2): ACE2 Inhibitor Screening Colorimetric Assay Kit	78365	96 reactions
Spike Trimer (S1+S2) (B.1.1.7, Alpha Variant) (SARS-CoV-2): ACE2 Inhibitor Screening Colorimetric Assay Kit	78175	96 reactions

Assay Kits	Catalog#	Size
Spike Trimer (S1+S2) (B.1.351, Beta Variant) (SARS-CoV-2): ACE2 Inhibitor Screening Colorimetric Assay Kit	78174	96 reactions
Spike Trimer (S1+S2) (B.1.617.2.1; Delta Plus Variant) (SARS-CoV-2): ACE2 Inhibitor Screening Colorimetric Assay Kit	78276	96 reactions
Spike Trimer (S1+S2) (B.1.617.2; Delta Variant) (SARS-CoV-2): ACE2 Inhibitor Screening Colorimetric Assay Kit	78275	96 reactions
Spike Trimer (S1+S2) (P.1; Gamma Variant) (SARS-CoV-2): ACE2 Inhibitor Screening Colorimetric Assay Kit	78274	96 reactions
TMPRSS2 Fluorogenic Assay Kit	78083	96 reactions

Coronavirus Cell Lines	Catalog#	Size
ACE2 - CHO Recombinant Cell Line	79959	2 vials
ACE2 - HEK293 Recombinant Cell Line	79951	2 vials
ACE2 - HeLa Recombinant Cell Line	79958	2 vials
TMPRSS2 - Vero E6 Recombinant Cell Line	78081	2 vials

Inhibitors	Catalog#	Size
Decanoyl-RVKR-CMK	78713	500 µg 1 mg 5 mg
GC376	78013	50 µg

Lentiviruses	Catalog#	Size
ACE2 Lentivirus	79944	500 µl x 2
Bald Lentiviral Pseudovirion (eGFP Reporter)	79987	500 µl x 2
Bald Lentiviral Pseudovirion (Luc-eGFP Dual Reporter)	79988	500 µl x 2
Bald Lentiviral Pseudovirion (Luciferase Reporter)	79943	500 µl x 2
Spike (B.1.1.529 BA.1, Omicron Variant) (SARS-CoV-2) Pseudotyped Lentivirus (eGFP Reporter)	78349	100 µl 500 µl x 2

Lentiviruses, Proteins Coronavirus

Lentiviruses	Catalog#	Size
Spike (B.1.1.529 BA.1, Omicron Variant) (SARS-CoV-2) Pseudotyped Lentivirus (Luc Reporter)	78348	100 µl 500 µl x 2
Spike (B.1.1.529 BA.1.1, Omicron Variant R346K) (SARS-CoV-2) Pseudotyped Lentivirus (Luc Reporter)	78623	100 µl 500 µl x 2
Spike (B.1.1.7, Alpha Variant) (SARS-CoV-2) Pseudotyped Lentivirus (eGFP Reporter)	78158	100 µl 500 µl x 2
Spike (B.1.1.7, Alpha Variant) (SARS-CoV-2) Pseudotyped Lentivirus (Luc Reporter)	78112	100 µl 500 µl x 2
Spike (B.1.351, Beta Variant) (SARS-CoV-2) Pseudotyped Lentivirus (eGFP Reporter)	78160	100 µl 500 µl x 2
Spike (B.1.351, Beta Variant) (SARS-CoV-2) Pseudotyped Lentivirus (Luc Reporter)	78142	100 µl 500 µl x 2
Spike (B.1.429, Epsilon Variant) Pseudotyped Lentivirus (Luc Reporter)	78172	100 µl 500 µl x 2
Spike (B.1.617 Variant) Pseudotyped Lentivirus (Luc Reporter)	78204	100 µl 500 µl x 2
Spike (B.1.617.1, Kappa Variant) Pseudotyped Lentivirus (Luc Reporter)	78205	100 µl 500 µl x 2
Spike (B.1.617.2.1; Delta Plus Variant) (SARS-CoV-2) Pseudotyped Lentivirus (eGFP Reporter)	78219	100 µl 500 µl x 2
Spike (B.1.617.2.1; Delta Plus Variant) Pseudotyped Lentivirus (Luc Reporter)	78218	100 µl 500 µl x 2
Spike (B.1.617.2; Delta Variant) (SARS-CoV-2) Pseudotyped Lentivirus (eGFP Reporter)	78216	100 µl 500 µl x 2
Spike (B.1.617.2; Delta Variant) Pseudotyped Lentivirus (Luc Reporter)	78215	100 µl 500 µl x 2
Spike (B.1.618 Variant) Pseudotyped Lentivirus (Luc Reporter)	78206	100 µl 500 µl x 2
Spike (B.1.621, Mu Variant) (SARS-CoV-2) Pseudotyped Lentivirus (Luc Reporter)	78618	100 µl 500 µl x 2
Spike (D614G) (SARS-CoV-2) Pseudotyped Lentivirus (eGFP Reporter)	78035	100 µl 500 µl x 2
Spike (D614G) (SARS-CoV-2) Pseudotyped Lentivirus (Luc Reporter)	78028	100 µl 500 µl x 2
Spike (K417T, E484K, N501Y) (SARS-CoV-2) Pseudotyped Lentivirus (Luc Reporter)	78143	100 µl 500 µl x 2
Spike (P.1, Gamma Variant) (SARS-CoV-2) Pseudotyped Lentivirus (eGFP Reporter)	78159	100 µl 500 µl x 2
Spike (P.1, Gamma Variant) (SARS-CoV-2) Pseudotyped Lentivirus (Luc Reporter)	78144	100 µl 500 µl 500 µl x 2
Spike (SARS-CoV-2) Lentivirus	78010	100 µl 500 µl x 2
Spike (SARS-CoV-2) Pseudotyped Lentivirus (eGFP Reporter)	79981	100 µl 500 µl x 2

Lentiviruses	Catalog#	Size
Spike (SARS-CoV-2) Pseudotyped Lentivirus (Luciferase Reporter)	79942	100 µl 500 µl x 2
Spike Variants (SARS-CoV-2) Pseudotyped Lentivirus Pack (Luciferase Reporter)	78616	12 x 100 µl
Spike(SARS-CoV-2) Pseudotyped Lentivirus (Luc-eGFP Dual Reporter)	79982	100 µl 500 µl x 2
TMPRSS2 Lentivirus	78011	100 µl 500 µl 500 µl x 2

Proteins	Catalog#	Size
14-3-3 theta Protein, His-tag (Human)	79038	20 µg
3CL Protease (B.1.1.529, Omicron Variant), (SARS-CoV-2)	101328	100 µg 1 mg
3CL Protease (Mpro), MBP-tag (SARS-CoV-2)	100707	100 µg 1 mg
3CL Protease (SARS-CoV-2)	100823	50 µg 500 µg
3CL Protease, His-tag (SARS-CoV-1)	100807	100 µg
3CL Protease, MBP-tag, His-tag (MERS-CoV)	100757	100 µg 1 mg
3CL Protease, MBP-tag, His-tag (SARS-CoV-1)	100739	100 µg 1 mg
ACE2, Fc Fusion (IgG1), Avi-Tag	101199	100 µg 1 mg
ACE2, Fc Fusion (IgG1), Avi-Tag, Biotin-Labeled HiP™	101200	25 µg 50 µg
ACE2, Fc Fusion (Monkey)	100701	50 µg 1 mg
ACE2, His-Avi-Tag, Biotin-labeled HiP™	100665	20 µg 50 µg
ACE2, His-Tag	11003	20 µg 100 µg
ACE2, His-tag (Monkey)	100702	50 µg 1 mg
ACE2, His-Tag, Eu-labeled	100705	100 µg
Cas12, GST-tag (Lachnospiraceae)	100740	20 µg 50 µg
Cas12, His-tag (Lachnospiraceae)	100741	20 µg 50 µg

Proteins

Coronavirus

Proteins	Catalog#	Size	Proteins	Catalog#	Size
Cathepsin B, His-tag	80001	10 µg	Spike S1 (13-665), Fc Fusion, Avi-tag (SARS-CoV-2)	100678	100 µg 1 mg
Cathepsin L, His-tag	80005	10 µg	Spike S1 (13-665), Fc fusion, Avi-tag, Biotin-Labeled (SARS-CoV-2)	100679	25 µg 50 µg
DPP4, His-tag	80040	10 µg	Spike S1 (16-685), Avi-His-tag (SARS-CoV-2)	100730	100 µg 1 mg
Neuropilin-1, Avi-His-Tag	100870	100 µg	Spike S1 (16-685), Avi-His-Tag, Biotin-Labeled (SARS-CoV-2)	100731	20 µg 50 µg
Neuropilin-1, Avi-His-Tag, Biotin-labeled, HiP™	100911	25 µg 50 µg	Spike S1 (16-685), Fc fusion (SARS-CoV-2)	100688	20 µg 50 µg
NSP10/NSP16 Complex (SARS-CoV-2)	100747	100 µg 1 mg	Spike S1 (16-685), Fc Fusion, Avi-tag (SARS-CoV-2)	100719	100 µg 1 mg
NSP7, His-tag (SARS-CoV-2)	100829	100 µg 1 mg	Spike S1 (16-685), Fc Fusion, Avi-tag, Biotin-labeled (SARS-CoV-2)	100720	25 µg 50 µg
NSP8, His-tag (SARS-CoV-2)	100830	100 µg 1 mg	Spike S1 (B.1.1.529 BA.1, Omicron Variant), Avi-His-Tag, (SARS-CoV-2) Recombinant	101333	100 µg 1 mg
Nucleocapsid Protein (B.1.1.529, Omicron Variant), Avi-His-Tag (SARS-CoV-2)	101319	100 µg 1 mg	Spike S1 (B.1.1.529 BA.1, Omicron Variant), Avi-His-Tag, Biotin-Labeled (SARS-CoV-2)	101334	25 µg 100 µg
Nucleocapsid Protein (B.1.1.7, Alpha Variant), Avi-His-Tag (SARS-CoV-2)	100986	100 µg	Spike S1 (B.1.1.7, Alpha Variant), Avi-His-Tag (SARS-CoV-2)	101001	100 µg 1 mg
Nucleocapsid Protein (B.1.351, Beta Variant), Avi-His-Tag (SARS-CoV-2)	100985	100 µg 1 mg	Spike S1 (B.1.351, Beta Variant), Avi-His-Tag (SARS-CoV-2)	100992	100 µg
Nucleocapsid Protein (P.1, Gamma Variant), Avi-His-Tag (SARS-CoV-2)	100987	100 µg	Spike S1 (B.1.429 Variant), Avi-His-Tag (SARS-CoV-2)	101130	100 µg
Nucleocapsid Protein, Avi-His-tag (SARS-CoV-2)	100778	100 µg 1 mg	Spike S1 (B.1.617.1; Kappa Variant), Avi-His-Tag, Biotin-Labeled (SARS-CoV-2)	101125	25 µg 50 µg
ORF9b, GST-Tag (SARS-CoV-2)	100962	100 µg 1 mg	Spike S1 (B.1.617.2, Delta Variant) Avi-His-Tag (SARS-CoV-2)	101151	100 µg 1 mg
PLP2, His-tag (HCoV-NL63)	81090	25 µg	Spike S1 (B.1.617.2, Delta Variant) Avi-His-Tag, Biotin-Labeled (SARS-CoV-2)	101152	25 µg 50 µg 500 µg
PLPro (1541-1857), His-tag (SARS-CoV-1)	100903	100 µg 1 mg	Spike S1 (B.1.617.2.1, Delta Plus Variant) Avi-His-Tag (SARS-CoV-2)	101179	100 µg
PLPro (723-1037), His-tag (SARS-CoV-1)	81091	25 µg	Spike S1 (B.1.617.2.1, Delta Plus Variant) Avi-His-Tag, Biotin-Labeled (SARS-CoV-2) HiP™	101180	25 µg 50 µg 500 µg
PLPro, His-tag (SARS-CoV-2)	100735	100 µg 1 mg	Spike S1 (B.1.618 Variant), Avi-His-Tag (SARS-CoV-2)	101126	100 µg
RdRp/NSP7/NSP8 (SARS-CoV-2) Complex	100839	20 µg	Spike S1 (K417T, E484K, N501Y), Avi-His-Tag (SARS-CoV-2)	101081	100 µg 1 mg
RNA Polymerase, FLAG-tag (SARS-CoV-2)	100729	100 µg	Spike S1 (K417T, E484K, N501Y), Avi-His-Tag, Biotin-Labeled (SARS-CoV-2)	101082	25 µg 50 µg 500 µg
Spike RBD (B.1.1.7, Alpha Variant), Avi-His-Tag (SARS-CoV-2)	100977	100 µg 1 mg	Spike S1 (P.1 Variant), Avi-His-Tag, Biotin-Labeled (SARS-CoV-2)	101080	25 µg 50 µg
Spike RBD (B.1.351, Beta Variant) Avi-His-Tag (SARS-CoV-2)	100978	100 µg 1 mg	Spike S1 (P.1, Gamma Variant), Avi-His-Tag (SARS-CoV-2)	101079	100 µg

Proteins, Substrates Coronavirus

Proteins	Catalog#	Size
Spike S1 RBD (B.1.1.7; Alpha Variant), Avi-His-Tag, Biotin-Labeled (SARS-CoV-2) HiP™	100999	25 µg 50 µg 500 µg
Spike S1 RBD (B.1.617 Variant), Avi-His-Tag (SARS-CoV-2) HiP™	101156	100 µg 1 mg
Spike S1 RBD (B.1.617.2, Delta Variant), Avi-His-Tag (SARS-CoV-2) HiP™	101153	100 µg 1 mg
Spike S1 RBD (B.1.617.2, Delta Variant), Avi-His-Tag, Biotin-Labeled (SARS-CoV-2) HiP™	101154	25 µg 50 µg
Spike S1 RBD (B.1.617.2.1, Delta Plus Variant), Avi-His-Tag (SARS-CoV-2) HiP™	101181	100 µg
Spike S1 RBD (B.1.617.2.1, Delta Plus Variant), Avi-His-Tag, Biotin-Labeled (SARS-CoV-2) HiP™	101182	25 µg 50 µg
Spike S1 RBD (B.1.618 Variant), Avi-His-Tag (SARS-CoV-2)	101158	100 µg
Spike S1 RBD (G476S), Avi-His-tag (SARS-CoV-2)	100868	100 µg
Spike S1 RBD (K417T, E484K, N501Y), Avi-His-Tag (SARS-CoV-2)	100993	100 µg 1 mg
Spike S1 RBD (V367F), Avi-His-tag (SARS-CoV-2) HiP™	100769	100 µg 1 mg
Spike S1 RBD (V367F), Avi-His-tag Biotin-labeled (SARS-CoV-2)	100770	25 µg 50 µg 500 µg
Spike S1 RBD (V483A), Avi-His-tag (SARS-CoV-2)	100846	100 µg 1 mg
Spike S1 RBD, Avi-His-tag (SARS-CoV-2)	100696	100 µg 1 mg
Spike S1 RBD, Avi-His-tag, Biotin-labeled (SARS-CoV-2)	100697	25 µg 50 µg
Spike S1 RBD, Fc fusion (SARS-CoV-2)	100699	50 µg 100 µg
Spike S1 RBD, Fc-Fusion, Avi-Tag (SARS-CoV-2)	100698	100 µg 1 mg
Spike S1 RBD, Fc-Fusion, Avi-Tag, Biotin-labeled (SARS-CoV-2)	100695	25 µg 50 µg 200 µg
Spike S1 RBD, His-Avi-Tag, Biotin-Labeled (SARS-CoV-2)	100937	20 µg 50 µg
Spike S1 RBD, His-tag (SARS-CoV-2)	100687	50 µg 100 µg
Spike S1 RBD, Mouse Fc-fusion (SARS-CoV-2)	100684	20 µg 50 µg
Spike S1 RBD-Nucleocapsid Protein Chimera (SARS-CoV-2)	100938	20 µg 50 µg 100 µg
Spike S1, Avi-His-Tag, iFluor-488-labeled (SARS-CoV-2)	100936	10 µg

Proteins	Catalog#	Size
Spike S2, Fc-Tag (SARS-CoV-2)	100895	100 µg 500 µg
Spike Trimer (S1+S2) (B.1.1.529 BA.1, Omicron Variant), His-Tag (SARS-CoV-2)	101343	100 µg
Spike Trimer (S1+S2) (B.1.1.7, Alpha Variant), His-Tag (SARS-CoV-2)	510334	100 µg 1 mg
Spike Trimer (S1+S2) (B.1.351, Beta Variant), His-Tag (SARS-CoV-2)	510333	100 µg 1 mg
Spike Trimer (S1+S2) (B.1.351, Beta Variant, Δ242-244) (SARS-CoV-2)	101091	100 µg
Spike Trimer (S1+S2) (B.1.429, Epsilon Variant) His-Tag (SARS-CoV-2)	101057	100 µg
Spike Trimer (S1+S2) (B.1.617 Variant), His-Tag (SARS-CoV-2)	101143	100 µg
Spike Trimer (S1+S2) (B.1.617.1, Kappa Variant), His-Tag (SARS-CoV-2)	101144	100 µg 1 mg
Spike Trimer (S1+S2) (B.1.617.2.1, Delta Plus Variant), His-Tag (SARS-CoV-2)	101165	100 µg
Spike Trimer (S1+S2) (B.1.617.2; Delta Variant), His-Tag (SARS-CoV-2)	101147	100 µg
Spike Trimer (S1+S2) (B.1.618 Variant), His-Tag (SARS-CoV-2)	101145	100 µg
Spike Trimer (S1+S2) (D614G), His-tag (SARS-CoV-2)	100810	100 µg
Spike Trimer (S1+S2) (K417T, E484K, N501Y), His-Tag (SARS-CoV-2)	100988	100 µg 1 mg
Spike Trimer (S1+S2) (P.1 Variant), His-Tag (SARS-CoV-2)	100989	100 µg 1 mg
Spike Trimer (S1+S2), His-tag (HCoV-NL63)	100788	50µg 100µg
Spike Trimer (S1+S2), His-tag (SARS-CoV-1)	100789	100 µg 500 µg
Spike Trimer (S1+S2), His-tag (SARS-CoV-2)	100728	100 µg 1 mg
Spike Trimer (S1+S2), His-tag, Eu-labeled (SARS-CoV-2)	100894	25 µg

Substrates	Catalog#	Size
3CL Protease (SARS-CoV-1 / SARS-CoV-2) Substrate	79952	1 mg 10 mg
3CL Protease (MERS-CoV) Substrate	78021	50 µl 1 mg 10 mg

Substrates

Coronavirus

Substrates	Catalog#	Size
3CL Protease Fluorogenic Standard	78006	1 mg
HRP Colorimetric Substrate	79651	10 ml
PLPro Substrate	79997	1 mg



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