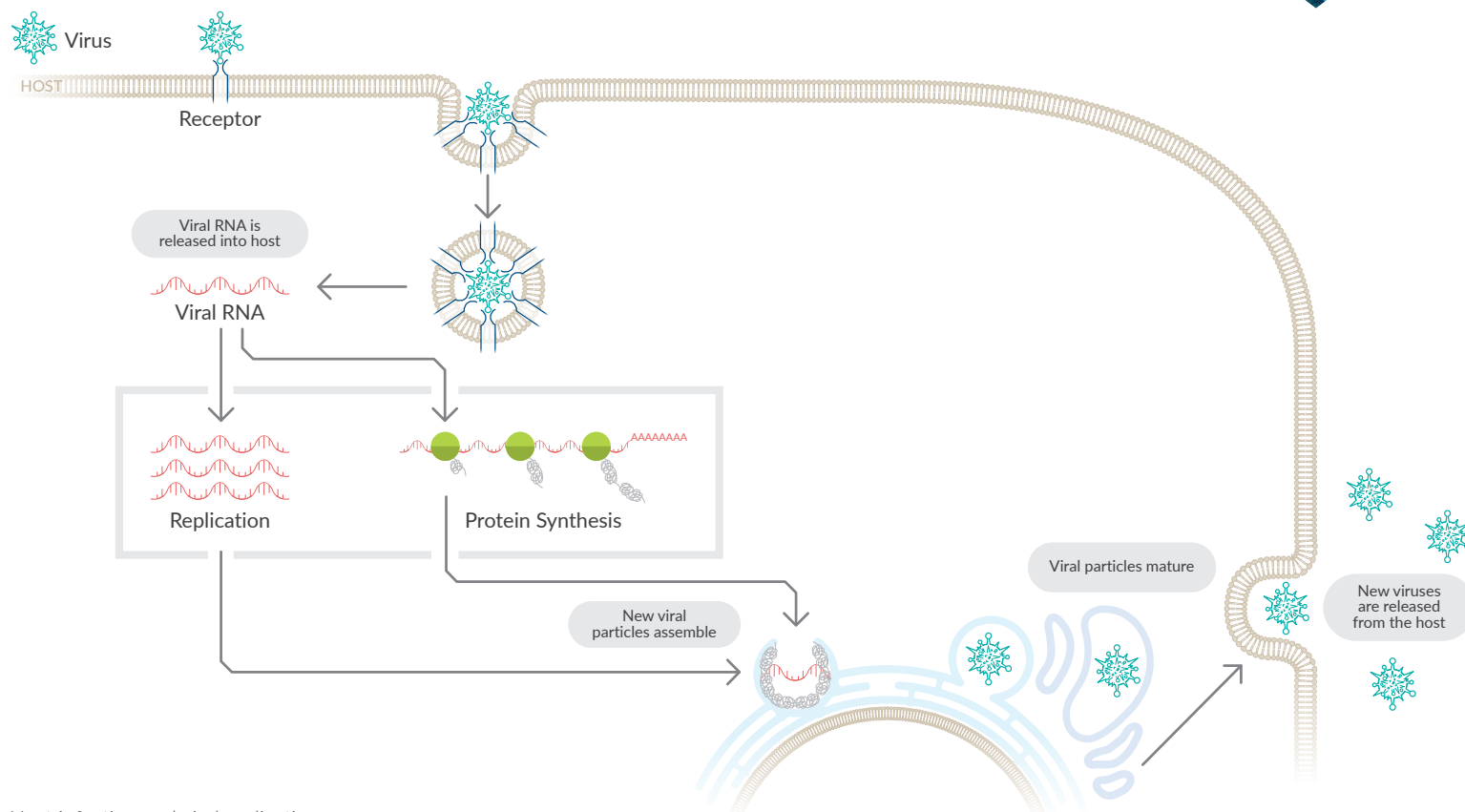


Antiviral Research Tools

Cayman provides a diverse set of antiviral agents that can be used to study the treatment and prevention of infectious diseases. This toolset can be used to further understand the virus growth cycle and key signaling pathways, including those mediating antiviral immune responses.



Host infection and viral replication.

Simplify Screening & Hit-Seeking

Antiviral Screening Library

Item No. 30390

A library of more than 410 antiviral-associated compounds including those with antiviral activity against HIV, hepatitis B virus, coronaviruses, and more.

SARS-CoV-2 Screening Library

Item No. 9003509

A made-to-order compound library curated through *in silico* modeling using Maestro (Schrödinger Suite) software by screening over 70,000 compounds targeting SARS-CoV-2 proteins.

FDA-Approved Drugs Screening Library

Item No. 23538

A library of approximately 892 FDA-approved compounds including antiviral and antibiotic agents.



Antiviral Compounds

Entry/Fusion Inhibitors

CCR5 Antagonists

Chemokine (C-C motif) receptor 5 (CCR5) is expressed on the surface of certain immune cells, including CD4⁺ T cells, where it mediates HIV entry. CCR5 antagonists inhibit HIV entry by blocking the interaction between HIV and CCR5.

CCR5 Antagonists

| Item No. | Product Name |
|----------|----------------------|
| 14641 | Maraviroc |
| 28448 | TAK-220 |
| 28453 | Vicriviroc (maleate) |

See all CCR5 antagonists at www.caymanchem.com

Abl Kinase Inhibitors

Blocking virus-host fusion with Abl kinase inhibitors is one antiviral strategy, since this kinase activity is required for viral entry.

| Item No. | Product Name |
|----------|---------------------|
| 16253 | GNF-2 |
| 16254 | GNF-5 |
| 13139 | Imatinib (mesylate) |
| 11497 | Saracatinib |

See all Abl family & Bcr-Abl inhibitors at www.caymanchem.com

Oxysterol-binding Protein Inhibitors

Oxysterol-binding protein (OSBP) plays a vital role in producing the membrane-bound viral replication organelles that form at the membrane contact sites between the ER and Golgi. OSBP-targeted compounds interfere with virus replication.

Oxysterol-Binding Protein Inhibitors

| Item No. | Product Name |
|----------|--------------|
| 13288 | Itraconazole |
| 30310 | OSW-1 |

Protease & Neuraminidase Inhibitors

Protease inhibitors block the viral life cycle by selectively preventing proteolytic cleavage that is essential to forming the replicase complex for viral replication. Viral neuraminidase inhibitors prevent the mobilization of the virus to and from the site of infection.

HCV Protease Inhibitors

| Item No. | Product Name |
|----------|--------------------------|
| 20835 | Asunaprevir |
| 18379 | Boceprevir |
| 22144 | Simeprevir (sodium salt) |
| 20054 | Telaprevir |

HIV Protease Inhibitors

| Item No. | Product Name |
|----------|-----------------------|
| 15866 | Darunavir |
| 13854 | Lopinavir |
| 15144 | Nelfinavir (mesylate) |
| 9001893 | Saquinavir (mesylate) |

SARS-CoV-2 M Protease Inhibitors

| Item No. | Product Name |
|----------|----------------------------|
| 31344 | Bofutrelvir |
| 35844 | Ensitrelvir (fumarate) |
| 35257 | PF-07321332 (Nirmatrelvir) |

See all protease & neuraminidase inhibitors at www.caymanchem.com

Influenza Neuraminidase Inhibitors

| Item No. | Product Name |
|----------|------------------|
| 15779 | Oseltamivir Acid |
| 23765 | Peramivir |
| 15123 | Zanamivir |

VISIT OUR CORONAVIRUS RESOURCE CENTER

We've gathered our SARS-CoV-2 products, services, news, and literature as a resource page to help you navigate and discover the tools for coronavirus research at

www.caymanchem.com/coronavirus



Explore new uses for existing therapeutics against SARS-CoV-2 at www.caymanchem.com/sars-cov-2antivirals

Reverse Transcriptase Inhibitors

Retroviruses reverse transcribe viral RNA into DNA for insertion into the host DNA. Nucleoside reverse transcriptase inhibitors (NRTIs) and non-nucleoside reverse transcriptase inhibitors (NNRTIs) have been developed to prevent viral replication by inhibiting reverse transcriptase activity.

NRTIs

| Item No. | Product Name |
|----------|---------------|
| 16879 | Emtricitabine |
| 18514 | Lamivudine |
| 13874 | Tenofovir |
| 15492 | Zidovudine |

See all NRTIs at www.caymanchem.com

NNRTIs

| Item No. | Product Name |
|----------|--------------|
| 26405 | Doravirine |
| 14412 | Efavirenz |
| 15117 | Nevirapine |
| 21559 | Rilpivirine |

See all NNRTIs at www.caymanchem.com

LIPID NANOPARTICLE TOOLS

- Lipids
- Exploration & Uptake Kits
- Development Services

www.caymanchem.com/lipids/pharma

HOW TO IDENTIFY VIRAL ANTIGENS

- Immunopeptidome Profiling
- Candidate Peptide Synthesis
- Immunogenicity Assays

GET STARTED

DNA & RNA Polymerase Inhibitors

Viruses encode their own polymerases for transcription and replication. A class of nucleotide analogs has been developed as antivirals to confuse polymerase activity, thus counteracting viral replication.

RdRp Inhibitors

| Item No. | Product Name |
|----------|---------------------|
| 30469 | GS-441524 |
| 30354 | Remdesivir |
| 16757 | Ribavirin |
| 23384 | T-705 (Favipiravir) |

See all DNA & RNA polymerase inhibitors at www.caymanchem.com

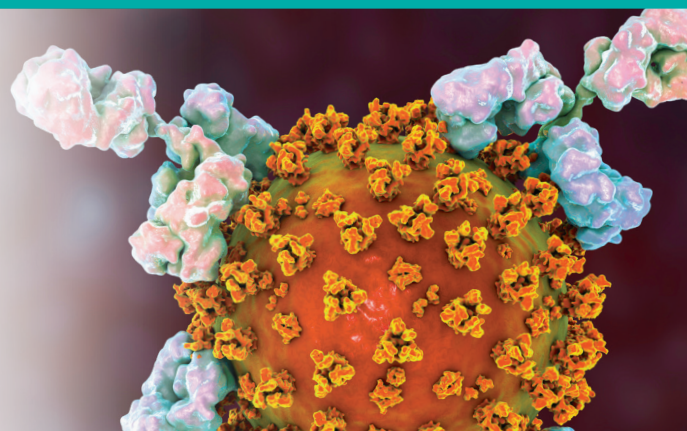
Integrase Inhibitors

Retroviral integrases integrate viral DNA into host cell DNA, forming a provirus that can be activated to produce viral proteins. Integrase inhibitors block incorporation of the virus into host DNA by preventing covalent bond formation with host DNA.

Integrase Inhibitors

| Item No. | Product Name |
|----------|------------------------------|
| 26532 | Bictegravir |
| 22191 | Dolutegravir |
| 16071 | Raltegravir (potassium salt) |
| 70740 | U-73122 |

See all integrase inhibitors at www.caymanchem.com



cGAS-STING Antiviral Responses

Cytosolic Nucleic Acid Sensing

Specific pattern recognition receptors (PRRs) are responsible for detecting cytosolic viral DNA or RNA and generating innate immune responses.

Cytosolic DNA Sensor

| Item No. | Product Name |
|----------|---------------------------------------|
| 22810 | cGAS (human, recombinant) |
| 23853 | cGAS Monoclonal Antibody (Clone 5G10) |

Cytosolic RNA Sensor & Adaptor Proteins

| Item No. | Product Name |
|----------|--|
| 25620 | RIG-I helicase domain (human, recombinant) |
| 25300 | RIG-I Monoclonal Antibody (Clone 1E3) |
| 26355 | MAVS Monoclonal Antibody (Clone 7B9) |

IN SILICO MODELING & SPR CAN GUIDE THE DESIGN OF STING AGONISTS

SEE HOW

STING Signaling Pathways

Upon sensing viral DNA in the cytosol, cGAS is activated to produce cyclic dinucleotides (CDNs). Binding of CDNs to STING activates signals that stimulate IFN genes.

CDNs & Negative Controls

| Item No. | Product Name |
|----------|-----------------------------|
| 17753 | Cyclic di-AMP (sodium salt) |
| 17144 | Cyclic di-GMP (sodium salt) |
| 22485 | Cyclic di-IMP (sodium salt) |
| 33890 | Cyclic di-UMP (sodium salt) |
| 22419 | 2'2'-cGAMP (sodium salt) |
| 19887 | 2'3'-cGAMP (sodium salt) |
| 17966 | 3'3'-cGAMP (sodium salt) |
| 33886 | 5'-pApA (sodium salt) |
| 33889 | 5'-pGpG (sodium salt) |

Tools to Study cGAS Activity

Cayman offers robust, easy-to-use assays to screen modulators of human cGAS. Active cGAS enzyme, substrates, and positive control inhibitor are provided to screen for inhibitors.

cGAS Inhibitor Screening Assay Kit

Item No. 701930

Uses a competitive ELISA platform to directly measure 2'3'-cGAMP as an indicator of cGAS activity

cGAS TR-FRET Inhibitor Screening Assay Kit - *Item No. 702120*

Uses a homogenous TR-FRET platform compatible with high-throughput screening applications



Learn more about our assays to study cGAS activity and screen for inhibitors at www.caymanchem.com/cGASassays

cGAS Inhibitors

| Item No. | Product Name |
|----------|--------------|
| 31029 | CU-32 |
| 31030 | CU-76 |
| 28318 | G150 |
| 32515 | PF-06928215 |
| 31765 | RU-521 |

STING Agonists

| Item No. | Product Name |
|----------|--|
| 30022 | CAY10748 |
| 28054 | diABZI STING Agonist-1 (hydrochloride) |
| 14617 | DMXAA |
| 35454 | M04 |

See all STING agonists online at www.caymanchem.com

Interferon Pathway Modulators

| Item No. | Product Name |
|----------|---|
| 17869 | Dimethyl biphenyl-4,4'-dicarboxylate |
| 30960 | IFN- α -IFNAR-IN-1 (hydrochloride) |
| 20449 | RO8191 |
| 22402 | StA-IFN-1 |