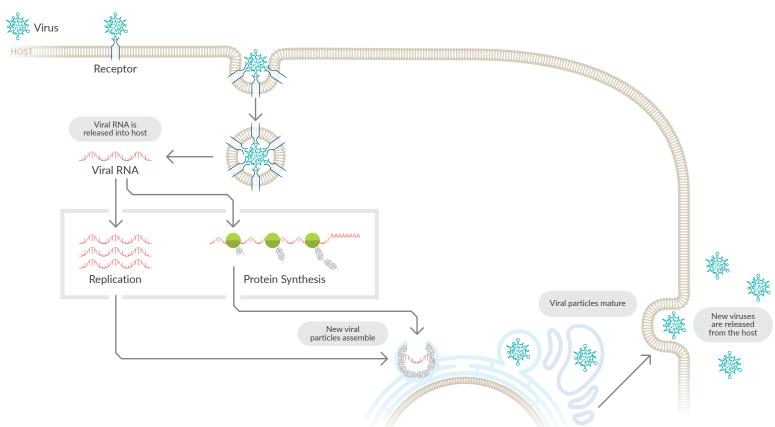
# **Antiviral Research Tools**

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.

### FDA-Approved Drugs Screening Library

#### Item No. 23538

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

### Natural Products Screening Library

#### Item No. 20897

A library of approximately 1,640 natural products including alkaloids, flavonoids, terpenes, and saponins with diverse biological activities.



# 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<sup>+</sup> T cells, where it mediates HIV entry. CCR5 antagonists inhibit HIV entry by blocking the interaction between HIV and CCR5.

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
Cap all Abl family C. Day Abl inhibitary at unusural manapalary ages	

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
33411	2'-O-Methylcytidine
20835	Asunaprevir
18519	Ledipasvir
20054	Telaprevir

#### **HIV Protease Inhibitors**

Item No.	Product Name
15866	Darunavir
15150	Indinavir (sulfate)
15144	Nelfinavir (mesylate)
13872	Ritonavir

#### Influenza Neuraminidase Inhibitors

Item No.	Product Name
39139	Laninamivir
15779	Oseltamivir Acid
23765	Peramivir
15123	Zanamivir

#### SARS-CoV-2 M Protease Inhibitors

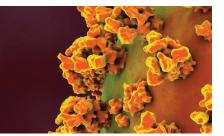
	Product Name
31344	Bofutrelvir
35844	Ensitrelvir (fumarate)
35257	PF-07321332 (Nirmatrelvir)

See all protease inhibitors at www.caymanchem.com

# 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.

Learn more at www.caymanchem.com/coronavirus



# **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
37669	Azvudine
16879	Emtricitabine
18514	Lamivudine
13874	Tenofovir
16019	Zalcitabine
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.cavmanchem.com	

See all NNRTIs at www.caymanchem.com



### Research Tools

- High-Purity Lipids
- LipidLaunch<sup>™</sup> Research-Ready LNPs & Reagent Kits
- LNP Development Services

#### www.caymanchem.com/LNPs

**Immunopeptidome Profiling Services** for the identification of MHC-associated peptides

#### www.caymanchem.com/immunopeptidome

### **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
27215	Cabotegravir
22191	Dolutegravir
17798	Elvitegravir
14842	Mitoxantrone (hydrochloride)

See all integrase inhibitors at www.caymanchem.com

# Helicase-Primase Inhibitors

The helicase-primase complex is involved in the replication of viral DNA. Helicase-primase inhibitors bind to the complex, blocking its function and preventing viral proliferation.

#### **Helicase-Primase Inhibitors**

Item No.	Product Name
27921	Amenamevir
22129	BAY 57-1293
38324	SSYA10-001

# 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)

# Tools to Study cGAS Activity

#### 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 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)

#### **CDNs ELISA Kits**

Cayman and scientists from the Biolog Life Science Institute have developed ELISAs for the detection of CDNs in mammalian and bacterial cell lysates.

Item No.	Product Name
501700	2'3'-cGAMP ELISA Kit
502340	3'2'-cGAMP ELISA Kit
502130	3'3'-cGAMP ELISA Kit
501960	Cyclic di-AMP ELISA Kit
501780	Cyclic di-GMP ELISA Kit

#### **STING Agonists**

Item No.	Product Name	
37354	C53	
28054	diABZI STING Agonist 1 (hydrochloride)	
34088	diABZI STING Agonist 2	
34082	diABZI STING Agonist 3	
30140	MSA-2	
38345	STING Agonist 23	
See all STING agonists online at www.caymanchem.com		