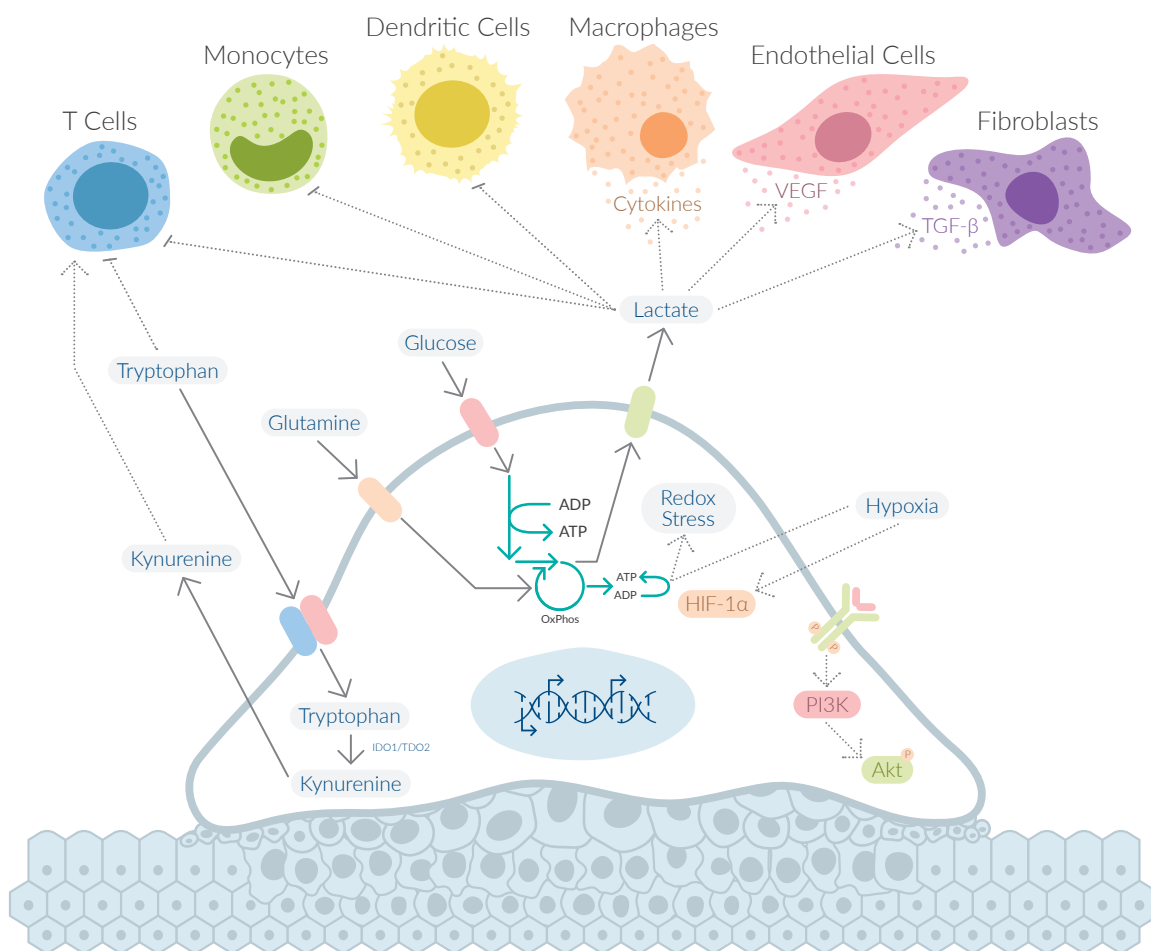


# Cancer

Cayman offers a variety of cancer research tools to help identify causes and develop strategies for prevention and treatment of one of the most pervasive public health issues. With expertise in cell biology, immunology, and epigenetics our product portfolio includes both the necessary and distinctive tools to advance your cancer research.

- Monitor cell cycle phase, viability, proliferation and apoptosis
- Quantify DNA damage and screen DNA repair inhibitors
- Study cell proliferation and metastasis
- Quantify cancer-associated cellular metabolism



Proliferating cancer cells alter the chemical composition of their microenvironment and influence normal cells residing in the vicinity. High levels of extracellular lactate, produced as a by-product of glucose and glutamine metabolism, promotes an immune-permissive surrounding, angiogenic signaling, and tumor invasiveness. Hypoxia impedes oxidative phosphorylation and disrupts redox balance. Several tumors overexpress IDO1 and TDO2, which interrupts the tryptophan/kynurenine balance that is essential for the antitumor activity of T cells.



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# Angiogenesis

Cayman's selection of high-quality small molecule inhibitors of endothelium-specific signaling factors, angiopoietin antibodies, and hypoxia-related research tools can be used to study angiogenesis-mediated cancer proliferation and metastasis.



## Angiopoietin Antibodies

Item No.	Product Name
10805	ANGPTL3 (human) Monoclonal Antibody (Clone Kairos-37)
10806	ANGPTL3 (mouse) Monoclonal Antibody (Clone Kairos3-1541)
10807	ANGPTL3 (mouse) Monoclonal Antibody (Clone Kairos3-3741)
10808	ANGPTL6 (human) Monoclonal Antibody (Clone Kairos-60)

## Anti-Angiogenic Compounds

Item No.	Product Name
14532	Apafant
13321	ARP 100
70630	Asterric Acid
11571	Bexarotene
11022	BIBF 1120
21773	CP 547,632
16889	DL- $\alpha$ -Difluoromethylornithine (hydrochloride hydrate)
15220	Dovitinib
10010622	Genipin
18004	Ki8751
20453	LDN-211904
10010811	Lutein
24314	MMP-2/MMP-9 Inhibitor II
20117	NSC 12
18489	NVP-BHG712
12018	PF-8380
15160	PPACK (trifluoroacetate salt)
19996	Ro 4929097
19258	Tanomastat
11350	Thiolutin
19535	Tie2 Inhibitor 7
17858	Tie2 Kinase Inhibitor
23702	Zibotentan

More than 200 products for angiogenesis available online

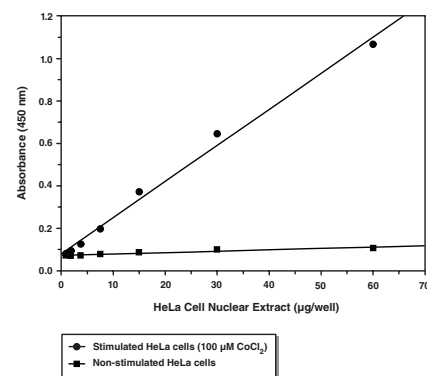
## Hypoxia Research Tools

Item No.	Product Name
10012682	CAY10585
19915	Daprodustat
71210	DMOG
11049	Echinomycin
10006421	HIF-1 $\alpha$ (C-Term) Polyclonal Antibody
14493	MIF (human recombinant)

## HIF-1 $\alpha$ Transcription Factor Assay Kit

### Item No. 10006910

- A sensitive, non-radioactive method for detecting HIF-1 $\alpha$  from whole cell lysates
- 96-well plate format replaces EMSAs
- Capture the transcription factor using a specific dsDNA sequence bound to the plate
- Detect the dsDNA-bound transcription factor with specific antibodies in an ELISA format



# Apoptosis

Cayman provides tools to examine programmed cell death. This includes caspase activity detection probes and antibodies that can be used to pinpoint the variable stages of cell death. We also offer a collection of inhibitors of the MDM2-p53 interaction and compounds that reactivate p53 to study the critical signaling pathway involved in controlling cell cycle, apoptosis, and DNA damage repair.



## p53 Signaling Pathway Modulators

Item No.	Product Name	Selected Target
10004985	Caylin-1	MDM2-p53
10005002	Caylin-2	MDM2-p53
16259	JNJ-26854165	MDM2
17473	MI-77301	MDM2
14858	MIRA-1	p53 reactivator
19919	NSC 59984	p53 reactivator
16431	NSC 66811	Mdm2
10004372	(±)-Nutlin-3	Mdm2-p53
13326	Pifithrin- $\alpha$	p53
17848	p-nitro-Cyclic Pifithrin- $\alpha$	p53
10748	Pifithrin- $\mu$	p53
63520	PRIMA-1	p53 reactivator
10006426	RITA	p53 reactivator
17003	SP 141	MDM2

## p53 Assay, Antibodies, and Proteins

Item No.	Product Name
10004807	p53 (Phospho-Ser <sup>392</sup> ) Polyclonal Antibody
10005291	p53 Product Pack
600020	p53 Transcription Factor Assay Kit
14171	TP53BP1 BRCT domains (human recombinant)

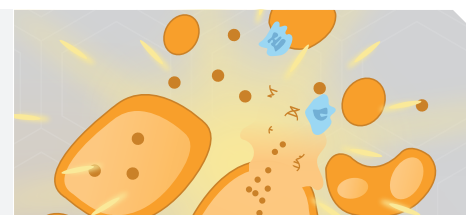
## ARC, RICK, and Caspase Antibodies

Item No.	Product Name
160737	ARC Polyclonal Antibody
160745	Caspase-3 (human) Polyclonal Antibody
13907	Caspase-1 Monoclonal Antibody (Clone 14F468)
160790	Caspase-9 Polyclonal Antibody
13916	Caspase-14 Monoclonal Antibody (Clone 70A1426)
160785	RICK Polyclonal Antibody

## Caspase Activity Detection Probes

Item No.	Product Name	Enzyme Specificity	Excitation Maximum (nm)	Emission Maximum (nm)
24563	Mca-DEVDAP-K(Dnp)-OH	caspase-3	■ 328	■ 420
14459	Ac-DEVD-AFC	caspase-3	■ 400	■ 505
24566	Ac-DNLD-AMC	caspase-3	■ 340-360	■ 440-460
17051	Ac-LEHD-AFC (trifluoroacetate salt)	caspase-4,-5, and -9	■ 400	■ 505
14991	Ac-LETD-AFC	caspase-8	■ 400	■ 505
14988	Ac-VDVAD-AFC	caspase-2	■ 400	■ 505
14989	Ac-VEID-AMC	caspase-6 and -8	■ 340-360	■ 440-460
14992	Ac-WEHD-AFC	caspase-1, -4, and -5	■ 400	■ 505

Learn more about how to choose the right apoptosis assay for your research in our **Apoptosis Assays Guide**. Available online at [www.caymanchem.com/literature](http://www.caymanchem.com/literature)

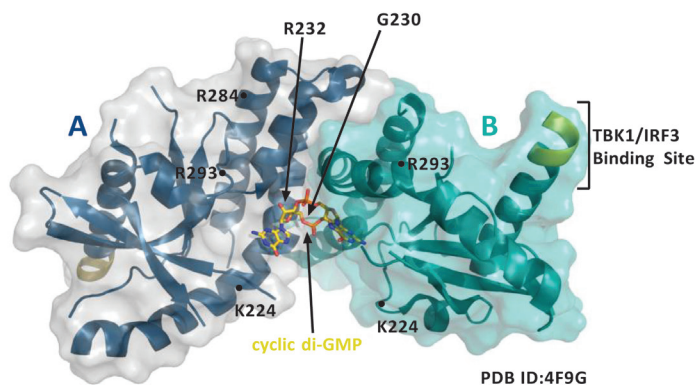


# Immuno-Oncology

Cayman provides a unique set of products to help researchers learn novel ways to harness innate and adaptive immune responses as targeted cancer therapies. This includes tools to study the major players of the cGAS-STING-type 1 interferon pathway as well as tools to study immune checkpoint modulators.



## cGAS-STING Immune Signaling



STING dimer (A and B are both aa 139-379) bound to cyclic-di-GMP and notated with key amino acid modifications of Cayman's STING variants.

### Proteins

Item No.	Product Name
22809	CdnP ( <i>Mycobacterium tuberculosis</i> strain ATCC 25618/H37Rv recombinant)
22810	cGAS (human recombinant)
22811	IRF3 (human recombinant)
23590	IRF3 (S386A, S396A mutant; human recombinant)
23592	STING AQ variant (human recombinant)
22815	STING H232 variant (human recombinant)
15139	STING H232 variant; SUMO-tagged (human recombinant)
23594	STING M284 variant (human recombinant)
23593	STING R224 variant (human recombinant)
22816	STING R232 variant (human recombinant)
22817	TBK1 (human recombinant)

## Immune Checkpoint Modulators

### Modulators of Immune Checkpoint Proteins

Item No.	Product Name
16838	CAY10581
19875	Epacadostat
19132	PD-1/PD-L1 Inhibitor 2
14806	R-848
16456	1-methyl-D-Tryptophan

### Antibodies

Item No.	Product Name
23853	cGAS Monoclonal Antibody (Clone 5G10)
22811	IRF3 (human recombinant)
17856	STING Monoclonal Antibody (Clone 2C8)
17857	STING Polyclonal Antibody

### Pathway Modulators

Item No.	Product Name
19887	2'3'-cGAMP (sodium salt) (Also available: 22419, 17966)
17144	Cyclic di-GMP (sodium salt) (Also available: 17753, 22485)
14617	DMXAA
22353	G10
22441	KIN1400
22402	StA-IFN-1

### 2'3'-cGAMP ELISA Kit - Item No. 501700

- Measure 2'3'-cGAMP in cell lysates down to 85.3 pg/ml
- Monitor the kinetics of 2'3'-cGAMP formation and hydrolysis in a biological setting
- Identify compounds that modulate cGAS activity by monitoring cGAMP levels

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### Antibodies

Item No.	Product Name
10011454	Adenosine Receptor A <sub>2A</sub> Monoclonal Antibody (Clone 7FG-G <sub>5</sub> -A2)
10004837	CD27 Monoclonal Antibody (Clone 203.6)
18842	Mouse Anti-CTLA-4 IgG conjugated to R-Phycoerythrin
18843	Rat Anti-LAG-3 IgG conjugated to R-Phycoerythrin
10873	TRAF5 Monoclonal Antibody (Clone 55A219)

# DNA Damage & Repair



Cayman offers a variety of tools to measure the major DNA damage markers such as 8-hydroxy-2'-deoxyguanosine (8-OH-dG) and to screen for inhibitors of DNA repair. A variety of base excision repair inhibitors are available, including inhibitors of poly(ADP-ribose) polymerases (PARPs), which assist in the repair of single-strand DNA nicks. Cayman's human recombinant BRCT domain-containing proteins can be used to study DNA damage checkpoint control and/or DNA repair pathways.

## Tools to Measure DNA Damage

### ELISA Kits - Sensitive Determination of 8-OH-dG

#### DNA/RNA Oxidative Damage (Clone 7E6.9) ELISA Kit

Item No. 501130

#### DNA/RNA Oxidative Damage (High Sensitivity) ELISA Kit


Item No. 589320

### Reactive Probe for Abasic Sites in Damaged DNA

Item No.	Product Name
10009350	Aldehyde Reactive Probe (trifluoroacetate salt)

### Screen for DNA Repair Inhibitors

Item No.	Product Name
501280	Glyco-SPOT DNA Repair Assay Kit

Manufactured by 

### DNA Repair Inhibitors

Item No.	Product Name
16348	DNA Base Excision Repair Pathway Inhibitor
22941	L67
18374	L189
18015	SCR7

### PARP Inhibitors

Item No.	Product Name
10397	3-amino Benzamide
18509	4-amino-1,8-Naphthalimide
11505	ABT-888 (hydrochloride)
19782	BMN 673
11304	BSI-201
14450	DPQ
21181	DR2313
14438	1,5-Isoquinolinediol
18488	ME0328
21340	NMS-P118
14534	NU 1025
10621	Olaparib
14440	PJ-34 (hydrochloride)
15643	Rucaparib
16112	TIQ-A

### PARP Antibody

Item No.	Product Name
13557	PARP (Cleaved) Monoclonal Antibody

### Human Recombinant BRCT Domain-Containing Proteins

Item No.	Product Name
14166	BARD1 BRCT domains (human recombinant)
14167	BRCA1 BRCT domains (human recombinant)
14168	ECT2 BRCT domains (human recombinant)
14169	LIG4 BRCT domains (human recombinant)
14170	MDC1 BRCT domains (human recombinant)
14171	TP53BP1 BRCT domains (human recombinant)

More than 200 products for DNA damage and repair available online

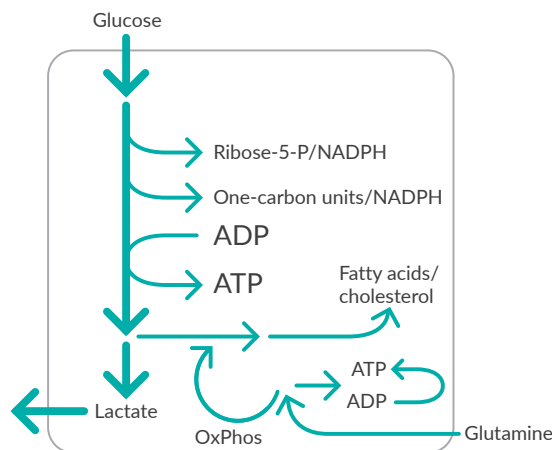
# Cellular Metabolism

Cayman's tools for cellular metabolism focus on the uptake of glucose as well as the rate-controlling enzymes and metabolites in the gluconeogenesis and glycolysis pathways. Because tumorigenesis is often dependent on the reprogramming of cellular metabolism, these tools are useful for the development of therapeutics for the treatment of cancer.



## Glucose Metabolism Assays

Item No.	Product Name
10009582	Glucose Colorimetric Assay Kit
700300	Glucose-6-Phosphate Dehydrogenase Activity Assay Kit
700750	Glucose-6-Phosphate Fluorometric Assay Kit
600470	Glucose Uptake Cell-Based Assay Kit
700480	Glycogen Assay Kit
600450	Glycolysis Cell-Based Assay Kit
700510	L-Lactate Assay Kit
700470	Pyruvate Assay Kit



Glucose metabolism in proliferating cancer cells.

## Fluorescent Probes

Item No.	Product Name	Detects	Excitation Maximum (nm)	Emission Maximum (nm)
11046	2-NBDG	Glucose uptake	475	550
13961	6-NBDG	Glucose uptake	465	535
9002314	NBD-Fructose	Fructose uptake; GLUT5 transport activity	472	538

## Glucose Metabolism Inhibitors

Item No.	Product Name
10009315	6-Aminonicotinamide
14325	2-deoxy-D-Glucose
18860	Fructose-1,6-bisphosphatase-1 Inhibitor
14079	Heptelidic Acid
17689	PFK15
19863	Physcion
19276	3PO

## Glycolytic Pathway Enzymes

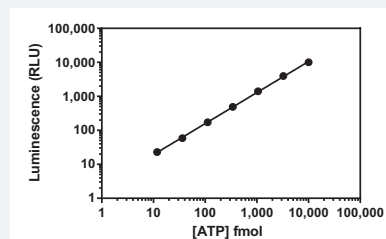
Item No.	Product Name
18279	Glucose-6-phosphate Isomerase (human recombinant)

## Glucose Transporter Inhibitors

Item No.	Product Name
19961	BAY-876
11327	Cytochalasin A
11173	STF-31

## ATP Detection Assay Kit - Luminescence - Item No. 700410

- Measure ATP in a variety of sample types
- Assay 120 samples in duplicate
- **Assay Range:** 12 fmol to 10 pmol
- Plate-based luminescence measurement



# Cell Proliferation, Viability, & Cytotoxicity



The range of fluorescent probes and cell-based assays available from Cayman are designed to give you the flexibility and efficiency needed to monitor cell cycle phase, viability, proliferation, and/or cytotoxicity. When performed in a biologically relevant context, these tools offer the ability to detect perturbations in function following treatment with a compound of interest, or the ability to monitor the overall health of your cell model.

## Cell Viability, Cell Cycle, Cell Proliferation

Item No.	Product Name	Detects	Excitation Maximum (nm)	Emission Maximum (nm)
14338	Acridine Orange	Cell cycle phase; pH (cell-permeable)	<ul style="list-style-type: none"> <li>■ 502 (dsDNA)</li> <li>■ 460 (ssDNA or RNA)</li> <li>■ 475 (low pH)</li> </ul>	<ul style="list-style-type: none"> <li>■ 525 (dsDNA)</li> <li>■ 650 (ssDNA or RNA)</li> <li>■ 590 (low pH)</li> </ul>
11397	7-Aminoactinomycin D	DNA; cell viability	■ ■ ■ 488, 546, 578	■ 650
14948	Calcein AM*	Cell viability (cell-permeable)	■ 494	■ 517
20635	Calcein Deep Red™ Acetate*	Cell viability (cell-permeable)	■ 646	■ 659
20641	Calcein Orange™ Diacetate*	Cell viability (cell-permeable)	■ 525	■ 550
20632	Calcein Red™ AM*	Cell viability (cell-permeable)	■ 560	■ 574
20639	Calcein UltraBlue™ AM*	Cell viability (cell-permeable) <i>(higher photostability and stronger fluorescence intensity at physiological pH than Calcein Blue)</i>	■ 360	■ 445
14456	CFDA-SE	Cell proliferation	■ 491	■ 518
20695	CytoCalcein™ Violet 500	Cell viability (cell-permeable)	■ 405	■ 500
20698	CytoTrace™ Red CMTPX	Cell division; cell trafficking; cell-to-cell interactions (cell-permeable)	■ 577	■ 602
19583	Green CMFDA	Cell division; cell trafficking (cell-permeable)	■ 492	■ 517
15547	Hoechst 33342 (hydrochloride)	DNA (A-T-rich sequences); cell cycle; nuclear morphology (cell-permeable)	■ 350	■ 461
15003	JC-1	Mitochondrial integrity; apoptosis (cell-permeable)	<ul style="list-style-type: none"> <li>■ 485 (monomer)</li> <li>■ - ■ 520-570 (aggregate)</li> </ul>	<ul style="list-style-type: none"> <li>■ 535 (monomer)</li> <li>■ 570-610 (aggregate)</li> </ul>
14289	Propidium Iodide	DNA; RNA; cell viability	■ 488-535	■ 617
14488	Pyronin Y	dsRNA; cell cycle (cell-permeable)	■ - ■ 540-550	■ - ■ 560-580

\*Also available: [membrane-impermeable non-AM forms](#)

## Cell Proliferation Assays

Item No.	Product Name	Measures	Readout	Time to Results
10009349	Cell Cycle Phase Determination Kit	Cell cycle progression	Flow cytometer	~3 hours
10009853	CFSE Cell Division Assay Kit	Cell proliferation	Flow cytometer	<1 hour to label, variable incubation, <1 hour to prep samples for flow cytometry
10009365	MTT Cell Proliferation Assay Kit	Cell proliferation / viability	Colorimetric plate reader	3-4 hours
10008883	WST-1 Cell Proliferation Assay Kit	Cell proliferation / viability	Colorimetric plate reader	2-4 hours
10010199	WST-8 Cell Proliferation Assay Kit	Cell proliferation / viability	Colorimetric plate reader	2-4 hours
10010200	XTT Cell Proliferation Assay Kit	Cell proliferation / viability	Colorimetric plate reader	4 hours

[More than 300 products for cell proliferation, viability, and cytotoxicity available online](#)

# Epigenetics

Cayman offers assays, small molecule inhibitors, recombinant proteins, and antibodies to key epigenetic factors to help researchers examine reversible aberrations that could be targeted for cancer treatment.



## DNA Methylation

### DNA Methyltransferase Inhibitors

Item No.	Product Name
11164	5-Azacytidine
11166	Decitabine
13302	RG-108
11165	SGI-1027

## Histone Modification

### Histone Methyltransferase Assays and Inhibitors

Item No.	Product Name
13124	BIX01294 (hydrochloride hydrate)
13828	3-Deazaneplanocin A
13966	EPZ005687
16175	EPZ5676
700140	Methyltransferase Colorimetric Assay Kit
700150	Methyltransferase Fluorometric Assay Kit
600490	SET7/9 SAM-Screener™ Assay Kit
700350	SET8 Methyltransferase Inhibitor Screening Assay Kit

### Histone Acetyltransferase Assays and Inhibitors

Item No.	Product Name
13144	Anacardic Acid
10549	C646
19835	HAT Inhibitor II
10006515	HAT Inhibitor Screening Assay Kit
17778	L002
22135	MG149

### Measure Global Changes in DNA Methylation

Item No.	Product Name
589324	DNA Methylation ELISA Kit

### Histone Deacetylase Assays and Inhibitors

Item No.	Product Name
10575	Apicidin
12084	CI-994
16426	CUDC-101
600150	HDAC Cell-Based Activity Assay Kit
10011563	HDAC Fluorometric Activity Assay Kit
10011564	HDAC1 Inhibitor Screening Assay Kit
10010401	SIRT1 Direct Fluorescent Screening Assay Kit
10011566	SIRT3 Direct Fluorescent Screening Assay Kit

### Histone Demethylase Assays and Inhibitors

Item No.	Product Name
19705	Bizine
16439	GSK-LSD1 (hydrochloride)
11572	IOX1
700120	LSD1 Inhibitor Screening Assay Kit
13944	N-Oxalylglycine
15487	SP2509

## Epigenetics Screening Library (96-Well) - Item No. 11076

- Contains >140 small molecules
- Includes compounds that modulate the activity of methyltransferases, demethylases, HATs, HDACs, and acetylated lysine reader proteins





# Bioactive Lipids

Cayman's research standards for bioactive lipids can be used to support a lipidomics approach to tumor characterization and anticancer therapies. We are experts in building the tools needed to study how bioactive lipids are involved in the oncogenic process.



## Sphingolipids

Item No.	Product Name
24393	C15 Ceramide (d18:1/15:0)
10681	C16 Ceramide (d18:1/16:0)
24369	C16 dihydro Ceramide (d18:0/16:0)
24427	C17 dihydro Ceramide (d18:0/17:0)
24464	C18 Ceramide-1-Phosphate-d <sub>3</sub> (d18:1/18:0-d <sub>3</sub> )
24428	C18 dihydro Ceramide-d <sub>3</sub> (d18:0/18:0-d <sub>3</sub> )
10724	C20 Ceramide (d18:1/20:0)
24400	C30 Ceramide (d18:1/30:0)
10165	D-erythro-MAPP
10007945	Sphinganine (d18:0)
22500	Sphinganine-1-phosphate (d18:0)
24373	Sphingosine (d14:1)
62570	Sphingosine-1-phosphate (d18:1)
22503	N,N-dimethyl Sphingosine (d17:1)

## Click Chemistry Probe for Sphingolipid Degradation

Item No.	Product Name
20714	(E)-2-Hexadecenal Alkyne

## Conjugated PUFAs

Item No.	Product Name
16036	Jacaric Acid
22976	9(E),11(E),13(E)-Octadecatrienoic Acid
10008349	9(Z),11(E),13(E)-Octadecatrienoic Acid
10008350	9(Z),11(E),13(E)-Octadecatrienoic Acid ethyl ester
10008333	9(Z),11(E),13(E)-Octadecatrienoic Acid methyl ester

## Read the Publication

### CD8<sup>+</sup> T cells regulate tumour ferroptosis during cancer immunotherapy

Discovered by University of Michigan researchers in collaboration with Cayman Chemical.

Nature 569, 270–274 (2019)

## Hydroxy/Hydroperoxy/Epoxy/Oxo Eicosanoids

Item No.	Product Name
18343	(±)5(6)-DiHETE lactone
50651	(±)14(15)-EET
50861	(±)17(18)-EpETE
32550	12(S)-HEPE
32840	(±)18-HEPE

## MaxSpec® Standards

Item No.	Product Name
24923	20-HETE-d <sub>6</sub> MaxSpec® Standard
10007240	Leukotriene B <sub>4</sub> MaxSpec® Standard
24936	Lipoxin A <sub>4</sub> -d <sub>5</sub> MaxSpec® Standard
10007273	Prostaglandin E <sub>2</sub> -d <sub>4</sub> MaxSpec® Standard

## Phosphatidic Acids

Item No.	Product Name
10010299	Oleoyl 3-carbacyclic Phosphatidic Acid
10010298	Palmitoleoyl 3-carbacyclic Phosphatidic Acid
10010293	Palmitoyl 3-carbacyclic Phosphatidic Acid

## Phosphatidylinositols

Item No.	Product Name
10008115	PtdIns-(4,5)-P <sub>2</sub> (1,2-dipalmitoyl) (sodium salt)
64930	PtdIns-(3,4,5)-P <sub>3</sub> (1-stearoyl, 2-arachidonoyl) (sodium salt)

## PAFs

Item No.	Product Name
9000332	Methylcarbanyl PAF C-8
60908	Methylcarbanyl PAF C-16

## Bioactive Lipid Screening Libraries

Item No.	Product Name
10506	Bio-active Lipid I Screening Library (96-Well)
10507	Bio-active Lipid II Screening Library (96-Well)

# Kinases

Cayman offers hundreds of potent small molecule inhibitors that target the major protein kinase families. These tools can be used to study how disruptions in intracellular signaling pathways can lead to the formation and spread of cancer, and assist pharmaceutical researchers in the development of novel cancer-fighting treatments.



## Receptor Tyrosine Kinases

EGFR/ErbB/HER Family    FGFR Family  
IGF-1R/InsR Family    PDGFR Family  
VEGFR Family

## Non-Receptor Tyrosine Kinases

Abl Family and Bcr-Abl    JAK Family  
SRC Family    Tec Family

## Serine/Threonine Kinases

ALKs    ATM    Aurora    CaMKs  
CDKs    Checkpoint Kinases    CK1  
CK2    DNA-PK    GSK3    IKKs  
JNK    mTOR    p38 MAPK    S6K  
PIMs    PLKs    PKA    PKB/Akt  
PKC    PKD & PKG    ROCK  
RAS/RAF/MEK/ERK/MAPK

## Lipid Kinases

PI3K    SPHKs

## Carbohydrate Kinases

Glucokinases    Hexokinases  
NAGK    PFKFB3

## Simplify Screening and Hit-Seeking

### Kinase Screening Library (96-Well)

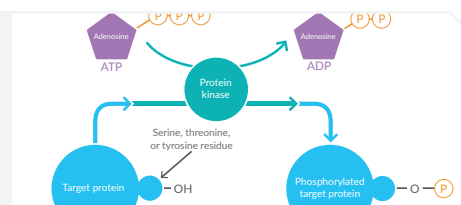
Item No. 10505

- Consists of two plates with ~160 selective and non-selective kinase inhibitors
- 10 mM inhibitor stocks in DMSO
- Includes a selection of dual specific threonine/tyrosine, MAPK, p38 MAPK, and PI3K inhibitors



**Also available:** Comprehensive Kinase Screening Library featuring >950 kinase inhibitors. Contact [sales@caymanchem.com](mailto:sales@caymanchem.com) for more information.

Browse more than 1,000 kinase inhibitors by target and learn more about the phosphorylation process by visiting [www.caymanchem.com/news](http://www.caymanchem.com/news)



# Bioanalysis & Assay Development



Our scientific staff has decades of industry expertise in assay and methods development, sample preparation, and analysis. We consult with you from project kickoff to conclusion on experimental design and data analysis to ensure you meet your objectives. Select from our catalog of well-characterized assays, or let our experts design a custom assay that suits your specific requirements.

## Sample Analysis

- Biomarker profiling
- Activity screening
- Lipidomic profiling
- Immunopeptidome profiling
- Proteomic profiling and PTM analysis
- Cellular metabolism and bioenergetics analysis

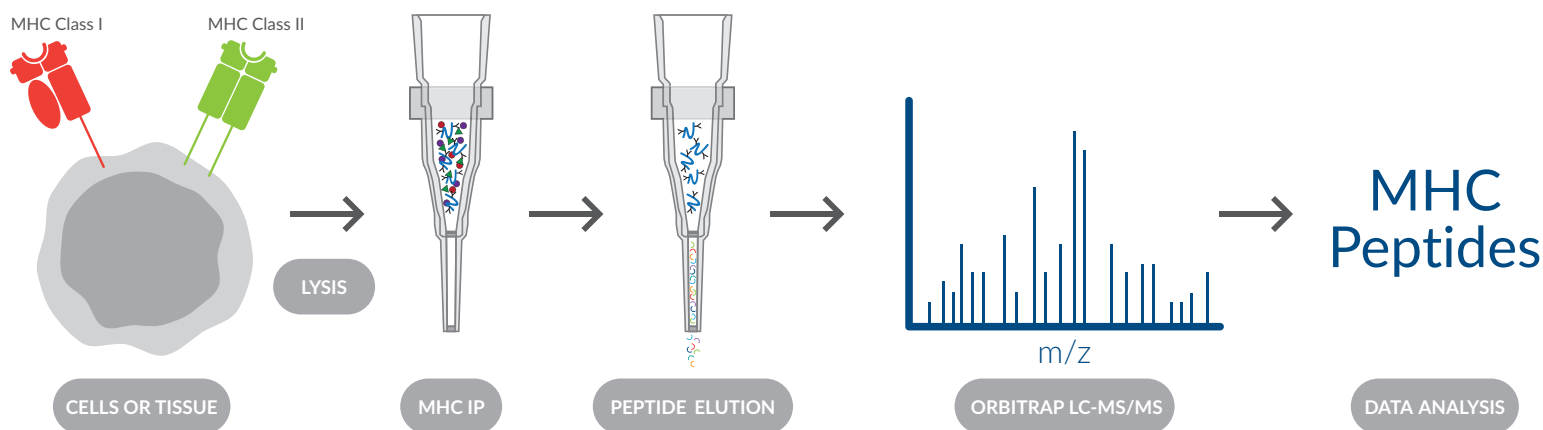
## Custom Assay Development

- Immunoassays
- Mass spectrometry-based assays
- Enzyme activity assays
- Cell-based assays
- Reporter assays

### *Spotlight: Immunopeptidome Profiling*

Cayman, in partnership with MS Bioworks, has developed a workflow to enable MHC Class I peptide profiling and MHC Class II Associated Peptide Proteomics (MAPPs). Our collective expertise provides efficient, cost-effective deep sequence analysis of immunogenic peptides from tumor cells and biological therapeutics.

- Identification of thousands of MHC-associated peptides
- Suitable for cells or tumor tissue
- Allele-specific studies matched to your specifications
- Analysis using Orbitrap MS and unbiased, deep sequencing of the MHC peptidome
- Custom antibody production, cell culture, and bioanalysis services
- Optimized workflow for MHC Class I and Class II (human or mouse)



To learn more, visit [www.caymanchem.com/services](http://www.caymanchem.com/services)



## CONTACT US

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