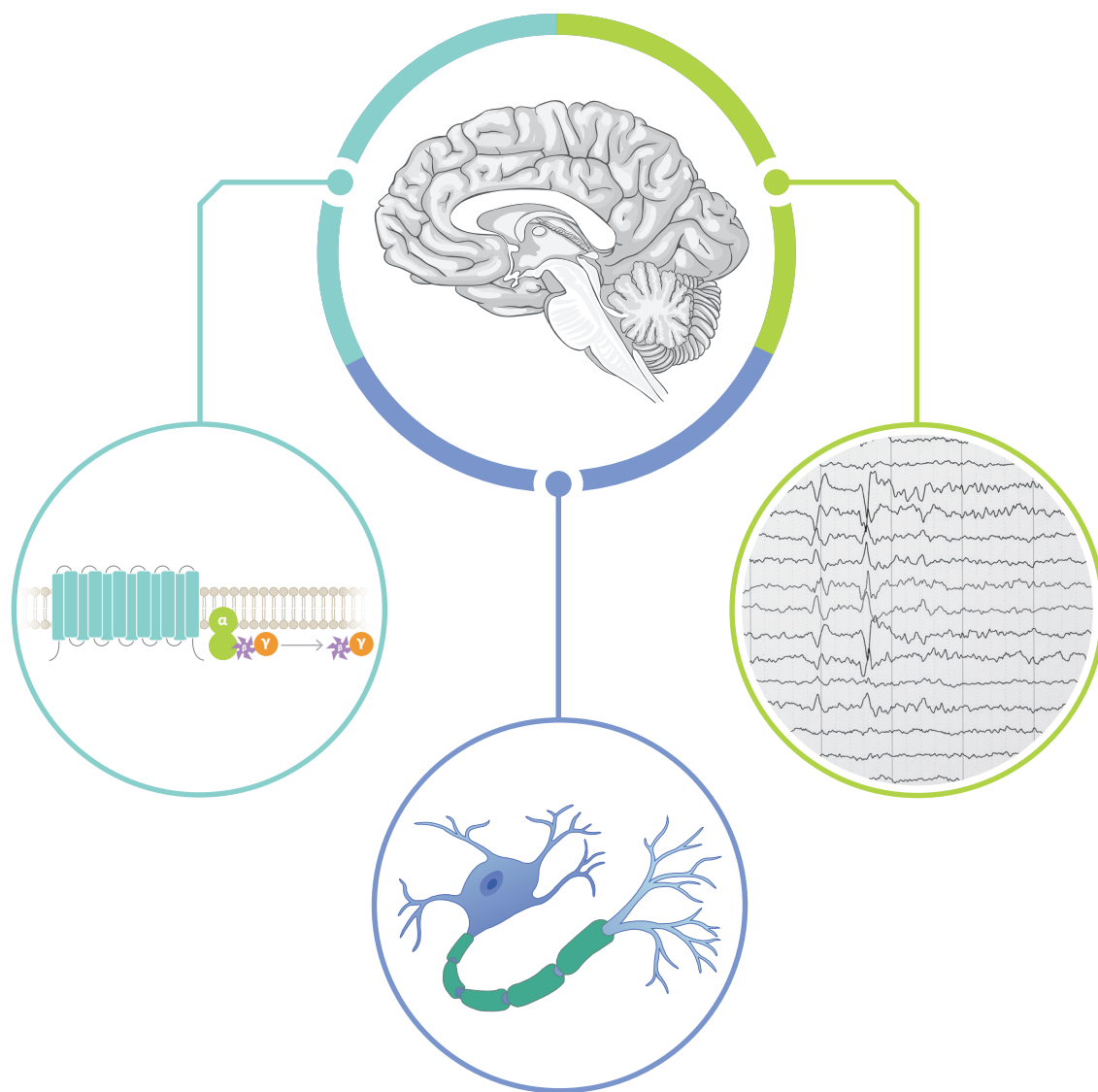


# Neuroscience

From the earliest stages of developmental processes to disorders that lead to degeneration, Cayman provides an abundance of tools to study the inner workings of the nervous system. We offer expertise that runs the gamut from cannabinoid signaling and pain research to neuroendocrinology and neurodegeneration.

- Examine modulators of targeted brain circuits mediating behavior
- Uncover mechanisms underlying various neurodegenerative disorders
- Screen for novel antiepileptic compounds
- Modulate receptors expressed by nociceptive primary afferent nerves
- Study enzymes that synthesize and degrade endocannabinoids and screen hundreds of synthetic cannabinoids



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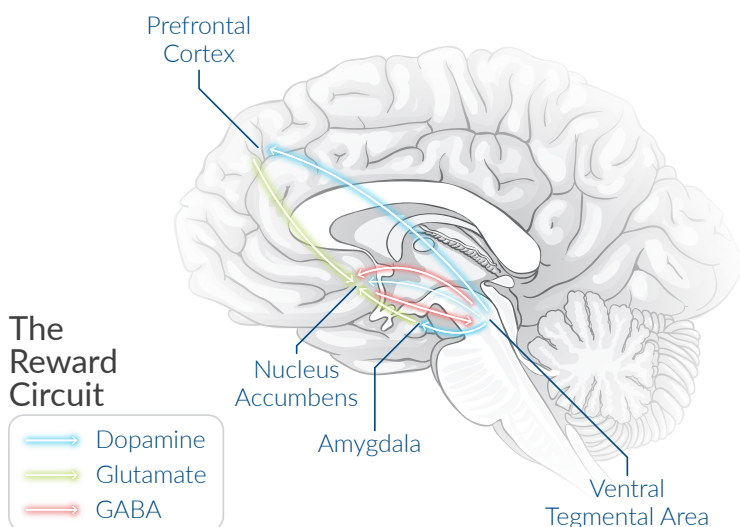
Pain Research

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Cannabinoid Research

# Behavioral Neuroscience

From understanding the underlying neural processes of normal biological function to determining how these processes become disrupted in various neurological and psychiatric disorders, Cayman offers a range of products to study targeted brain circuits mediating behavior. This includes modulators of the reward circuit, learning and memory, sleep and biological rhythms, anxiety, and depression.



## Dopamine Receptor Agonists/Antagonists

Item No.	Product Name
21992	Dopamine (hydrochloride)
22354	L-741,626
11981	(S)-Pramipexole (hydrochloride)
25331	SCH 39166 (hydrobromide)

## mGluR Agonists/Antagonists/Allosteric Modulators

Item No.	Product Name
21807	A-841720
21486	CPCCOEt
14961	MTEP (hydrochloride)
21457	NGB 2904 (hydrochloride)
11995	VU0360223
22925	YM-298198 (hydrochloride)

## Catecholamine Synthesis/Transport Tools

Item No.	Product Name
10009372	Dopamine Transporter (C-Term) Polyclonal Antibody
10009373	Dopamine Transporter (Extracellular Loop 2) Polyclonal Antibody
15622	GBR 12909 (hydrochloride)
17700	GBR 12935 (hydrochloride)
27798	3-Iodotyrosine
24001	Metyrosine
22126	Nepicastat (hydrochloride)
10009413	Tyrosine Hydroxylase (Phospho-Ser <sup>31</sup> ) Polyclonal Antibody
10009414	Tyrosine Hydroxylase (Phospho-Ser <sup>40</sup> ) Polyclonal Antibody

## GABA Receptor Modulators

Item No.	Product Name
25535	(R,S)-BHFF
10008346	Gabapentin
20919	Ganaxolone
14585	SR 95531 (hydrobromide)

## $\mu$ -Opioid Receptor Agonists/Antagonists

Item No.	Product Name
23902	Alvimopan
26150	AT-121
24955	$\beta$ -Endorphin (human) (trifluoroacetate salt)
27377	CTOP (trifluoroacetate salt)
23280	Endomorphin 1 (trifluoroacetate salt)
23281	Endomorphin 2 (trifluoroacetate salt)

Cayman offers more than 2,000 drugs of abuse available as high-quality standards for analytical testing or in bulk quantities for scientific research.

- Amphetamines
- Benzodiazepines
- Hallucinogens
- Steroids
- Antidepressants
- Cannabinoids
- Opioids
- Stimulants

Browse our standards on [www.caymanchem.com](http://www.caymanchem.com)

## Learning & Memory

### NMDA Receptor Agonists/Antagonists

Item No.	Product Name
14539	D-AP5
14184	Memantine (hydrochloride)
14581	NMDA

### AMPA Receptor Modulators

Item No.	Product Name
14936	CX-516
21510	Farampator
14937	S18986

## Sleep & Biological Rhythms

### Melatonin Receptor Agonists/Antagonists

Item No.	Product Name
15998	Luzindole
14427	Melatonin
21857	6-hydroxy Melatonin
24731	Melatonin Receptor Type 1A (human recombinant)
17411	4-P-PDOT
23546	Tasimelteon
18605	N-acetyl Tryptamine

### REV-ERBa/ $\beta$ Agonists/Antagonists

Item No.	Product Name
11931	GSK4112
11929	SR9009
11930	SR9011
17000	SR8278

## Anxiety

### Serotonin Receptor Agonists/Antagonists

Item No.	Product Name
23449	Eptapirone
22405	Escitalopram
14418	Fluoxetine (hydrochloride)
22075	Ipsapirone
21336	Metergoline



### nAChR Agonists and Allosteric Modulators

Item No.	Product Name
25991	DBO-83
21018	NS 1738
14973	SIB 1553A (hydrochloride)

### Orexin Receptor Agonists/Antagonists

Item No.	Product Name
13638	Almorexant (hydrochloride)
14139	JNJ-10397049
20993	MK-1064
24765	Orexin B (human) (trifluoroacetate salt)
9002140	Suvorexant
18495	TCS 1102

### Orexin 2 Receptor Reporter Assay Kit

#### Item No. 600250

- A 96-well plate coated with DNA encoding both OX2R and a cAMP response element-regulated SEAP
- Cells grown on the complex will express both OX2R and the SEAP reporter

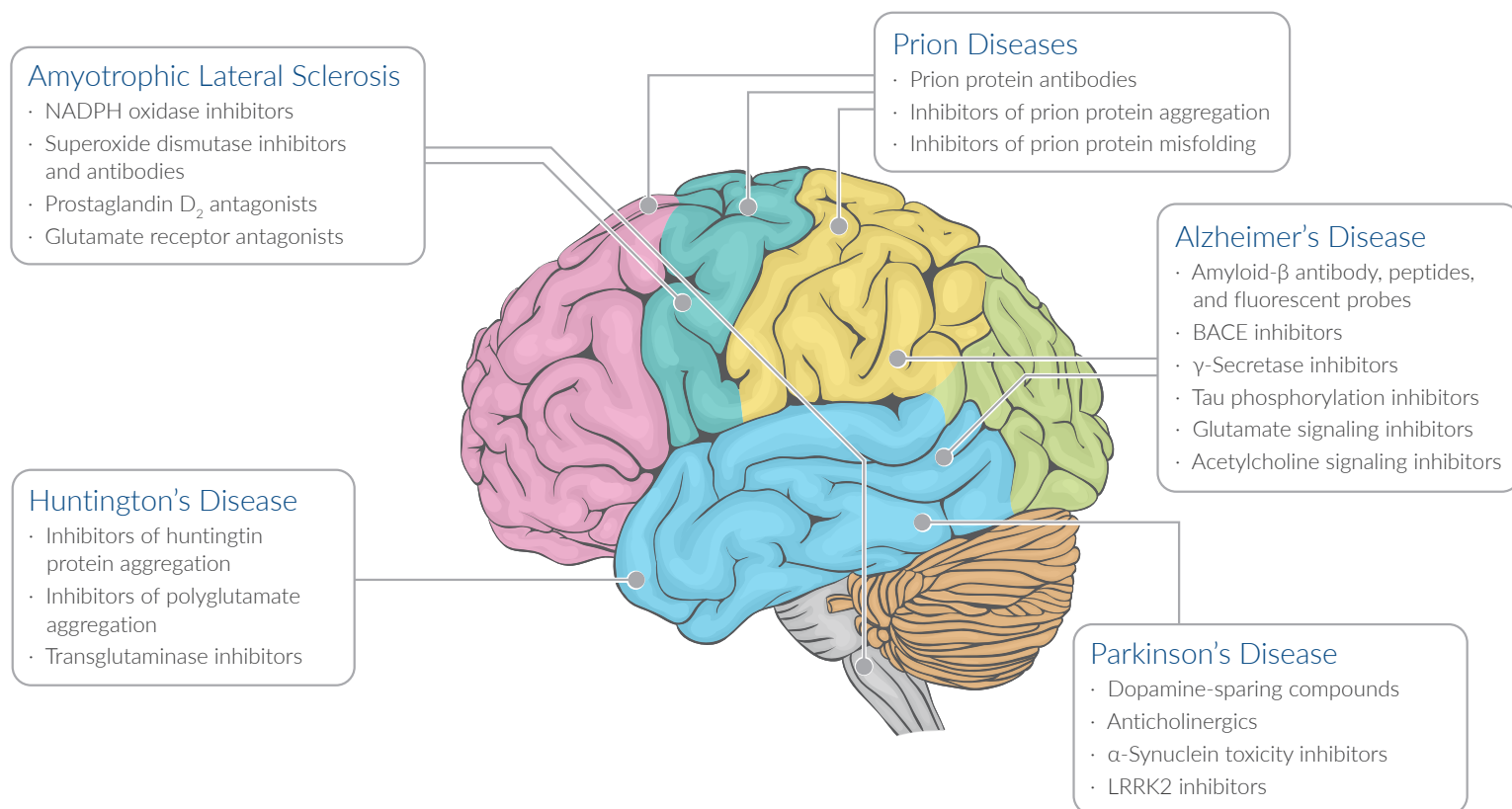
## Depression

### Antidepressants

Item No.	Product Name
15881	Amitriptyline (hydrochloride)
17347	Amoxapine
15884	Clomipramine (hydrochloride)
15888	Doxepin (hydrochloride)
15890	Imipramine (hydrochloride)

# Neurodegenerative Disorders

Cayman offers a broad collection of tools to study the mechanisms underlying various neurodegenerative disorders. This includes key compounds, peptides, antibodies, and assay kits used to study the disease pathways of Alzheimer's Disease, Parkinson's Disease, Amyotrophic Lateral Sclerosis (ALS), Huntington's Disease, and Prion Diseases.



## Alzheimer's Disease

### Amyloid-β Research Tools

Item No.	Product Name	Summary
11610	Amyloid-β Monoclonal Antibody (Clone 6C3, MOAB-2)	<b>Host:</b> Mouse · <b>Species Reactivity:</b> (+) Human · <b>Applications:</b> ELISA, ICC, IP, WB
27419	Amyloid-β Precursor Protein (96-110) Peptide (cyclized) (human) (trifluoroacetate salt)	A 15-residue cyclized APP fragment
10229	Amyloid-β (1-8, A2V) Peptide	Model peptide (dominant negative mutant) for design of amyloid formation inhibitors
21617	Amyloid-β (1-40) Peptide (human) (trifluoroacetate salt)	A 40-residue Aβ protein fragment
20574	Amyloid-β (1-42) Peptide (trifluoroacetate salt)	A 42-residue Aβ protein fragment
19814	CRANAD 2	A near-infrared Aβ fluorescent probe (K <sub>d</sub> = 38 nM)
18520	NIAD-4	A fluorescent probe for Aβ (K <sub>i</sub> = 10 nM)
29431	Propentofylline	A neuroprotective agent that reduces cell death induced by amyloid-β (1-42)

### Acetylcholine Signaling Inhibitors

Item No.	Product Name	Summary
13245	Donepezil	Reversibly inhibits AChE which readily crosses the blood-brain barrier to reduce the breakdown of acetylcholine
14270	Rivastigmine (tartrate)	Irreversibly inhibits AChE (IC <sub>50</sub> = 4.15 μM) and BChE (IC <sub>50</sub> = 37 nM)
70240	Tacrine (hydrochloride)	Inhibits both AChE and BChE (IC <sub>50</sub> s = 31 and 26.5 nM, respectively)

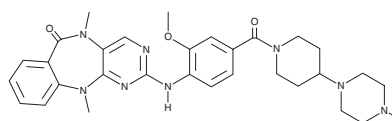
# Parkinson's Disease



## LRRK2-IN-1

Item No. 18094

· A selective LRRK2 inhibitor



## Dopamine-Sparing Compounds and Anticholinergics

Item No.	Product Name	Summary
16094	(-)-Apomorphine (hydrochloride)	A non-selective dopamine receptor agonist that displays anti-parkinsonian and neuroprotective actions
16214	Benztropine (mesylate)	A centrally acting M <sub>1</sub> mAChR antagonist (K <sub>i</sub> = 0.59 nM in rat); inhibits dopamine uptake through the dopamine transporter
15618	CAY10680	A dopamine-sparing, benzothiazinone compound that selectively inhibits both MAO-B activity (IC <sub>50</sub> = 34.9 nM) and adenosine A <sub>2A</sub> receptors (K <sub>i</sub> = 39.5 nM) in human
15046	R(-)-Deprenyl (hydrochloride)	A selective, reversible inhibitor of MAO-B (K <sub>i</sub> = 0.091 μM)
13248	L-DOPA	A metabolic precursor of dopamine that crosses the blood-brain barrier
14153	Entacapone	A peripherally acting COMT inhibitor (K <sub>i</sub> = 145 nM); decreases 3-OMD levels in rat brain and prolongs L-DOPA bioavailability
15622	GBR 12909 (hydrochloride)	An inhibitor of dopamine uptake <i>in vivo</i> , leading to consequent stimulation of dopamine receptors
11640	Lazabemide	A reversible inhibitor of MAO-B
11981	(S)-Pramipexole (hydrochloride)	An agonist of the G <sub>α</sub> -linked dopamine receptors D <sub>2</sub> , D <sub>3</sub> , and D <sub>4</sub> (K <sub>s</sub> = 3.9, 2.2, 0.5, and 5.1 nM for D <sub>2s</sub> , D <sub>2L</sub> , D <sub>3</sub> , and D <sub>4</sub> , respectively)
17422	Raclopride	A selective dopamine D <sub>2</sub> /D <sub>3</sub> receptor antagonist (K <sub>s</sub> = 1.8 and 3.5 nM, respectively)
14917	Rasagiline	An inhibitor of MAO-B (IC <sub>50</sub> = 4.43 nM); increases the availability of dopamine at striatal receptors
11982	SB 277011A (hydrochloride)	A selective dopamine D <sub>3</sub> receptor antagonist (pK <sub>i</sub> = 8.0)
15631	SCH 23390 (hydrochloride)	A selective antagonist of the dopamine D <sub>1</sub> -like receptor subtypes D <sub>1</sub> and D <sub>5</sub> (K <sub>s</sub> = 0.2 and 0.3 nM, respectively)
10032	N-(α-Linolenoyl) Tyrosine	A dietary CNS lipid used for enhancing CNS dopamine content by facilitated transport of the tyrosine precursor across the blood-brain barrier

## Neuroprotection

### Receptor Agonists

Item No.	Product Name	Receptor Target
21570	GTS-21 (hydrochloride)	α7-containing nAChRs
15351	LY379268	mGluR2 and mGluR3
14304	PNU-120596	α7-containing nAChRs

### Receptor Antagonists

Item No.	Product Name	Receptor Target
13358	CAY10608	NR2B subunit of NMDA receptors
23728	Conivaptan (hydrochloride)	Arginine vasopressin (AVP) receptors V <sub>1A</sub> and V <sub>2</sub>
10009019	(+)-MK-801 (hydrogen maleate)	NMDA receptors
18453	NASPM (hydrochloride)	GluR2-lacking, Ca <sup>2+</sup> -permeable AMPA receptors

# Neuroendocrinology



The central neuroendocrine systems serve as an interface between the brain and many of the peripheral endocrine systems. From regulation of the pituitary as an output of the nervous system to various influences of hormones on the nervous system, Cayman offers neuropeptides, steroid hormones, assay kits, antibodies, and key receptor agonists and antagonists to study these important axes.

## Neuropeptides, Nonpeptide Hormones, and Pheromones

Item No.	Product Name	Summary
21618	Angiotensin III (human, mouse)	An agonist at AT <sub>1</sub> and AT <sub>2</sub> receptors
16063	Corticosterone	A steroid hormone used as a stress biomarker
24407	CRF (human, rat) (trifluoroacetate salt)	A neuropeptide secreted in response to stress
24462	MCH (human, mouse, rat) (trifluoroacetate salt)	A hypothalamic neuropeptide hormone
24476	Melanocyte-Stimulating Hormone Release-Inhibiting Factor (trifluoroacetate salt)	A tripeptide with diverse biological activities
24543	Neuromedin B (trifluoroacetate salt)	A peptide agonist of the NMB receptor
24707	Neuromedin N (trifluoroacetate salt)	A neurotensin-like neuropeptide
24548	Neuropeptide FF (trifluoroacetate salt)	A neuropeptide and agonist of NPFF1 and NPFF2 receptors
24551	Neuropeptide W-23 (human) (trifluoroacetate salt)	A neuropeptide ligand for GPR7 and GPR8
15071	Neuropeptide Y (human, rat)	A key neuropeptide of the gut-brain axis
15073	Orexin A (bovine, human, mouse, rat)	A hypothalamic neuropeptide
24767	[Ser <sup>4</sup> ,Ile <sup>6</sup> ]-Oxytocin (trifluoroacetate salt)	A neuropeptide
16502	Peptide YY (3-36)	A satiety hormone
19864	Pregnenolone	A natural steroid hormone
24113	Sermorelin (trifluoroacetate salt)	A growth hormone-releasing hormone analog
24991	Somatostatin-28 (trifluoroacetate salt)	A cyclic neuropeptide hormone

## Neuroendocrine Assay Kits

Item No.	Product Name	Summary
10006307	Acylated Ghrelin (mouse, rat) Express EIA Kit	Specifically measures the octanoylated active form of ghrelin
500360	Cortisol ELISA Kit	A competitive assay for the quantification of cortisol in urine, plasma, and other sample matrices
500010	Leptin (human) EIA Kit	Enzyme immunometric assay for the measurement of human leptin
10007609	Leptin (mouse/rat) EIA Kit	For the measurement of mouse or rat leptin
10007608	Leptin Receptor (human) EIA Kit	For the measurement of human leptin receptor
501420	11-Oxoetiocholanolone ELISA Kit	For the quantification of 11-oxoetiocholanolone in biological matrices
500440	Oxytocin ELISA Kit	For the quantification of oxytocin in plasma
500730	Prolactin (human) ELISA Kit	An immunometric assay for the measurement of prolactin in human serum and plasma
583751	Substance P ELISA Kit	For the measurement of Substance P
10008953	Unacylated Ghrelin (mouse, rat) Express EIA Kit	For the measurement of unacylated ghrelin

# Seizure Disorders



Epilepsies are chronic neurological disorders in which neurons signal abnormally and cause seizures. Certain conditions can also involve seizures without being associated with chronic, epileptic electrical discharge in the brain. To study these disorders, Cayman provides central nervous system modulators that act as antiseizure compounds or can be used to experimentally induce seizures in animals in order to screen for novel compounds that block the production of seizures.

## Antiseizure Compounds

Item No.	Product Name	Summary
90080	Cannabidiol	An analytical reference standard
15612	2-Chloroadenosine	An adenosine A receptor agonist
10008346	Gabapentin	An approved antiepileptic drug
15428	Lamotrigine	An inhibitor of voltage-gated sodium channels
9001820	Levetiracetam	An antiepileptic compound
14577	Riluzole (hydrochloride)	An inhibitor of glutamatergic transmission
17781	Stiripentol	An antiepileptic drug
9000976	Vigabatrin	Inhibitor of GABA transaminase

## Seizure-Inducing Compounds

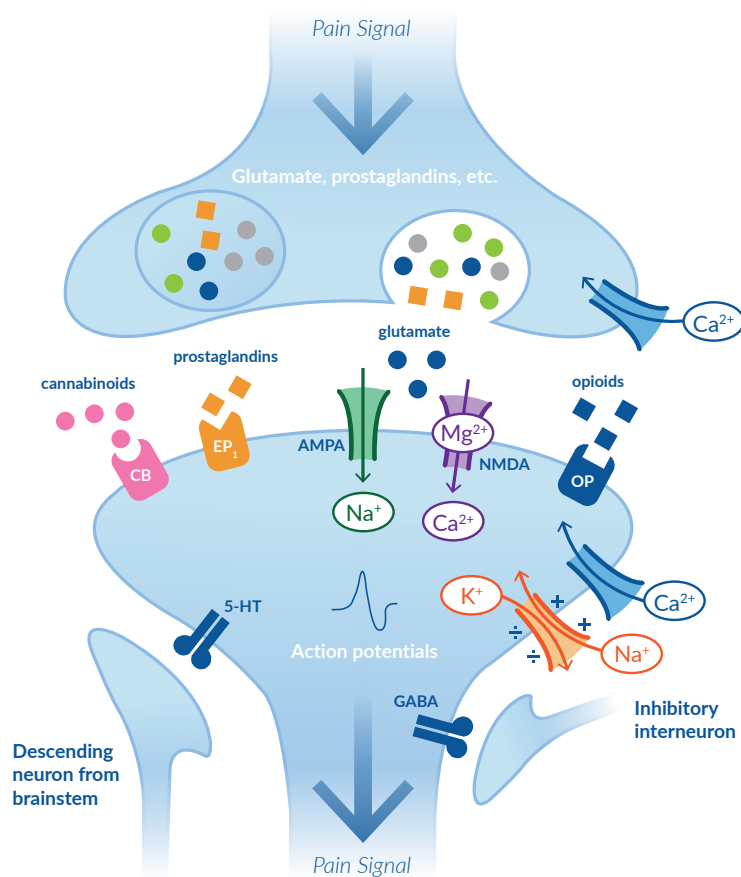
Item No.	Product Name	Summary
11727	Bicuculline	Competitive GABA <sub>A</sub> receptor antagonist
21433	Domoic Acid	Kainate receptor agonist
78050	(-)-(α)-Kainic Acid (hydrate)	Kainate receptor agonist
18682	Pentylentetrazole	Antagonist of GABA <sub>A</sub> receptors
20771	Picrotoxin	Selective GABA <sub>A</sub> receptor antagonist
14585	SR 95531 (hydrobromide)	Antagonist of GABA <sub>A</sub> receptors

## ILAE 2017 Classification of Seizure Types

Focal Onset <i>Seizures start in, and affect, one part of the brain.</i>		Generalized Onset <i>Seizures start in, and affect, both sides of the brain at once and happen without warning.</i>		Unknown Onset <i>Term used to describe a seizure if doctors are not sure where in the brain the seizure starts.</i>	
<i>Aware</i>	<i>Impaired Awareness</i>	<b>Motor Onset</b> · Tonic-Clonic · Clonic · Tonic · Myoclonic · Myoclonic-Tonic-Clonic · Myoclonic-Atonic · Atonic · Epileptic Spasms	<b>Non-Motor (absence)</b> · Typical · Atypical · Myoclonic · Eyelid Myoclonia	<b>Motor Onset</b> · Tonic-Clonic · Epileptic Spasms	<b>Non-Motor Onset</b> · Behavior Arrest
Motor Onset · Automatism · Atonic · Clonic · Epileptic Spasms · Hyperkinetic · Myoclonic · Tonic					
Non-Motor Onset · Autonomic · Behavior Arrest · Cognitive · Emotional · Sensory					
Focal to Bilateral Tonic-Clonic					
<b>Unclassified</b> <i>Term used if there is not enough information available about the person's seizure or because of the unusual nature of the seizure.</i>					

# Pain Research

The development of novel pain therapeutics relies on understanding the highly complex nociceptive signaling pathways. Cayman offers a select group of tools to study TRP ion channels, purinergic receptors, voltage-gated ion channels, and various G protein-coupled receptors (GPCRs) that are known to be expressed by nociceptive primary afferent nerves. Modulators of glutamate, GABA, and nicotinic acetylcholine receptors are also available.



## Ligand-Gated Ion Channels

### TRP Ion Channel Agonists and Antagonists

Item No.	Product Name
14715	AMG 9810
92350	Capsaicin
10007518	Capsazepine
11923	HC-030031
10137	Icilin
20458	JYL1421
21019	Supercinnamaldehyde

### Glutamate/GABA Receptor Agonists and Antagonists

Item No.	Product Name
18600	(±)-Baclofen
18599	CGP 35348
16355	Gaboxadol (hydrochloride)
20919	Ganaxolone
15351	LY379268
10009019	(+)-MK-801 (hydrogen maleate)
14578	Ro 25-6981 (maleate)

## Voltage-Gated Ion Channels

### Sodium Channel Blockers

Item No.	Product Name	Summary
10012588	A-803467	An inhibitor of Na <sub>v</sub> 1.8 channels (IC <sub>50</sub> = 8 nM when stimulated at half-maximal inactivation and IC <sub>50</sub> = 79 nM at a resting state)
22111	PF-01247324	An inhibitor of Na <sub>v</sub> 1.8 channels
10011032	QX-314 (bromide)	A selective blocker of sodium channels on nociceptive neurons
21422	(-)-Ropivacaine (hydrochloride hydrate)	A reversible blocker of sodium channels in nerve fibers

### Calcium Channels

Item No.	Product Name	Summary
10008346	Gabapentin	Penetrates the central nervous system and blocks the α <sub>2</sub> δ-type voltage-gated calcium channels
22475	Mirogabalin	Blocks α <sub>2</sub> δ-1 and α <sub>2</sub> δ-2 subunits of voltage-dependent calcium channels
9002652	Phenibut (hydrochloride)	Blocks α <sub>2</sub> δ subunit-containing voltage-gated calcium channels





## Potassium Channels

Item No.	Product Name	Summary
16674	Flupirtine (maleate)	An activator of KCNQ channels
15185	ML-213	A selective activator of KCNQ2 and KCNQ4 channels (EC <sub>50</sub> s = 230 and 510 nM for KCNQ2 and KCNQ4, respectively)
15191	ML-252 (hydrochloride)	A selective inhibitor of the voltage-gated potassium channel subtype K <sub>v</sub> 7.2 (IC <sub>50</sub> = 69 nM in a patch clamp assay)
15193	ML-277	An activator of KCNQ1 channels (EC <sub>50</sub> = 260 nM)

## Voltage-Gated Ion Channels

### COX Inhibitors

Item No.	Product Name	Summary
10024	Acetaminophen	An analgesic and antipyretic compound that inhibits COX-2 activity by more than 80% at relatively high doses
10008672	Celecoxib	A selective COX-2 inhibitor (IC <sub>50</sub> = 0.05 μM)
10091	Etoricoxib	A selective COX-2 inhibitor; blocks PGE <sub>2</sub> production in CHO cells expressing COX-2 or COX-1 (IC <sub>50</sub> = 79 nM and >50 μM, respectively)
70280	(±)-Ibuprofen	A non-selective, reversible COX inhibitor (IC <sub>50</sub> = 2.6 and 1.53 μM for COX-1 and COX-2, respectively)
70220	Lornoxicam	An inhibitor of both COX-1 and COX-2 (IC <sub>50</sub> s = 5 and 8 nM, respectively)
14906	Meloxicam	A selective COX-2 inhibitor (IC <sub>50</sub> = 11.8 μM)
17875	Pranoprofen	A potent COX-1 inhibitor (IC <sub>50</sub> = 30 nM)
10010260	Rofecoxib	A selective COX-2 inhibitor with 1,000-fold selectivity over COX-1 (IC <sub>50</sub> s = 26 nM and >50 μM in human osteosarcoma cells for COX-2 and COX-1, respectively)
20304	Tenoxicam	A COX-2 inhibitor (IC <sub>50</sub> s = 20 and 322 nM for COX-1 and COX-2, respectively)

### mPGES-1 Inhibitors

Item No.	Product Name	Summary
13164	CAY10589	A dual mPGES-1 and 5-LO inhibitor
18905	CAY10700	An orally bioavailable inhibitor of mPGES-1 (IC <sub>50</sub> = 0.24 μM in an <i>in vitro</i> human whole blood assay)
13217	MF63	A selective, orally active inhibitor of human mPGES-1 (IC <sub>50</sub> = 1.3 nM)
18904	PF-9184	An inhibitor of mPGES-1 (IC <sub>50</sub> = 16.5 nM for recombinant human enzyme)

### Prostaglandin EP<sub>1</sub> Receptor Antagonists

Item No.	Product Name	Summary
10010410	GW 848687X	An orally bioavailable, potent, and selective EP <sub>1</sub> receptor antagonist (>400-fold selectivity over other EP receptor subtypes) with diverse effects
14070	ONO-8711	A selective EP <sub>1</sub> receptor antagonist (K <sub>i</sub> = 0.6 and 1.7 nM for human and mouse EP <sub>1</sub> , respectively)
14060	SC-19220	A selective EP <sub>1</sub> antagonist that displaces radiolabeled PGE <sub>2</sub> from the cloned human EP <sub>1</sub> receptor with an IC <sub>50</sub> of 6.7 μM
10010744	SC-51322	A selective EP <sub>1</sub> antagonist that demonstrates analgesic activity in mouse pain models (ED <sub>50</sub> = 0.9 mg/kg)

# Cannabinoid Research

Cannabinoid (CB) receptors CB<sub>1</sub> and CB<sub>2</sub> can be activated by endogenous, synthetic, and plant CBs alike. Cayman offers endogenous CB receptor ligands as well as synthetic CBs, many of which are highly selective for either CB<sub>1</sub> or CB<sub>2</sub>. This diverse collection of tools includes assay kits, antibodies, and inhibitors that can be used to study the enzymes that synthesize and degrade endocannabinoids. Many prominent phytocannabinoids unique to the *Cannabis* plant and their main metabolites are also available.

## CB<sub>1</sub> & CB<sub>2</sub> Receptors

Item No.	Product Name	Summary
10006590	CB <sub>1</sub> Receptor (C-Term) Polyclonal Antibody	<b>Host:</b> Rabbit · <b>Species Reactivity:</b> (+) Human, mouse, rat · <b>Applications:</b> IHC, WB
101500	CB <sub>1</sub> Receptor Polyclonal Antibody	<b>Host:</b> Rabbit · <b>Species Reactivity:</b> (+) Human, mouse, rat · <b>Applications:</b> IHC, WB
101550	CB <sub>2</sub> Receptor Polyclonal Antibody	<b>Host:</b> Rabbit · <b>Species Reactivity:</b> (+) Human, mouse · <b>Applications:</b> IHC, WB
10010712	CB <sub>2</sub> Receptor Polyclonal FITC Antibody	<b>Host:</b> Rabbit · <b>Species Reactivity:</b> (+) Human · <b>Applications:</b> FC, IF

## Synthetic Cannabinoids

Item No.	Product Name	Summary
10006972	AM281	CB <sub>1</sub> receptor antagonist/inverse agonist (K <sub>s</sub> = 12 and 4,200 nM for CB <sub>1</sub> and CB <sub>2</sub> , respectively)
90050	Arachidonoyl Ethanolamide	CB receptor neurotransmitter (K <sub>s</sub> = 61 and 279 nM for CB <sub>1</sub> and CB <sub>2</sub> , respectively)
62160	2-Arachidonoyl Glycerol	CB receptor agonist (K <sub>s</sub> = 25.3 and 145 nM for CB <sub>1</sub> and CB <sub>2</sub> , respectively)
90084	(-)-CP 55,940	CB receptor agonist (K <sub>s</sub> = 0.5 and 0.69 nM for CB <sub>1</sub> and CB <sub>2</sub> receptors, respectively)
90083	HU-210 (exempt preparation)	CB receptor agonist (K <sub>s</sub> = 0.73 and 0.52 nM for CB <sub>1</sub> and CB <sub>2</sub> , respectively)
10004184	NESS 0327	CB <sub>1</sub> receptor antagonist (K <sub>s</sub> = 0.35 pM and 21 nM for CB <sub>1</sub> and CB <sub>2</sub> , respectively)
9000491	SR 144528	CB <sub>2</sub> receptor inverse agonist (K <sub>i</sub> = 0.3 nM)
10009023	(+)-WIN 55,212-2 (mesylate)	CB receptor agonist (K <sub>s</sub> = 62.3 and 3.3 nM for CB <sub>1</sub> and CB <sub>2</sub> , respectively)

## Synthetic Cannabinoid Screening Library Item No. 9002891

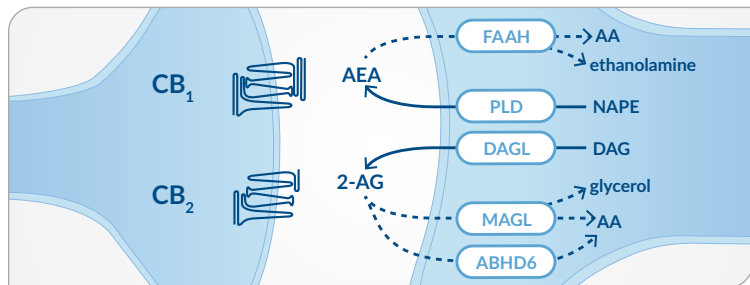
- Contains more than 350 synthetic cannabinoids
- Includes parent compounds and their positional isomers, analogs, and homologs



## Phytocannabinoids

Item No.	Product Name	Summary
90080	Cannabidiol	An active phytocannabinoid identified in <i>Cannabis</i> (composes ~40% of the plant's extract)
9001574	Cannabidivarin	A non-psychoactive cannabinoid found in <i>Cannabis</i> that activates CB <sub>2</sub> receptors
15293	Cannabigerol	A metabolite of Δ <sup>9</sup> -THC
9001572	Cannabigerolic Acid	A precursor to the three major branches of cannabinoids
26282	Olivetolic Acid	A precursor in the synthesis of CBGA, Δ <sup>9</sup> -THC, and CBD
14042	Δ <sup>8</sup> -THC	An analog of Δ <sup>9</sup> -THC that binds both CB <sub>1</sub> and CB <sub>2</sub> receptors (K <sub>s</sub> = 28.5 and 25 nM, respectively)
12068	Δ <sup>9</sup> -THC	A natural psychoactive compound found in plants of the genus <i>Cannabis</i> (K <sub>s</sub> = 41 and 36 nM for CB <sub>1</sub> and CB <sub>2</sub> , respectively)

# Endocannabinoid Research



Endocannabinoid Synthesis and Hydrolysis

Cayman offers a diverse collection of tools to study endogenous ligands for the cannabinoid receptors, AEA (Item No. 90050) and 2-AG (Item No. 62160), as well as enzymes that synthesize and degrade these endocannabinoids.



## FAAH

Item No.	Product Name	Summary
10010183	Fatty Acid Amide Hydrolase (human recombinant)	<b>Source:</b> Human recombinant C-terminal His-tagged protein expressed in Sf21 cells <b>MW:</b> 64.3 kDa
101600	Fatty Acid Amide Hydrolase Polyclonal Antibody	<b>Host:</b> Rabbit · <b>Species Reactivity:</b> (+) Human, mouse, rat · <b>Applications:</b> IHC, WB
10005196	Fatty Acid Amide Hydrolase Inhibitor Screening Assay Kit	A convenient fluorescence-based method for screening FAAH inhibitors
10005102	CAY10435	A selective inhibitor of rat FAAH ( $K_i = 0.57$ nM)
10008661	JP104	An irreversible FAAH inhibitor ( $IC_{50} = 7.3$ nM for the human recombinant enzyme when tested using radiolabeled oleamide)

## NAPE-PLD

Item No.	Product Name	Summary
10305	NAPE-PLD (Internal) Polyclonal Antibody	<b>Host:</b> Rabbit · <b>Species Reactivity:</b> (+) Human, mouse, rat · <b>Application:</b> WB
10306	NAPE-PLD (N-Term) Polyclonal Antibody	<b>Host:</b> Rabbit · <b>Species Reactivity:</b> (+) Human, bovine, mouse, rat · <b>Application:</b> WB

## MAGL

Item No.	Product Name	Summary
10007812	Monoacylglycerol Lipase (human, recombinant)	<b>Source:</b> Human recombinant C-terminal His-tagged protein expressed in <i>E. coli</i> · <b>MW:</b> 39 kDa
10212	Monoacylglycerol Lipase (FL) Polyclonal Antibody	<b>Host:</b> Rabbit · <b>Species Reactivity:</b> (+) Human, rat · <b>Applications:</b> ICC, IHC, WB
100035	Monoacylglycerol Lipase Polyclonal Antibody	<b>Host:</b> Rabbit · <b>Species Reactivity:</b> (+) Human, bovine, mouse, rat · <b>Applications:</b> IHC, WB
705192	Monoacylglycerol Lipase Inhibitor Screening Assay Kit	A convenient colorimetric method for screening human MAGL inhibitors

## DAGL

Item No.	Product Name	Summary
18933	KT109	A selective inhibitor of DAGL $\beta$ ( $IC_{50} = 42$ nM)
16419	LEI-106	An <i>in vitro</i> inhibitor of <i>sn</i> -1 DAGL $\alpha$ ( $IC_{50} = 18$ nM)
14009	O-7460	A selective inhibitor of DAGL $\alpha$ ( $IC_{50} = 690$ nM)
10005426	Orlistat	An inhibitor of human recombinant DAGL $\alpha$ ( $IC_{50} = 60$ nM)

## ABHD6

Item No.	Product Name	Summary
19384	JJH260	An inhibitor of ABHD6
14818	KT195	A selective inhibitor of ABHD6 ( $IC_{50} = 10$ nM)
14819	KT203	A selective inhibitor of ABHD6 ( $IC_{50} = 0.31$ - $3.9$ nM)



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