

# Cannabinoid Signaling

The cannabinoid receptors CB<sub>1</sub> and CB<sub>2</sub> can be activated by endogenous, synthetic, and phytocannabinoids. Cayman Chemical offers a broad collection of assay kits, antibodies, and ligands to study these receptors and cannabinoid signaling pathways.



## Cannabinoid Receptor Ligands

### Endocannabinoids

Item No.	Product Name
90050	Arachidonoyl Ethanolamide (AEA)*
62160	2-Arachidonoyl Glycerol (2-AG)*
90350	Palmitoyl Ethanolamide*
90155	Linoleoyl Ethanolamide*
90265	Oleoyl Ethanolamide*
90245	Stearoyl Ethanolamide*

\*Isotope-labeled forms available

View all endocannabinoids at [www.caymanchem.com](http://www.caymanchem.com)

### Phytocannabinoids

Item No.	Product Name
26252	(±)-Cannabichromene*
90080	Cannabidiol*
36871	Cannabidiolic Acid*
15293	Cannabigerol*
25495	Cannabinol*
14042	$\Delta^8$ -THC*
12068	$\Delta^9$ -THC*
33448	THCA-A*
30171	$\Delta^9$ -THCP*

\*Certified Reference Materials available

View all phytocannabinoids at [www.caymanchem.com](http://www.caymanchem.com)

### Synthetic Cannabinoids & Other Ligands

Item No.	Product Name
71670	AM251
10006974	AM630
13241	(±)-CP 55,940
90086	HU-308
10005428	JWH 133
9000484	Rimonabant
9000491	SR 144528

View all CB<sub>1</sub> and CB<sub>2</sub> receptor ligands at [www.caymanchem.com](http://www.caymanchem.com)

## Endocannabinoid Profiling Services

We provide bioanalysis of endocannabinoids and endocannabinoid-like compounds using state-of-the-art chromatography/mass spectrometry systems.

- N-Acylethanolamides
- N-Acylglycines
- Acylglycerols
- N-Acylserines
- N-Acyltaurines
- N-Acyldopamines

Learn more at [www.caymanchem.com/lipidomics](http://www.caymanchem.com/lipidomics)

New

## Hydrogenated Phytocannabinoids

More than 25 reference standards for:

- Hexahydrocannabinols (HHCs)
- Hexahydrocannabiphorols (HHCPs)
- Tetrahydrocannabinoliols (H4-CBDs)



Learn how our standards were used to characterize HHCs resulting from  $\Delta^8$ - or  $\Delta^9$ -THC hydrogenation at [www.caymanchem.com/HHC](http://www.caymanchem.com/HHC)

## A Guide to Cannabinoid Receptor Signaling: Cannabinoid Receptors Wall Poster

Featuring:

- CB<sub>1</sub>- and CB<sub>2</sub>-Selective Ligands
- Mixed CB<sub>1</sub>/CB<sub>2</sub>-Selective Ligands
- Receptor Distribution and MOA
- Amino Acid Sequence

Request your copy at

[www.caymanchem.com/cbposter](http://www.caymanchem.com/cbposter)



# Tools to Study the Endocannabinoid System

Explore the actions of metabolic enzymes involved in endocannabinoid synthesis and degradation.

## Endocannabinoid Synthesis

Endogenous cannabinoids are synthesized in postsynaptic terminals upon neuronal activation. 2-AG is synthesized from DAG by DAGL $\alpha$ . AEA is synthesized from NAPE by NAPE-PLD.

### Research Tools

Item No.	Product Name
10305	NAPE-PLD (Internal) Polyclonal Antibody
10306	NAPE-PLD (N-Term) Polyclonal Antibody
18933	KT109 (DAGL $\beta$ inhibitor)
10005426	Orlistat (DAGL $\alpha$ / $\beta$ inhibitor)

## Endocannabinoid Degradation

The biological activities of AEA and 2-AG are terminated by FAAH and MAGL, respectively.

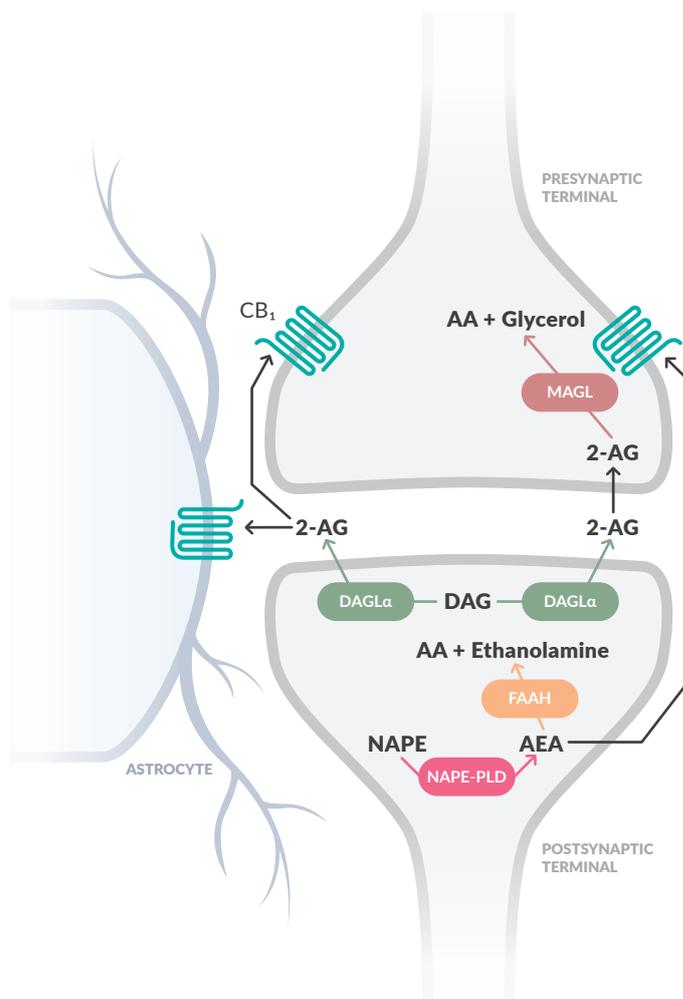
### Proteins & Antibodies

Item No.	Product Name
10010183	Fatty Acid Amide Hydrolase (human, recombinant)
101600	Fatty Acid Amide Hydrolase Polyclonal Antibody
10007812	Monoacylglycerol Lipase (human, recombinant)
100035	Monoacylglycerol Lipase Polyclonal Antibody
10212	Monoacylglycerol Lipase (FL) Polyclonal Antibody

### Inhibitors

Item No.	Product Name	Target
13279	PF-3845	FAAH
10046	URB597	FAAH
13158	JZL 184	MAGL
17583	MJN110	MAGL
13668	JZL 195	FAAH & MAGL

View all FAAH & MAGL inhibitors at [www.caymanchem.com](http://www.caymanchem.com)

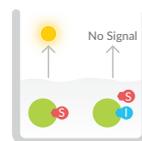


## Simple & Effective Assays

Fatty Acid Amide Hydrolase Inhibitor Screening Assay Kit - Item No. 10005196

Monoacylglycerol Lipase Inhibitor Screening Assay Kit - Item No. 705192

- Screen for inhibitors of MAGL or FAAH
- Assay 45 samples in duplicate
- Includes positive control
- Robust assay performance - Z' factor >0.76



Discover all that Cayman has to offer to support cannabinoid research and analysis at our Cannabinoid Resource Center.

- Wall Posters, Articles, Application Notes, & Webinars
- Cayman Services
- Basic Research Tools & Pharmacological Probes

[www.caymanchem.com/cannabinoids](http://www.caymanchem.com/cannabinoids)

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