

# Research Tools for Lipid Analysis by Mass Spectrometry



Mass spectrometry is a powerful technique to characterize the lipid profile in biological samples. High-quality lipid reference standards are essential during mass spectrometry-based lipid analysis to produce accurate, reliable, and reproducible results. Cayman has been a trusted source of lipid research standards for over 45 years. Backed by decades of experience in lipid synthesis, purification, and characterization, our high-purity lipid standards have helped researchers explore fundamental mechanisms of biology, identify biomarkers, and develop new therapies.

## Explore our Lipid Standards & Custom Research Services

- High-purity, qualitative research standards
- Stable isotope-labeled standards
- Ready-to-use MaxSpec® analytical standard mixtures
- Untargeted lipidomics & targeted lipid analysis
- Custom lipid synthesis



New

### Deuterated Lipidomics MaxSpec® Mixture

Item No. 40974

- Contains 15 lipid class-specific internal standards for signal normalization and semiquantification
- Enables absolute quantification when paired with authentic unlabeled standards
- Confirms MS/MS and retention time method performance during method development and validation

New

### MaxSpec® Reference Plasma (Human)

Item No. 42573

A reference material for the analysis of lipids or metabolites

Use for:

- Optimizing instrument parameters
- Monitoring instrument precision
- Evaluating recovery from extraction
- Validating overall method accuracy

## MaxSpec® Mixtures for LC-MS

### Ready-to-Use Quantitative Standards

Our MaxSpec® mixtures streamline workflows by reducing the effort and variability of mixing individual internal and calibration standards.

### MaxSpec® Quality Guarantee

- ✓ Headspace purged with argon
- ✓ At least 1 ml of solution per ampule
- ✓ Packaged in glass ampoules
- ✓ Custom mixtures also available
- ✓ Designed for direct snap-and-inject use

# Fatty Acyls

## Prostaglandins

### Unlabeled Standards

Item No.	Product Name
14010	Prostaglandin E <sub>2</sub>
16010	Prostaglandin F <sub>2α</sub>
18500	Prostaglandin J <sub>2</sub>
12010	Prostaglandin D <sub>2</sub>

Popular matched pair items shown, over 435 prostaglandins, intermediates, and metabolites available online

### Labeled Standards

Item No.	Product Name
314010	Prostaglandin E <sub>2</sub> -d <sub>4</sub>
316010	Prostaglandin F <sub>2α</sub> -d <sub>4</sub>
19345	Prostaglandin J <sub>2</sub> -d <sub>4</sub>
312010	Prostaglandin D <sub>2</sub> -d <sub>4</sub>

### MaxSpec® Mixtures for Prostaglandins

Item No.	Product Name
19300	Primary Prostaglandin Metabolite MaxSpec® LC-MS Mixture*

Item No.	Product Name
19422	Secondary Prostaglandin Metabolite MaxSpec® LC-MS Mixture

\* Also Available: Deuterated Primary Prostaglandin Metabolite MaxSpec® LC-MS Mixture (Item No. 19304)

## Hydroxy/Hydroperoxy/Epoxy/Oxo Eicosanoids

### Unlabeled Standards

Item No.	Product Name
34230	5(S)-HETE
34570	12(S)-HETE
34720	15(S)-HETE
90030	20-HETE
50511	(±)11(12)-EET
50651	(±)14(15)-EET
51651	(±)14(15)-DIHET
34250	5-OxoETE

Popular matched pair items shown, over 170 hydroxy/hydroperoxy/epoxy/oxo eicosanoids available online

### Labeled Standards

Item No.	Product Name
334230	5(S)-HETE-d <sub>8</sub>
334570	12(S)-HETE-d <sub>8</sub>
334720	15(S)-HETE-d <sub>8</sub>
390030	20-HETE-d <sub>6</sub>
10006413	(±)11(12)-EET-d <sub>11</sub>
10006410	(±)14(15)-EET-d <sub>11</sub>
10008040	(±)14(15)-DIHET-d <sub>11</sub>
334250	5-OxoETE-d <sub>7</sub>

## Thromboxanes & Leukotrienes

### Unlabeled Standards

Item No.	Product Name
19030	Thromboxane B <sub>2</sub>
19500	11-dehydro Thromboxane B <sub>2</sub>
20110	Leukotriene B <sub>4</sub>
20210	Leukotriene C <sub>4</sub>

Popular matched pair items shown, over 20 thromboxanes and 40 leukotrienes available online

### Labeled Standards

Item No.	Product Name
319030	Thromboxane B <sub>2</sub> -d <sub>4</sub>
319500	11-dehydro Thromboxane B <sub>2</sub> -d <sub>4</sub>
320110	Leukotriene B <sub>4</sub> -d <sub>4</sub>
10006198	Leukotriene C <sub>4</sub> -d <sub>5</sub>

### MaxSpec® Mixtures for Arachidonic Acid Metabolites

Item No.	Product Name
19101	Primary COX and LOX MaxSpec® LC-MS Mixture*

Item No.	Product Name
20665	Arachidonic Acid CYP450 Metabolite MaxSpec® LC-MS Mixture

Item No.	Product Name
20666	Arachidonic Acid Oxylin MaxSpec® LC-MS Mixture*

\* Also available: Deuterated Primary COX and LOX MaxSpec® LC-MS Mixture (Item No. 19228) and Deuterated Arachidonic Acid Oxylin MaxSpec® LC-MS Mixture (Item No. 20668)

## Octadecanoids

### Unlabeled Standards

Item No.	Product Name
38610	13(S)-HODE
38410	9(S)-HODE
52400	(±)9(10)-EpOME
53400	(±)9(10)-DiHOME
52450	(±)12(13)-EpOME
10009832	(±)12(13)-DiHOME

Popular matched pair items shown, over 250 octadecanoids available online

### Labeled Standards

Item No.	Product Name
338610	13(S)-HODE-d <sub>4</sub>
338410	9(S)-HODE-d <sub>4</sub>
10009995	(±)9(10)-EpOME-d <sub>4</sub>
10009993	(±)9(10)-DiHOME-d <sub>4</sub>
10009996	(±)12(13)-EpOME-d <sub>4</sub>
10009994	(±)12(13)-DiHOME-d <sub>4</sub>

## MaxSpec® Mixtures for Octadecanoids

Item No.	Product Name	Item No.	Product Name	Item No.	Product Name
20794	Linoleic Acid Oxylipins MaxSpec® LC-MS Mixture*	22638	ALA and GLA Oxylipin MaxSpec® LC-MS Mixture	22281	Dihomo-γ-Linolenic Acid Metabolite MaxSpec® LC-MS Mixture

\* Also available: Deuterated Linoleic Acid Oxylipins MaxSpec® LC-MS Mixture (Item No. 20795)

## Specialized Pro-Resolving Mediators

### Docosanoids

#### Unlabeled Standards

Item No.	Product Name
13060	17(R)-Resolvin D1
10009799	17(S)-HDHA
10878	Maresin 1
10010390	Protectin D1
10012554	Resolvin D1
13834	Resolvin D3

Popular matched pair items shown, over 145 docosanoids available online

#### Labeled Standards

Item No.	Product Name
11183	17(R)-Resolvin D1-d <sub>5</sub>
29797	17(S)-HDHA-d <sub>5</sub>
21823	Maresin 1-d <sub>5</sub>
21625	Protectin D1-d <sub>5</sub>
11182	Resolvin D1-d <sub>5</sub>
19512	Resolvin D3-d <sub>5</sub>

### Lipoxins & E-Series Resolvins

#### Unlabeled Standards

Item No.	Product Name
90410	Lipoxin A <sub>4</sub>
10007848	Resolvin E1

Popular matched pair items shown, over 10 lipoxins and resolvin Es available online

#### Labeled Standards

Item No.	Product Name
10007737	Lipoxin A <sub>4</sub> -d <sub>5</sub>
10009854	Resolvin E1-d <sub>4</sub>

## MaxSpec® Mixtures for Specialized Pro-Resolving Mediators

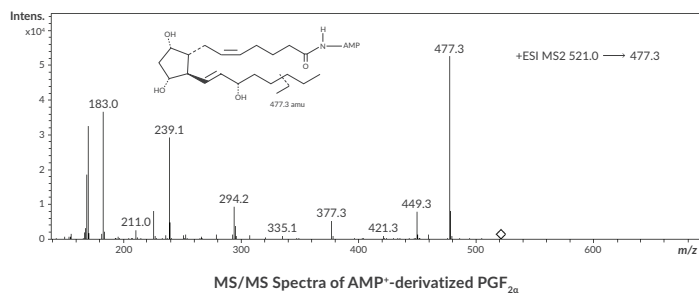
Item No.	Product Name	Item No.	Product Name	Item No.	Product Name
19412	Lipoxin MaxSpec® LC-MS Mixture	18702	SPM D-series MaxSpec® LC-MS Mixture	19417	SPM E-series MaxSpec® LC-MS Mixture

## AMP<sup>+</sup> MaxSpec<sup>®</sup> Kit

Item No. 710000

A novel method to increase MS sensitivity for detection of lipids

- AMP<sup>+</sup> can be coupled quantitatively to free carboxylic acids through an amide bond linkage
- Derivatized product shows improved electrospray ionization and improved MS sensitivity
- Stable to MS/MS fragmentation; isobaric derivatives yield unique fragment ions



## Fatty Acids

### Unlabeled Standards

Item No.	Product Name
13351	Myristic Acid; C14:0
10006627	Palmitic Acid; C16:0
10011298	Stearic Acid; C18:0
90260	Oleic Acid; C18:1
90150	Linoleic Acid; C18:2
90210	$\alpha$ -Linolenic Acid; C18:3
90230	Dihomo- $\gamma$ -Linolenic Acid; C20:3
90010	Arachidonic Acid; C20:4
90110	Eicosapentaenoic Acid; C20:5
90310	Docosahexaenoic Acid; C22:6
13353	Lignoceric Acid; C24:0

Popular matched pair items shown, over 340 fatty acids available online

### Labeled Standards

Item No.	Product Name
9003317	Myristic Acid-d <sub>27</sub> ; C14:0-d <sub>27</sub>
16497	Palmitic Acid-d <sub>31</sub> ; C16:0-d <sub>31</sub>
9000455	Stearic Acid-d <sub>5</sub> ; C18:0-d <sub>5</sub>
9000432	Oleic Acid-d <sub>17</sub> ; C18:1-d <sub>17</sub>
9002193	Linoleic Acid-d <sub>11</sub> ; C18:2-d <sub>11</sub>
9002286	$\alpha$ -Linolenic Acid-d <sub>5</sub> ; C18:3-d <sub>5</sub>
10458	Dihomo- $\gamma$ -Linolenic Acid-d <sub>6</sub> ; C20:3-d <sub>6</sub>
390010	Arachidonic Acid-d <sub>8</sub> ; C20:4-d <sub>8</sub>
10005056	Eicosapentaenoic Acid-d <sub>5</sub> ; C20:5-d <sub>5</sub>
10005057	Docosahexaenoic Acid-d <sub>5</sub> ; C22:6-d <sub>5</sub>
9003320	Lignoceric Acid-d <sub>47</sub> ; C24:0-d <sub>47</sub>

## MaxSpec<sup>®</sup> Mixtures for Fatty Acids

Item No.	Product Name
17941	Polyunsaturated Fatty Acid MaxSpec <sup>®</sup> LC-MS Mixture
17942	Saturated/Monounsaturated Fatty Acid MaxSpec <sup>®</sup> LC-MS Mixture

Item No.	Product Name
18824	Short-Chain Fatty Acid MaxSpec <sup>®</sup> LC-MS Mixture
19227	Odd-Chain Fatty Acid MaxSpec <sup>®</sup> LC-MS Mixture

## Edible Oil Mixtures

Item No.	Product Name
29365	AOCS Canola Oil Fatty Acid Methyl Ester Standard Mixture
28665	AOCS Long-Chain Fatty Acid Methyl Ester Standard Mixture 1
28666	AOCS Long-Chain Fatty Acid Methyl Ester Standard Mixture 2
29366	AOCS Long-Chain Fatty Acid Methyl Ester Standard Mixture 3
28668	AOCS Long-Chain Fatty Acid Methyl Ester Standard Mixture 4
28669	AOCS Medium- and Long-Chain Fatty Acid Methyl Ester Standard Mixture 1
28670	AOCS Medium- and Long-Chain Fatty Acid Methyl Ester Standard Mixture 2

## Lipidomics & Lipid Analysis Services

Cayman's lipid analysis laboratories are equipped with state-of-the-art chromatography/mass spectrometry systems and data analysis software, enabling us to offer lipidomics and lipid analysis services to meet your specific project needs.

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

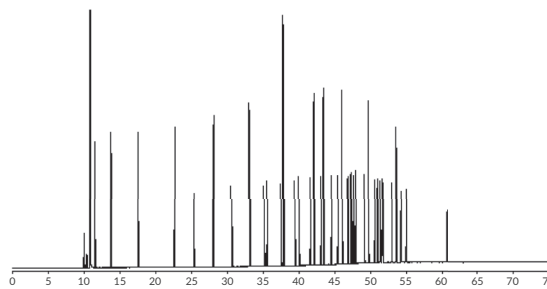
## Fatty Ester Mixtures

### Featured Product

#### Comprehensive Fatty Acid Methyl Ester Mixture 2

Item No. 29335

- Contains 37 saturated and mono- and polyunsaturated fatty acid methyl esters
- Intended for use as a reference standard in various sample types by GC-MS



## Compare Fatty Ester Mixtures to Find the One Fit for Your Research

Learn more at [www.caymanchem.com/FAME-mixtures](http://www.caymanchem.com/FAME-mixtures)

## Fatty Amides

### Unlabeled Standards

Item No.	Product Name
90350	Palmitoyl Ethanolamide
90050	Arachidonoyl Ethanolamide
90051	Arachidonoyl Glycine
90057	N-Arachidonoyl Dopamine
10005537	N-Arachidonoyl Taurine
10005455	N-Arachidonoyl-L-Serine
10964	Eicosapentaenoyl Ethanolamide

Popular matched pair items shown, over 165 fatty amides available online

### Labeled Standards

Item No.	Product Name
10007824	Palmitoyl Ethanolamide-d <sub>4</sub>
10011178	Arachidonoyl Ethanolamide-d <sub>4</sub>
10007531	Arachidonoyl Glycine-d <sub>8</sub>
10007431	N-Arachidonoyl Dopamine-d <sub>8</sub>
26323	N-Arachidonoyl Taurine-d <sub>4</sub>
10007428	N-Arachidonoyl-L-Serine-d <sub>8</sub>
9001835	Eicosapentaenoyl Ethanolamide-d <sub>4</sub>

## Fatty Acyl Carnitines

### Unlabeled Standards

Item No.	Product Name
9001873	Propionyl-L-carnitine (chloride)
26555	Isovaleryl-L-carnitine (chloride)
26554	Hexanoyl-L-carnitine (chloride)
26558	Octanoyl-L-carnitine (chloride)
26550	Lauroyl-L-carnitine (chloride)
26556	Stearoyl-L-carnitine (chloride)
39014	Oleoyl-L-carnitine (chloride)

Popular matched pair items shown, over 55 fatty acyl carnitines available online

### Labeled Standards

Item No.	Product Name
26579	Propionyl-L-carnitine-d <sub>3</sub> (chloride)
26574	Isovaleryl-L-carnitine-d <sub>3</sub> (chloride)
26570	Hexanoyl-L-carnitine-d <sub>3</sub> (chloride)
26577	Octanoyl-L-carnitine-d <sub>3</sub> (chloride)
26571	Lauroyl-L-carnitine-d <sub>3</sub> (chloride)
26580	Stearoyl-L-carnitine-d <sub>3</sub> (chloride)
26578	Oleoyl-L-carnitine-d <sub>3</sub> (chloride)

## Custom Synthesis & Mixtures

- Complex fatty acids
- Sphingolipids
- Stable isotope-labeled standards
- Glycerophospholipids
- Sterols
- Custom MaxSpec® mixtures

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

# Glycerolipids

## Unlabeled Standards

Item No.	Product Name
23334	1,2,3-Tripalmitoyl Glycerol; TG(16:0/16:0/16:0)
16489	1,2,3-Triheptadecanoyl Glycerol; TG(17:0/17:0/17:0)
23335	1,2,3-Tristearoyl Glycerol; TG(18:0/18:0/18:0)
26871	1,2,3-Trioleoyl Glycerol; TG(18:1/18:1/18:1)
10008650	1-Stearoyl-2-Arachidonoyl- <i>sn</i> -Glycerol; SAG
26827	1-Stearoyl- <i>rac</i> -glycerol; MG(18:0/0:0/0:0)
62160	2-Arachidonoyl Glycerol; 2-AG

Popular matched pair items shown, over 320 glycerolipids available online

## Labeled Standards

Item No.	Product Name
28593	1,2,3-Tripalmitoyl-d <sub>31</sub> Glycerol; TG(16:0/16:0/16:0)-d <sub>31</sub>
28918	1,2,3-Triheptadecanoyl Glycerol-d <sub>5</sub> ; TG(17:0/17:0/17:0)-d <sub>5</sub>
28867	1,2,3-Tristearoyl Glycerol-d <sub>105</sub> ; TG(18:0/18:0/18:0)-d <sub>105</sub>
41987	1,2,3-Trioleoyl Glycerol-d <sub>5</sub> ; TG(18:1/18:1/18:1)-d <sub>5</sub>
10009872	1-Stearoyl-2-Arachidonoyl-d <sub>8</sub> - <i>sn</i> -Glycerol; SAG-d <sub>8</sub>
28919	1-Stearoyl- <i>rac</i> -glycerol-d <sub>40</sub> ; MG(18:0-d <sup>40</sup> /0:0/0:0)
362162	2-Arachidonoyl Glycerol-d <sub>5</sub> ; 2-AG-d <sub>5</sub>

# Glycerophospholipids

## Unlabeled Standards

Item No.	Product Name
15097	1,2-Dimyristoyl- <i>sn</i> -glycero-3-PC; DMPC
10009473	1,2-Dipalmitoyl- <i>sn</i> -glycero-3-PC; DPPC
15092	1,2-Dipalmitoyl- <i>sn</i> -glycero-3-PE; DPPE
15086	1,2-Dipalmitoyl- <i>sn</i> -glycero-3-PG (sodium salt); DPPG
15100	1,2-Distearoyl- <i>sn</i> -glycero-3-PC; DSPC
25658	1-Palmitoyl-2-Arachidonoyl- <i>sn</i> -glycero-3-PC; PAPC
10010094	1-Palmitoyl-2-hydroxy- <i>sn</i> -glycero-3-PA; LPA 16:0
10172	1-Palmitoyl-2-hydroxy- <i>sn</i> -glycero-3-PC; LPC 16:0
10009864	1-Stearoyl-2-Arachidonoyl- <i>sn</i> -glycero-3-PC; PC(18:0/20:4)
25871	1-Stearoyl-2-Arachidonoyl- <i>sn</i> -glycero-3-PE; PE(18:0/20:4)
15107	1-Stearoyl-2-hydroxy- <i>sn</i> -glycero-3-PC; Lyso-PC
60900	PAF C-16
60906	Lyso-PAF C-16
60916	Lyso-PAF C-18

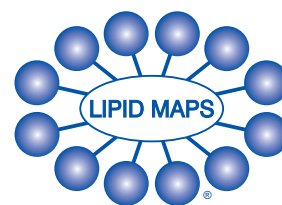
Popular matched pair items shown, over 280 glycerophospholipids available online

## Labeled Standards

Item No.	Product Name
28753	1,2-Dimyristoyl-d <sub>54</sub> - <i>sn</i> -glycero-3-PC; DMPC-d <sub>54</sub>
28154	1-Palmitoyl-d <sub>9</sub> -2-Palmitoyl- <i>sn</i> -glycero-3-PC; DPPC-d <sub>9</sub>
28155	1-Palmitoyl-d <sub>9</sub> -2-Palmitoyl- <i>sn</i> -glycero-3-PE; DPPE-d <sub>9</sub>
28953	1-Palmitoyl-d <sub>9</sub> -2-Palmitoyl- <i>sn</i> -glycero-3-PG; DPPG-d <sub>9</sub>
28752	1,2-Distearoyl-d <sub>70</sub> - <i>sn</i> -glycero-3-PC; DSPC-d <sub>70</sub>
38384	1-Palmitoyl-d <sub>9</sub> -2-Arachidonoyl- <i>sn</i> -glycero-3-PC; PAPC-d <sub>9</sub>
33479	1-Palmitoyl-d <sub>9</sub> -2-hydroxy- <i>sn</i> -glycero-3-PA; LPA 16:0-d <sub>9</sub>
28153	1-Palmitoyl-d <sub>9</sub> -2-hydroxy- <i>sn</i> -glycero-3-PC; LPC 16:0-d <sub>9</sub>
27928	1-Stearoyl-2-Arachidonoyl-d <sub>11</sub> - <i>sn</i> -glycero-3-PC; PC(18:0/20:4-d <sub>11</sub> )
27929	1-Stearoyl-2-Arachidonoyl-d <sub>11</sub> - <i>sn</i> -glycero-3-PE; PE(18:0/20:4-d <sub>11</sub> )
28230	1-Stearoyl-d <sub>35</sub> -2-hydroxy- <i>sn</i> -glycero-3-PC; Lyso-PC-d <sub>35</sub>
360900	PAF C-16-d <sub>4</sub>
360906	Lyso-PAF C-16-d <sub>4</sub>
10010228	Lyso-PAF C-18 -d <sub>4</sub>

## LIPID MAPS®

Cayman is a proud sponsor of the LIPID MAPS® consortium and supports its mission as a repository of data and protocols related to lipid research. Our catalog is increasingly aligned with the LIPID MAPS® classification and name recommendations, and we provide LIPID MAPS® with structures and information on new lipid standards available in our catalog.



## Lipid Resource Center

Explore all products and resources for lipidomics and lipid analysis at [www.caymanchem.com/lipids](http://www.caymanchem.com/lipids)

# Sphingolipids

## Gangliosides

### Unlabeled Standards

Item No.	Product Name
42979	C16 Ganglioside G <sub>M1</sub> (d18:1/16:0) (ammonium salt)
42980	C18 Ganglioside G <sub>M1</sub> (d18:1/18:0) (ammonium salt)
42981	C24:1 Ganglioside G <sub>M1</sub> (d18:1/24:1) (ammonium salt)
15587	Ganglioside G <sub>M3</sub> (bovine brain) (sodium salt)

Popular matched pair items shown, over 70 gangliosides available online

## Glucosylceramides & Galactosylceramides

### Unlabeled Standards

Item No.	Product Name
24352	C16 Lactosylceramide (d18:1/16:0)
40274	C16 $\alpha$ -Glucosylceramide (d18:1/16:0) (synthetic)
24863	C18 3'-sulfo Galactosylceramide (d18:1/18:0)
23210	C22 Glucosylceramide (d18:1/22:0)

Popular matched pair items shown, over 85 glucosylceramides and galactosylceramides available online

## Globosides

### Unlabeled Standards

Item No.	Product Name
24875	C16 Globotriaosylceramide (d18:1/16:0)
24877	C18 Globotriaosylceramide (d18:1/18:0)

Popular matched pair items shown, over 15 globosides available online

## Ceramides, Sphingosines, & Sphingomyelins

### Unlabeled Standards

Item No.	Product Name
62525	C6 Ceramide (d18:1/6:0)
10681	C16 Ceramide (d18:1/16:0)
19556	C18 Ceramide (d18:1/18:0)
62535	C24 Ceramide (d18:1/24:0)
62530	C24:1 Ceramide (d18:1/24:1(15Z))
10007907	Sphingosine (d18:1)
62570	Sphingosine-1-phosphate (d18:1)
10007946	C16 Sphingomyelin (d18:1/16:0)
20217	Phytosphingosine (yeast)

Popular matched pair items shown, over 225 ceramides, 180 sphingosines, and 45 sphingomyelins available online

### Labeled Standards

Item No.	Product Name
31195	C16 Ganglioside G <sub>M1</sub> -d <sub>9</sub> (d18:1/16:0-d <sub>9</sub> ) (ammonium salt)
24839	C18 Ganglioside G <sub>M1</sub> -d <sub>3</sub> (d18:1/18:0-d <sub>3</sub> ) (ammonium salt)
42982	C24:1 Ganglioside G <sub>M1</sub> -d <sub>18</sub> (d18:1/24:1-d <sub>18</sub> ) (ammonium salt)
39226	C18 Ganglioside G <sub>M3</sub> -d <sub>3</sub> (d18:1/18:0-d <sub>3</sub> ) (ammonium salt, synthetic)

### Labeled Standards

Item No.	Product Name
24625	C16 Lactosylceramide-d <sub>3</sub> (d18:1/16:0-d <sub>3</sub> )
24621	C16 Glucosylceramide-d <sub>3</sub> (d18:1/16:0-d <sub>3</sub> )
24624	C18 3'-sulfo Galactosylceramide-d <sub>3</sub> (d18:1/18:0-d <sub>3</sub> )
9003462	C22 Glucosylceramide-d <sub>4</sub> (d18:1/22:0-d <sub>4</sub> )

### Labeled Standards

Item No.	Product Name
31199	C16 Globotriaosylceramide-d <sub>9</sub> (d18:1/16:0-d <sub>9</sub> )
24626	C18 Globotriaosylceramide-d <sub>3</sub> (d18:1/18:0-d <sub>3</sub> )

### Labeled Standards

Item No.	Product Name
24826	C6 Ceramide-d <sub>7</sub> (d18:1-d <sub>7</sub> /6:0)
22787	C16 Ceramide-d <sub>7</sub> (d18:1-d <sub>7</sub> /16:0)
22788	C18 Ceramide-d <sub>7</sub> (d18:1-d <sub>7</sub> /18:0)
22789	C24 Ceramide-d <sub>7</sub> (d18:1-d <sub>7</sub> /24:0)
22790	C24:1 Ceramide-d <sub>7</sub> (d18:1-d <sub>7</sub> /24:1(15Z))
22786	Sphingosine-d <sub>7</sub> (d18:1)
10008121	Sphingosine-1-phosphate-d <sub>7</sub> (d18:1)
27551	C16 Sphingomyelin-d <sub>7</sub> (d18:1/16:0-d <sub>7</sub> )
9004341	Phytosphingosine-d <sub>7</sub>

## View Tips on Sphingolipid Solubilization, Isolation, Analysis, and Storage

Learn more from our lipid experts at [www.caymanchem.com/sphingolipid-advice](http://www.caymanchem.com/sphingolipid-advice)

# Sterol Lipids

## Cholesterol Esters

### Unlabeled Standards

Item No.	Product Name
22595	Cholesteryl Arachidonate
22597	Cholesteryl Linoleate
26473	Cholesteryl Palmitate

Popular matched pair items shown, over 45 cholesteryl esters available online

## Oxysterols

### Unlabeled Standards

Item No.	Product Name
19518	4 $\beta$ -hydroxy Cholesterol
25538	5 $\alpha$ ,6 $\beta$ -Dihydroxycholestanol
20098	7 $\alpha$ -hydroxy Cholesterol
25442	7 $\alpha$ -hydroxy-4-Cholesten-3-one
20099	7 $\beta$ -hydroxy Cholesterol
11097	25-hydroxy Cholesterol

Popular matched pair items shown, over 15 oxysterols available online

### Labeled Standards

Item No.	Product Name
39085	Cholesteryl Arachidonate-d <sub>8</sub>
37920	Cholesteryl Linoleate-d <sub>11</sub>
28123	Cholesteryl Palmitate-d <sub>9</sub>

### Labeled Standards

Item No.	Product Name
25971	4 $\beta$ -hydroxy Cholesterol-d <sub>7</sub>
25968	5 $\alpha$ ,6 $\beta$ -Dihydroxycholestanol-d <sub>7</sub>
25547	7 $\alpha$ -hydroxy Cholesterol-d <sub>7</sub>
26100	7 $\alpha$ -hydroxy-4-Cholesten-3-one-d <sub>7</sub>
25548	7 $\beta$ -hydroxy Cholesterol-d <sub>7</sub>
11099	25-hydroxy Cholesterol-d <sub>6</sub>

### Oxysterol Derivatization MaxSpec® Kit - Item No. 601540

An oxidation and derivatization kit for mass spec analysis of oxysterols

## Bile Acids

### Unlabeled Standards

Item No.	Product Name
20250	Cholic Acid; CA
16215	Taurocholic Acid (sodium salt); TCA
20276	Glycocholic Acid; GCA
10011286	Chenodeoxycholic Acid; CDCA
20275	Taurochenodeoxycholic Acid (sodium salt); TCDCA
16942	Glycochenodeoxycholic Acid (sodium salt hydrate); GCDCA
20253	Lithocholic Acid; LCA
20756	Deoxycholic Acid; DCA
15935	Taurodeoxycholic Acid (sodium salt hydrate); TDCA

Popular matched pair items shown, over 155 bile acids available online

### Labeled Standards

Item No.	Product Name
20849	Cholic Acid-d <sub>4</sub> ; CA-d <sub>4</sub>
21891	Taurocholic Acid-d <sub>4</sub> (sodium salt); TCA-d <sub>4</sub>
21889	Glycocholic Acid-d <sub>4</sub> ; GCA-d <sub>4</sub>
20848	Chenodeoxycholic Acid-d <sub>4</sub> ; CDCA-d <sub>4</sub>
21905	Taurochenodeoxycholic Acid-d <sub>4</sub> (sodium salt); TCDCA-d <sub>4</sub>
21890	Glycochenodeoxycholic Acid-d <sub>4</sub> ; GCDCA-d <sub>4</sub>
20831	Lithocholic Acid-d <sub>4</sub> ; LCA-d <sub>4</sub>
20851	Deoxycholic Acid-d <sub>4</sub> ; DCA-d <sub>4</sub>
32983	Taurodeoxycholic Acid-d <sub>4</sub> (sodium salt); TDCA-d <sub>4</sub>

### MaxSpec® Mixtures for Bile Acids

Contains primary and secondary bile acids, as well as glycine- and taurine-conjugated bile acids

Item No.	Product Name
33505	Bile Acids MaxSpec® Discovery Mixture

Item No.	Product Name
33506	Deuterated Bile Acids MaxSpec® Discovery Mixture