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RESEARCH PRODUCTS

# Labeled Biological Standards for Quantitative Mass Spectrometry

- Amino Acids
- Caffeine and Metabolites
- Calibrant Gases
- Carnitine/Acylcarnitines
- Fatty Acids and Lipids
- Steroids and Hormones
- Other Metabolites and Substrates



## Amino Acids

Catalog No.	Description
NSK-A	Labeled Amino Acid Standards Set A
NSK-AB	Labeled Standards Sets A & B
DLM-248	L-Alanine (3,3,3-D <sub>3</sub> , 99%)
CNLM-3946	β-Alanine ( <sup>13</sup> C <sub>3</sub> , 98%+, <sup>15</sup> N, 96-99%)
DLM-1505	L-Allo-Isoleucine (D <sub>10</sub> , 98%)
DLM-541	L-Arginine·HCl (D <sub>7</sub> , 98%)
DNLM-7543	L-Arginine·HCl (D <sub>7</sub> , 98%; <sup>15</sup> N <sub>4</sub> , 98%)
CLM-2265-H	L-Arginine·HCl ( <sup>13</sup> C <sub>6</sub> , 99%)
CNLM-539-H	L-Arginine·HCl ( <sup>13</sup> C <sub>6</sub> , 99%; U- <sup>15</sup> N <sub>4</sub> , 99%)
DLM-546	L-Aspartic acid (2,3,3-D <sub>3</sub> , 98%)
CDLM-7139	L-Citrulline (5- <sup>13</sup> C, 99%; 4,4,5,5-D <sub>4</sub> , 95%)
CLM-4320-H	L-Cysteine ( <sup>13</sup> C <sub>3</sub> , 99%)
CNLM-3871-H	L-Cysteine ( <sup>13</sup> C <sub>3</sub> , 99%; <sup>15</sup> N, 99%)
CLM-520	L-Cystine (3,3'- <sup>13</sup> C <sub>2</sub> , 99%)
DLM-3725	L-Glutamic acid (2,4,4-D <sub>3</sub> , 97-98%)
DNLM-6996	L-Glutamic acid (2,3,3,4,4-D <sub>5</sub> , 98%; <sup>15</sup> N, 98%)
DLM-1826	L-Glutamine (2,3,3,4,4-D <sub>5</sub> , 97%)
CNLM-508	Glycine (2- <sup>13</sup> C, 99%; <sup>15</sup> N, 98%+)
CLM-2248-H	L-Isoleucine ( <sup>13</sup> C <sub>6</sub> , 99%)
CLM-2262-H	L-Leucine ( <sup>13</sup> C <sub>6</sub> , 99%)
CNLM-281-H	L-Leucine ( <sup>13</sup> C <sub>6</sub> , 99%; <sup>15</sup> N, 99%)
DLM-2640	L-Lysine·2HCl (4,4,5,5-D <sub>4</sub> , 96-98%)
CLM-2247-H	L-Lysine·2HCl ( <sup>13</sup> C <sub>6</sub> , 99%)
CNLM-291-H	L-Lysine·2HCl ( <sup>13</sup> C <sub>6</sub> , 99%; U- <sup>15</sup> N <sub>2</sub> , 99%)
CLM-893	L-Methionine ( <sup>13</sup> C <sub>5</sub> , 97-99%)
CNLM-759	L-Methionine ( <sup>13</sup> C <sub>5</sub> , 97-99%; <sup>15</sup> N, 97-99%)
DLM-4261	L-Ornithine·HCl (5,5-D <sub>2</sub> , 98%)
DLM-6669	L-Ornithine·HCl (D <sub>7</sub> , 98%)
DLM-372	L-Phenylalanine (D <sub>8</sub> , 98%)
DLM-487	L-Proline (D <sub>7</sub> , 97-98%)
DNLM-7562	L-Proline (D <sub>7</sub> , 98%; <sup>15</sup> N, 98%)
DLM-582	L-Serine (2,3,3-D <sub>3</sub> , 98%)
CNLM-587	L-Threonine (U- <sup>13</sup> C <sub>4</sub> , 97-99%; <sup>15</sup> N, 97-99%)
DLM-1092	L-Tryptophan (indole-D <sub>5</sub> , 98%)
DLM-451	L-Tyrosine (ring-D <sub>4</sub> , 98%)
DNLM-7373	L-Tyrosine (D <sub>7</sub> , 98%; <sup>15</sup> N, 98%)
DLM-488	L-Valine (D <sub>8</sub> , 98%)

See [www.isotope.com](http://www.isotope.com) for a complete listing of amino acids and a detailed description of the NSK products. Protected amino acids are available as well!

## Caffeine and Metabolites

Catalog No.	Description
CNLM-9240	5-Acetylamino-6-amino-3-methyluracil (AAMU) ( <sup>13</sup> C <sub>4</sub> , 99%; <sup>15</sup> N <sub>3</sub> , 98%)
CLM-728	Caffeine (3-methyl- <sup>13</sup> C, 99%)
CLM-514	Caffeine (trimethyl- <sup>13</sup> C <sub>3</sub> , 99%)
NLM-332	Caffeine (1,3- <sup>15</sup> N <sub>2</sub> , 99%)
CNLM-333	Caffeine (2- <sup>13</sup> C, 99%; 1,3- <sup>15</sup> N <sub>2</sub> , 98%+)
CNLM-9241	1,3-Dimethyluric acid ( <sup>13</sup> C <sub>4</sub> , 99%; <sup>15</sup> N <sub>3</sub> , 98%)
CNLM-9242	1,7-Dimethyluric acid ( <sup>13</sup> C <sub>4</sub> , 99%; <sup>15</sup> N <sub>3</sub> , 98%)
CNLM-9243	1,7-Dimethylxanthine (paraxanthine) ( <sup>13</sup> C <sub>4</sub> , 99%; <sup>15</sup> N <sub>3</sub> , 98%)
DLM-9245	1,7-Dimethylxanthine (paraxanthine) (D <sub>6</sub> , 98%)
DLM-9244	3,7-Dimethylxanthine (theobromine) (D <sub>6</sub> , 98%)
CNLM-9246	1-Methyluric acid ( <sup>13</sup> C <sub>4</sub> , 99%; <sup>15</sup> N <sub>3</sub> , 98%)
CNLM-9247	3-Methyluric acid ( <sup>13</sup> C <sub>4</sub> , 99%; <sup>15</sup> N <sub>3</sub> , 98%)
CNLM-9248	7-Methyluric acid ( <sup>13</sup> C <sub>4</sub> , 99%; <sup>15</sup> N <sub>3</sub> , 98%)

Catalog No.	Description
CDLM-9249	1-Methylxanthine ( <sup>13</sup> C, 99%; D <sub>3</sub> , 98%) CP 97%
CNLM-9252	1-Methylxanthine ( <sup>13</sup> C <sub>4</sub> , 99%; <sup>15</sup> N <sub>3</sub> , 98%)
CNLM-9250	3-Methylxanthine ( <sup>13</sup> C <sub>4</sub> , 99%; <sup>15</sup> N <sub>3</sub> , 98%)
CNLM-9251	7-Methylxanthine ( <sup>13</sup> C <sub>4</sub> , 99%; <sup>15</sup> N <sub>3</sub> , 98%)
CNLM-9253	1,3,7-Trimethyluric acid ( <sup>13</sup> C <sub>4</sub> , 99%; <sup>15</sup> N <sub>3</sub> , 98%)

## Calibrant Gases

Catalog No.	Description
CLM-3781	5% CO <sub>2</sub> in air baseline calibrant gas (with delta value = -22.71 vs. PDB)
CLM-3782	5% CO <sub>2</sub> in air midlevel calibrant gas (vs. PDB -15.5) 7.21 DOB
CLM-3783	5% CO <sub>2</sub> in air high level calibrant gas (vs. PDB -9.69) 13.02 DOB
CLM-3785	5% CO <sub>2</sub> in air low level calibrant gas (vs. PDB -19.39) 3.32 DOB
CLM-9026	5% CO <sub>2</sub> in air midlevel calibrant gas (vs. PDB -13.60) 9.11 DOB

## Carnitine/Acylcarnitines

Catalog No.	Description
NSK-B	Labeled Carnitine Standards Set B
NSK-AB	Labeled Standards Sets A & B
NSK-B-G	Labeled Carnitine Standards (Supplement to NSK-B)
NSK-T	Labeled Succinylacetone Standard-1 (Set T)
DLM-3555	L-Carnitine (trimethyl-D <sub>3</sub> , 98%)
DLM-3821	L-Carnitine·HCl, O-acetyl (N,N-dimethyl-D <sub>6</sub> , 98%) CP 97%
DLM-3973	L-Carnitine·HCl, O-propionyl (N-methyl-D <sub>3</sub> , 98%)
DLM-755	L-Carnitine·HCl, O-octanoyl (N-methyl-D <sub>3</sub> , 98%)
DLM-1263	L-Carnitine·HCl, O-palmitoyl (N-methyl-D <sub>3</sub> , 98%)

See [www.isotope.com](http://www.isotope.com) for a complete listing of acylcarnitines and a detailed description of the NSK products.

## Fatty Acids and Lipids

Catalog No.	Description
DLM-1234	Arachidic acid (methyl-D <sub>3</sub> , 98%)
DLM-270	Decanoic acid (D <sub>19</sub> , 98%)
CLM-8398	Docosahexaenoic acid (DHA), methyl ester (docosahexaenoate- <sup>13</sup> C <sub>22</sub> , 95%+) CP 90%+
CLM-8398-HP	Docosahexaenoic acid (DHA), methyl ester (docosahexaenoate- <sup>13</sup> C <sub>22</sub> , 95%+) CP 98%+
DLM-1308	Heptadecanoic acid (methyl-D <sub>3</sub> , 98%)
DLM-563	Lauric acid (D <sub>23</sub> , 98%)
CLM-3665	Myristic acid (1,2,3- <sup>13</sup> C <sub>3</sub> , 99%)
DLM-1039	Myristic acid (methyl-D <sub>3</sub> , 98%)
DLM-619	Octanoic acid (D <sub>15</sub> , 98%)
CLM-2492	Oleic acid (methyl- <sup>13</sup> C, 99%)
DLM-2893	Palmitic acid (7,7,8,8-D <sub>4</sub> , 98%)
DLM-1154	Stearic acid (methyl-D <sub>3</sub> , 98%)

## Steroids and Hormones

Catalog No.	Description
DLM-8438	Aldosterone (2,2,4,6,6,17,21,21-D <sub>8</sub> )
DLM-7937	Androsterone (16,16-D <sub>2</sub> , 98%)
DLM-9137	Androsterone glucuronide (2,2,4,4-D <sub>4</sub> , 98%)
DLM-8330	Androstene-3,17-dione (2,2,4,6,6-D <sub>5</sub> , 98%)
DLM-6780	Chenodeoxycholic acid (2,2,4,4-D <sub>4</sub> , 98%)
CLM-9139	Cholesterol (2,3,4- <sup>13</sup> C <sub>3</sub> , 99%)
CLM-804	Cholesterol (3,4- <sup>13</sup> C <sub>2</sub> , 99%)

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Catalog No.	Description
DLM-1831	Cholesterol (3-D <sub>1</sub> , 98%)
DLM-7260	Cholesterol (25,26,26,26-D <sub>4</sub> , 98%)
DLM-2607	Cholesterol (2,2,3,4,4,6-D <sub>6</sub> , 97-98%)
DLM-3057	Cholesterol (25,26,26,26,27,27-D <sub>7</sub> , 98%)
OLM-7695	Cholesterol ( <sup>18</sup> O, 80%)
CLM-3361	Cholesterol-3-octanoate (octanoate-1- <sup>13</sup> C, 99%)
CLM-2710	Cholic acid (24- <sup>13</sup> C, 99%)
DLM-2611	Cholic acid (2,2,4,4-D <sub>4</sub> , 98%)
DLM-7347	Corticosterone (2,2,4,6,6,17α,21,21-D <sub>8</sub> , 97-98%)
DLM-2615	Cortisol (1,2-D <sub>2</sub> , 98%)
DLM-2057	Cortisol (9,12,12-D <sub>3</sub> , 98%)
DLM-2218	Cortisol (9,11,12,12-D <sub>4</sub> , 98%)
DLM-8863	Cortisone (1,2-D <sub>2</sub> , 98%)
DLM-9142	Cortisone (2,2,4,6,6,12,12-D <sub>7</sub> , 98%)
DLM-4216	7-Dehydrocholesterol (25,26,26,26,27,27-D <sub>7</sub> , 98%)
DLM-7714	Dehydroepiandrosterone (DHEA) (16,16-D <sub>2</sub> , 97%)
DLM-8049	Dehydroepiandrosterone (DHEA) (2,2,3,4,4,6-D <sub>6</sub> , 99%) CP 97%
DLM-8701	Dehydroepiandrosterone sulfate-sodium salt (DHEAS) (16,16-D <sub>2</sub> , 97%)
DLM-8337	Dehydroepiandrosterone sulfate-sodium salt (DHEAS) (2,2,3,4,4,6-D <sub>6</sub> , 98%)
CLM-3364	Deoxycholic acid (24- <sup>13</sup> C, 99%)
DLM-2824	Deoxycholic acid (2,2,4,4-D <sub>4</sub> , 98%)
DLM-7209	11-Deoxycortisol (21,21-D <sub>2</sub> , 96%)
DLM-8305	21-Deoxycortisol (D <sub>8</sub> , 96%)
DLM-170	Diethylstilbestrol ( <i>cis/trans</i> mix) (ring-3,3',5,5'-diethyl-1,1',1'-D <sub>8</sub> , 98%)
DLM-3023	Dihydrotestosterone (16,16,17-D <sub>3</sub> , 98%)
CLM-9146	5α-Dihydrotestosterone (2,3,4- <sup>13</sup> C <sub>3</sub> , 99%)
DLM-9041	5α-Dihydrotestosterone (2,2,4,4-D <sub>4</sub> , 98%)
CLM-9222	L-3,3'-Diiodothyronine (T2) (phenoxy- <sup>13</sup> C <sub>6</sub> , 99%) CP 97%
CLM-3369	Dopamine·HCl (ring- <sup>13</sup> C <sub>6</sub> , 99%)
DLM2181	Dopamine·HCl (ring-D <sub>3</sub> , 98%)
DLM-2498	Dopamine·HCl (1,1,2,2-D <sub>4</sub> , 97-98%)
CNLM-7889	DL-Epinephrine (1,2- <sup>13</sup> C <sub>2</sub> , 99%; <sup>15</sup> N, 98%)
DLM-2866	DL-Epinephrine (α,α,β-D <sub>3</sub> , 97%)
CLM-803	Estradiol (3,4- <sup>13</sup> C <sub>2</sub> , 99%)
DLM-3694	Estradiol (16,16,17-D <sub>3</sub> , 98%)
CLM-9147	Estriol (16α-hydroxyestradiol) (2,3,4- <sup>13</sup> C <sub>3</sub> , 99%)
DLM-7468	Estriol (2,4-D <sub>2</sub> , 98%)
DLM-8343	Estriol (2,4,17-D <sub>3</sub> , 98%) CP 96%
DLM-8583	Estriol (2,4,16,17-D <sub>4</sub> , 98%) CP 95%
DLM-8586	Estriol (2,4,16-D <sub>3</sub> , 98%)
CLM-9148	Estrone (2,3,4- <sup>13</sup> C <sub>3</sub> , 99%)
CLM-673	Estrone (3,4- <sup>13</sup> C <sub>2</sub> , 99%)
DLM-3976	Estrone (2,4,16,16-D <sub>4</sub> , 97%)
CLM-8033	DL-Estrone 3-methyl ether (13,14,15,16,17,18- <sup>13</sup> C <sub>6</sub> , 99%)
DLM-4691	17α-Ethynylestradiol (2,4,16,16-D <sub>4</sub> , 97-98%)
DLM-8646	7α-Hydroxycholesterol (25,26,26,26,27,27-D <sub>7</sub> , 98%) CP 97%
DLM-9150	18-Hydroxycorticosterone (9,11,12,12-D <sub>4</sub> , 98%) CP 95%
DLM-9149	6β-Hydroxycortisol (9,11,12,12-D <sub>4</sub> ) CP 97%
CLM-9153	16α-Hydroxysterone (2,3,4- <sup>13</sup> C <sub>3</sub> , 99%)
DLM-7206	17α-Hydroxypregnenolone (21,21,21-D <sub>3</sub> , 97%)
CDLM-9154	17α-Hydroxypregnenolone (20,21- <sup>13</sup> C <sub>2</sub> , 99%; 16,16-D <sub>2</sub> , 99%)
CLM-9157	17α-Hydroxyprogesterone (2,3,4- <sup>13</sup> C <sub>3</sub> , 98%)
DLM-6598	17α-Hydroxyprogesterone (2,2,4,6,6,21,21,21-D <sub>8</sub> , 98%)
DLM-8647	7-Ketocholesterol (25,26,26,26,27,27-D <sub>7</sub> , 99%)

Catalog No.	Description
CLM-2468	Norethindrone (ethynyl- <sup>13</sup> C <sub>2</sub> , 99%)
DLM-3979	19-Nortestosterone (16,16,17-D <sub>3</sub> , 98%)
DLM-3754	5-α-Pregnan-3-α-ol-20-one (17,21,21,21-D <sub>4</sub> , 96-98%) CP 95%+
DLM-7492	5-α-Pregnan-3-β-ol-20-one (17α,21,21,21-D <sub>4</sub> , 97%+) CP 96%
DLM-2294	5-β-Pregnan-3-α-ol-20-one (17,21,21,21-D <sub>4</sub> , 96-98%)
DLM-8751	5-β-Pregnan-3-α, 11-β,17-α, 21-tetrol-20-one (9,11α,12-D <sub>3</sub> , 95%)
DLM-8753	5-β-Pregnan-3-α,17-α, 20-triol (20,21,21,21-D <sub>4</sub> , 98%) mix of 20α and 20β
DLM-3910	5-α-Pregnane-3-α,21-diol-20-one (17,21,21-D <sub>3</sub> , 95%)
DLM-3816	5-α-Pregnane-3,20-dione (1,2,4,5,6,7-D <sub>6</sub> , 95%)
DLM-3817	5-β-Pregnane-3,20-dione (1,2,4,5,6,7-D <sub>6</sub> , 95%)
DLM-7228	4-Pregnen-21-ol-3,20-dione (2,2,4,6,6,17,21,21-D <sub>8</sub> , 96%) CP 95%
DLM-6896	Pregnenolone (17,21,21,21-D <sub>4</sub> , 98%)
CDLM-9158	Pregnenolone (20,21- <sup>13</sup> C <sub>2</sub> , 99%;16,16-D <sub>2</sub> , 98%)
CDLM-9160	Pregnenolone sulfate-sodium salt (20,21- <sup>13</sup> C <sub>2</sub> , 99%;16,16-D <sub>2</sub> , 98%)
CLM-457	Progesterone (3,4- <sup>13</sup> C <sub>2</sub> , 90%)
CLM-9162	Progesterone (2,3,4- <sup>13</sup> C <sub>3</sub> ,99%)
DLM-6909	Progesterone (2,2,6,6,17,21,21,21-D <sub>8</sub> , 96%)
DLM-7953	Progesterone (2,2,4,6,6,17α,21,21,21-D <sub>9</sub> , 98%)
DLM-3312	Prostaglandin A2 (3,3,4,4-D <sub>4</sub> , 98%)
DLM-3627	Prostaglandin A2 (3,3,4,4-D <sub>4</sub> , 98%) in solution
DLM-3728	Prostaglandin E1 (3,3,4,4-D <sub>4</sub> , 98%) in solution
DLM-3592	Prostaglandin E2 (3,3,4,4-D <sub>4</sub> , 98%) 500 µg/mL in methyl acetate
DLM-3558	Prostaglandin F2α (3,3,4,4-D <sub>4</sub> , 98%) in solution
DLM-4200	9-α,11-α-Prostaglandin F2 (3,3',4,4'-D <sub>4</sub> , 98%) in solution
DLM-7457	Sodium 17β-estradiol 3-sulfate (2,4,16,16-D <sub>4</sub> , 98%) stabilized with 50% w/w Tris
DLM-7456	Sodium estrone 3-sulfate (2,4,16,16-D <sub>4</sub> , 98%) stabilized with 50% w/w Tris
CLM-159	Testosterone (3,4- <sup>13</sup> C <sub>2</sub> , 99%)
CLM-9164	Testosterone (2,3,4- <sup>13</sup> C <sub>3</sub> ,99%)
DLM-683	Testosterone (1,2-D <sub>2</sub> , 98%)
DLM-6224	Testosterone (16,16,17-D <sub>3</sub> , 98%)
DLM-8085	Testosterone (2,2,4,6,6-D <sub>5</sub> , 98%)
DLM-8265	Testosterone diacetate (testosterone-D <sub>4</sub> , acetate methyl-D <sub>6</sub> , 98%)
DLM-7477	3-α,5-β-Tetrahydrodeoxycorticosterone (17,21,21-D <sub>3</sub> , 97%) CP 96%
CLM-7185	3,3',5-Triiodo-L-Thyronine (ring- <sup>13</sup> C <sub>6</sub> , 99%) CP 90%
CLM-6725	L-Thyroxine (tyrosine-ring- <sup>13</sup> C <sub>6</sub> , 99%) CP 90%

## Vitamins

Catalog No.	Description
DLM-9105	1,25-Dihydroxyvitamin D <sub>2</sub> (6,19,19-D <sub>3</sub> , 99%) CP 95%
DLM-9107	1,25-Dihydroxyvitamin D <sub>3</sub> (6,19,19-D <sub>3</sub> , 97%) CP 95%
DLM-9111	3- <i>epi</i> -25-Hydroxyvitamin D <sub>3</sub> (6,19,19-D <sub>3</sub> , 98%)
CLM-9113	25-Hydroxyvitamin D <sub>2</sub> (25,26,27- <sup>13</sup> C <sub>3</sub> , 99%)
DLM-9114	25-Hydroxyvitamin D <sub>2</sub> (6,19,19-D <sub>3</sub> , 97%)
DLM-9116	25-Hydroxyvitamin D <sub>3</sub> (6,19,19-D <sub>3</sub> , 97%)
DLM-7708	25-Hydroxyvitamin D <sub>3</sub> (26,26,26,27,27-D <sub>6</sub> , 98%)
DLM-9069	Pyridoxal·HCl (methyl-D <sub>3</sub> , 98%)
DLM-9119	Pyridoxamine·2HCl (vitamin B <sub>6</sub> ) (methyl-D <sub>3</sub> , 98%)
CLM-7563	Pyridoxine·HCl (vitamin B <sub>6</sub> ) (4,5- <i>bis</i> (hydroxymethyl)- <sup>13</sup> C <sub>4</sub> , 99%)
DLM-9121	Pyridoxine·HCl (vitamin B <sub>6</sub> ) (methyl-D <sub>3</sub> , 98%) CP 96%

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Catalog No.	Description
CLM-8870	Vitamin A acetate (12,13,14,20- <sup>13</sup> C <sub>4</sub> , 99%)
CLM-4831	Vitamin A acetate (8,9,10,12,13,14,19,20- <sup>13</sup> C <sub>8</sub> , 99%)
CLM-7277	Vitamin A acetate (8,9,10,11,12,13,14,15,19,20- <sup>13</sup> C <sub>10</sub> , 99%)
DLM-2244	Vitamin A acetate 3-4% <i>cis</i> (10,19,19,19-D <sub>4</sub> , 96%)
DLM-3828	Vitamin A acetate 3-4% <i>cis</i> (19,19,19,20,20-D <sub>6</sub> , 96%)
DLM-4203	Vitamin A acetate 3-4% <i>cis</i> (10,14,19,19,19,20,20-D <sub>6</sub> , 90%)
CLM-7667	Vitamin B <sub>1</sub> (thiamine chloride) (4,5,4-methyl- <sup>13</sup> C <sub>3</sub> , 99%)
CNLM-8851	Vitamin B <sub>2</sub> (riboflavin) ( <sup>13</sup> C <sub>4</sub> , 99%; <sup>15</sup> N <sub>2</sub> , 98%) CP 97%
CNLM-7694	Vitamin B <sub>5</sub> (pantothenic acid, calcium salt monohydrate) (β-alanyl- <sup>13</sup> C <sub>3</sub> , 99%; <sup>15</sup> N, 98%)
DLM-8985	Vitamin D <sub>2</sub> (ergocalciferol) (6,19,19-D <sub>3</sub> , 97%)
CLM-7850	Vitamin D <sub>3</sub> (cholecalciferol) ( <sup>13</sup> C <sub>2</sub> , 99%) CP 90%
DLM-9126	Vitamin E (α-tocopherol) (5-methyl-D <sub>3</sub> ,7-methyl-D <sub>3</sub> , 98%)
DLM-8847	Vitamin E acetate (tocopherol acetate) (acetyl-D <sub>3</sub> , 98%)
DLM-9128	Vitamin H (biotin) (2',2',3',3',4',4',5',5'-D <sub>8</sub> , 99%)
DLM-7702	Vitamin K <sub>1</sub> (phyloquinone) (ring-D <sub>4</sub> , 98%)
DLM-9130	Vitamin K <sub>1</sub> (phyloquinone) (D <sub>7</sub> , 99%) CP 97%
DLM-9132	Vitamin K <sub>3</sub> (menadiolone) (D <sub>8</sub> , 98%) CP 97%

## Other Metabolites and Substrates

Catalog No.	Description
DLM-7476	ADMA-HCl·H <sub>2</sub> O (asymmetric dimethylarginine) (2,3,3,4,4,5,5-D <sub>7</sub> , 98%)
CLM-535	5-Aminolevulinic acid·HCl (4- <sup>13</sup> C, 99%)
DLM-9261	<i>N</i> -(3-Aminopropyl) butane-1,4-diamine·3HCl (D <sub>8</sub> , 98%) (spermidine·3HCl)
DLM-9262	<i>N,N'</i> -bis(3-Aminopropyl)-1,4-butanediamine·4HCl (D <sub>8</sub> , 98%) (spermine·4HCl)
CLM-8589	Ammelide (ring- <sup>13</sup> C <sub>3</sub> , 99%)
CLM-8316	Ammeline (desethyldeisopropylhydroxyatrazine) (ring- <sup>13</sup> C <sub>3</sub> , 99%) CP 94%
CLM-4325	Bisphenol A (ring- <sup>13</sup> C <sub>12</sub> , 99%)
DLM-2775	Bisphenol A (propane-D <sub>6</sub> , 98%)
DLM-1540	Bisphenol A (ring-D <sub>8</sub> , 98%)
DLM-1839	Bisphenol A (D <sub>16</sub> , 98%)
DLM-3829	β-Carotene (19,19,19,19',19',19'-D <sub>6</sub> , 98%)
DLM-2439	β-Carotene (10,10',19,19,19',19',19'-D <sub>8</sub> , 97%)
CLM-9256	(+/-) Catechin ( <sup>13</sup> C <sub>3</sub> , 99%)
CLM-7103	3-Chloro-L-tyrosine (ring- <sup>13</sup> C <sub>6</sub> , 99%)

Catalog No.	Description
DLM-3653	Creatinine ( <i>N</i> -methyl-D <sub>3</sub> , 98%)
CNLM-4661	Cyanuric acid ( <sup>13</sup> C <sub>3</sub> , 99%; <sup>15</sup> N <sub>3</sub> , 98%+) CP 90%+
CLM-9255	1,3-Diaminobenzene ( <sup>13</sup> C <sub>6</sub> , 99%) (1,3-Phenylenediamine) CP 95%
CNLM-411	5,5-Diphenylhydantoin (2- <sup>13</sup> C, 99%; 1,3- <sup>15</sup> N <sub>2</sub> , 98%)
CLM-7254	<i>O,O'</i> -Dityrosine (ring- <sup>13</sup> C <sub>12</sub> , 99%)
CLM-9257	(+/-) Epicatechin ( <sup>13</sup> C <sub>3</sub> , 99%)
DLM-552	Ethanolamine (D <sub>4</sub> , 98%)
CNLM-3916	5-Fluorouracil ( <sup>13</sup> C <sub>4</sub> , 99%; <sup>15</sup> N <sub>2</sub> , 98%)
CLM-1396	D-Glucose ( <sup>13</sup> C <sub>6</sub> , 99%)
CNLM-6245	Glutathione (peptide purity 85-90%) (glycine- <sup>13</sup> C <sub>2</sub> , 98%+; <sup>15</sup> N, 96-99%) 65-70% net peptide
CNLM-8782	Glutathione disulfide (peptide purity 90%+) (glycines- <sup>13</sup> C <sub>2</sub> , 98%+; <sup>15</sup> N, 96-99%) 65-70% net peptide
DLM-3619	DL-Homocystine (3,3,3',3',4,4,4',4'-D <sub>8</sub> , 98%)
CLM-373	Homovanillic acid (1,2- <sup>13</sup> C <sub>2</sub> , 99%)
COLM-376	Homovanillic acid (ring- <sup>13</sup> C <sub>6</sub> , 99%; 4-hydroxy- <sup>18</sup> O, 90-95%)
CLM-9260	4-Hydroxy-3-methoxycinnamic acid ( <sup>13</sup> C <sub>3</sub> , 99%) (ferulic acid)
DLM-3035	Imipramine-HCl (2,4,6,8-D <sub>4</sub> , 98%) CP 97%
DLM-1943	Isophorone (3-methyl-D <sub>3</sub> ; 2,4,4,6,6-D <sub>5</sub> , 98%)
DLM-7842	L-Kynurenine sulfate·H <sub>2</sub> O (ring-D <sub>4</sub> , 3,3-D <sub>2</sub> , 95%+) CP 90-95%
CNLM-8150	Melamine ( <sup>13</sup> C <sub>3</sub> , 99%; amino- <sup>15</sup> N <sub>3</sub> , 98%)
DLM-3560	DL-Metanephrine·HCl (α,β,β-D <sub>3</sub> , 98%)
DLM-2646	DL-Methoxytryptamine·HCl (α,α,β,β-D <sub>4</sub> , 98%)
CLM-4285	3-Methylglutaconic acid (2,4- <sup>13</sup> C <sub>2</sub> , 3-methyl- <sup>13</sup> C, 99%)
DLM-387	Methylmalonic acid (methyl-D <sub>3</sub> , 98%)
CLM-7104	3-Nitro-L-tyrosine (ring- <sup>13</sup> C <sub>6</sub> , 99%) CP 94%
DLM-8609	DL-Normetanephrine·HCl (α,β,β-D <sub>3</sub> , 98%)
NLM-1048	Orotic acid·H <sub>2</sub> O (1,3- <sup>15</sup> N <sub>2</sub> , 98%+)
DLM-9254	Paclitaxel (D <sub>8</sub> , 98%)
CNLM-3952	Potassium thiocyanate ( <sup>13</sup> C, 99%; <sup>15</sup> N, 98%+)
CLM-9259	Resveratrol (4-hydroxyphenyl- <sup>13</sup> C <sub>6</sub> , 99%)
DLM-6874	Sarcosine·HCl (methyl-D <sub>3</sub> , 98%)
CLM-1579	Sodium L-lactate ( <sup>13</sup> C <sub>3</sub> , 98%) 20% w/w in H <sub>2</sub> O
CLM-2440	Sodium pyruvate ( <sup>13</sup> C <sub>3</sub> , 99%)
CLM-6755	Succinylacetone (3,4,5,6,7- <sup>13</sup> C <sub>5</sub> , 99%)
CNLM-8110	Tiglylglycine (glycine- <sup>13</sup> C <sub>2</sub> , 98%; <sup>15</sup> N, 98%)
CNLM-9258	1,2,4-Triazole ( <sup>13</sup> C <sub>2</sub> , 99%; <sup>15</sup> N <sub>2</sub> , 98%)

## Ordering Information

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