



Cambridge Isotope Laboratories, Inc.  
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RESEARCH PRODUCTS

# Advance, Accelerate, and Enhance Your Research

Mixtures, Sets, and Kits  
for MS 'Omics and  
MS/MS Screening



**Cambridge Isotope Laboratories, Inc.**

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To help advance research in MS 'omics and MS/MS screening, Cambridge Isotope Laboratories, Inc. (CIL) is pleased to offer the largest variety of stable isotope-labeled sets, mixtures, and kits. The mixes are formulated neat and/or as solutions and are readily available for immediate use. The kits include a user manual together with the packaged mix(es). The manual outlines general procedures and processing examples for user reference, as well as troubleshooting notes and analysis results. Please see [isotope.com](http://isotope.com) for product details, pricing, and to inquire about customized mixes.

### Benefits

- Easy to use
- Offers flexibility
- Saves time
- Enhances data quality
- Improves reproducibility
- Renders confidence

### Features Overview

- Mixes supplied in neat and/or solution form
- Preferentially <sup>13</sup>C- and/or <sup>15</sup>N-enriched
- Site-specific or uniform labeling
- Established specification guidelines
- Procedural guides in kit manuals
- Broad-spanning applications (from QC to quantification)

## Mixtures and Sets

### Amino Acids

Catalog No.	Description	No. of Metabolites	Unit Size
NSK-A	Amino Acid Standards Mix Set A	12	1 vial, 10 vials
NSK-A1	Amino Acid Standards Mix Set A1	12	1 vial, 10 vials
NSK-AB	Standards Mix Sets A and B	12 (in A), 8 (in B)	2 × 10 vials
NSK-AA3	3-Plex Amino Acid Standards Mix	3	1 vial
NSK-AA3-10X	3-Plex Amino Acid Standards Mix (10X)	3	1 vial
NSK-BCAA	Branched-chain Amino Acid Standards Mix	4	1 vial
MSK-A2	Metabolomics Amino Acid Mix	17	1.2 mL
MSK-CAA	Canonical Amino Acid Mix	20	1 vial
MSK-NCAA	Non-canonical Amino Acid Mix	7	1 vial
MSK-CNCAA	Canonical/Non-canonical Amino Acid Mix Sets	20 (in CAA), 7 (in NCAA)	2 × 1 vial
MSK-MSM1	Metabolomics Screening and Monitoring Standards Mix 1	14	1 vial

### Bile Acids

MSK-BA1	Bile Acid Standards Mix 1 – Unconjugated	6	1 vial
MSK-BA1-25X	Bile Acid Standards Mix 1 (25X) – Unconjugated	6	1 vial
MSK-BA2	Bile Acid Standards Mix 2 – Conjugated	10	1 vial
MSK-BA2-20X	Bile Acid Standards Mix 1 (20X) – Conjugated	10	1 vial

### Carnitine/Acylcarnitines

NSK-B	Carnitine/Acylcarnitine Standards Mix Set B	8	1 vial, 10 vials
NSK-B-G1	Carnitine/Acylcarnitine Standards Mix Supplement to NSK-B	5	1 vial, 10 vials
NSK-AB	Standards Mix Sets A and B	12 (in A), 8 (in B)	2 × 10 vials

### Fatty Acids/Lipids

CLM-8455	Fatty Acid Mix (U- <sup>13</sup> C, 98%)	5-10	0.25 g, 1 g
DLM-8572	Fatty Acid Mix (U-D, 96%)	5-10	Please inquire
CDLM-8376	Fatty Acid Mix (U- <sup>13</sup> C, 98%; U-D, 97%)	5-10	0.25 g, 1 g
CLM-8381	Fatty Acid, Methyl Ester Mix (U- <sup>13</sup> C, 98%) (unlabeled terminal ester) CP 95%	5-10	0.25 g, 1 g
DLM-2497	Fatty Acid, Methyl Ester Mix (U-D, 96%)	5-10	Please inquire
DLM-8375	Triglyceride Mix (U-D, 97%)	5-10	0.25 g, 1 g

### Nucleic Acids

CNLM-7871-SL	Set of 4 2'-Deoxyribonucleoside 5'-Monophosphates, lithium salt ( <sup>13</sup> C, 98%; <sup>15</sup> N, 98%) (in solution) CP 95%	4	10 mg
NLM-7512-SL	Set of 4 2'-Deoxyribonucleoside 5'-Triphosphates, lithium salt ( <sup>15</sup> N, 98%) (in solution) CP 95%	4	10 mg, 50 mg
DLM-7511-SL	Set of 4 2-Deoxyribonucleoside 5'-Triphosphates, lithium salt (D, 98%) (in solution) CP 95%	4	10 mg, 50 mg

Chemical purity (CP) is 98% or greater, unless otherwise specified.

Catalog No.	Description	No. of Metabolites	Unit Size
CNLM-7513-SL	Set of 4 2'-Deoxyribonucleoside 5'-Triphosphates, lithium salt ( <sup>13</sup> C, 98%; <sup>15</sup> N, 98%) (in solution) CP 95%	4	10 mg, 50 mg
NLM-7519-SL	Set of 4 Ribonucleoside 5'-Triphosphates, ammonium salt ( <sup>15</sup> N, 98%) (in solution) CP 95%	4	10 mg, 50 mg
DLM-7518-SL	Set of 4 Ribonucleoside 5'-Triphosphates, ammonium salt (D, 98%) (in solution) CP 95%	4	10 mg, 50 mg
CNLM-7503-SL	Set of 4 Ribonucleoside 5'-Triphosphates, lithium salt ( <sup>13</sup> C, 98%; <sup>15</sup> N, 98%) (in solution) CP 95%	4	10 mg, 50 mg
NLM-7519-CA	Set of 4 Ribonucleoside 5'-Triphosphates, ammonium salt ( <sup>15</sup> N; 98%) (in solution) CP 90%	4	4 × 20 μmol, 4 × 100 μmol
DLM-7518-CA	Set of 4 Ribonucleoside 5'-Triphosphates, ammonium salt (D, 98%) (in solution) CP 95%	4	4 × 20 μmol, 4 × 50 μmol, 4 × 100 μmol
CNLM-7503-CA	Set of 4 Ribonucleoside 5'-Triphosphates, ammonium salt ( <sup>13</sup> C, 98%; <sup>15</sup> N; 99%) (in solution) CP 95%	4	4 × 20 μmol, 4 × 50 μmol, 4 × 100 μmol

### Organic Acids

MSK-OA	Organic Acid Mix	33	1 vial
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### Other

NSK-LPC	Lysophosphatidylcholine Mix	4	1 vial
NSK-NI	Acid Sphingomyelinase Substrate and Internal Standard Mix	1 (S + IS)	1 vial
NSK-KR	Galactocerebrosidase Substrate and Internal Standard Mix	1 (S + IS)	1 vial
NSK-FA	α-Galactosidase Substrate and Internal Standard Mix	1 (S + IS)	1 vial
NSK-GA	Glucocerebrosidase Substrate and Internal Standard Mix	1 (S + IS)	1 vial
NSK-MP	α-L-Iduronidase Substrate and Internal Standard Mix	1 (S + IS)	1 vial
NSK-PO	Acid α-Glucosidase Substrate and Internal Standard Mix	1 (S + IS)	1 vial
MSK-MET1	Metabolomics Standards Mix 1	11	1 vial, 5 vials, 10 vials

### Steroids

NSK-S	Steroid Standards Mix Set S	5	1 vial, 10 vials
NSK-S-40X	Steroid Standards Mix Set S (40X)	5	1 vial, 10 vials
NSK-S-EXP	Expanded Steroid Standards Mix Set S	9	1 vial, 10 vials

### TCA Cycle

MSK-TCA1	TCA Cycle Standards Mix 1	8	1 vial
MSK-TCA2-A	TCA Cycle Standards Mix 2A	6	1 vial
MSK-TCA-A	TCA Cycle Standards Mix Sets 1 and 2A	8 (in 1), 6 (in 2)	2 × 1 vial

Note: Companion unlabeled standard mixes and sets may be available; please inquire.

## Kits

### Metabolomic Kits

#### Platform and Workflow Quality Control (QC)

Catalog No.	Description	No. of Metabolites per Vial
MSK-QC-KIT	Metabolomics QC Kit	5 (vial 1), 9 (vial 2)
MSK-QReSS-KIT	Metabolomics QReSS™ Kit	12 (vial 1), 6 (vial 2)
MSK-QReSS-EXP-KIT	Expanded Metabolomics QReSS™ Kit	12 (vial 1), 6 (vial 2), 9 (vial 3)

COMING SOON!

#### Qualification and Quantification

MSK-CRED-DD-KIT	Credentialed <i>E. coli</i> Cell Extract Kit (dried down)	100s
MSK-CRED-KIT	Credentialed <i>E. coli</i> Cell Extract Kit (solution)	100s
ISO1-KIT	Metabolite Yeast Extract Kit	100s

Note: Companion unlabeled standard mixes and kits may be available; please inquire.

### Lipidomic Kit

Catalog No.	Description	No. of Fatty Acids/Lipids per Vial
L-ISO1	Crude Lipid Yeast Extract (U- <sup>13</sup> C, 99%)	100s

Note: Companion unlabeled standard kit is available; please inquire.

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## Glycomic Kit

## Qualification and Quantification

Catalog No.	Description	Unit Size
GTK-1000	INLIGHT® Glycan Tagging Kit	1 kit

## Proteomic Kits

## Platform and Workflow Quality Control (QC)

Catalog No.	Description	No. of Peptides per Mix	Unit Size	Optimized Instrument
LCMSP-QC	PeptiQuant™ Plus Human Plasma Daily QC Kit	35	10, 20, or 50 injections	<ul style="list-style-type: none"> <li>• 6490/6495 QqQ</li> <li>• QTRAP® 6500</li> <li>• Q Exactive™ Plus</li> </ul>
WFPK	PeptiQuant™ Plus Human Plasma Workflow QC Kit	35	1 or 2 runs	<ul style="list-style-type: none"> <li>• 6490/6495 QqQ</li> <li>• Q Exactive Plus</li> <li>• QTRAP 6500</li> </ul>

## Biomarker Assessment (BAKs)

Catalog No.	Description	No. of Quant. Proteins	Unit Size	Optimized Instrument
<b>Human</b>				
BAK-125	PeptiQuant™ Plus Human Plasma Biomarker Assessment Kit	125	20, 50, or 100 samples	<ul style="list-style-type: none"> <li>• 6490/6495 QqQ</li> <li>• QTRAP 6500</li> <li>• Q Exactive Plus</li> <li>• Xevo TQ-XS</li> </ul>
BAK-270	Expanded PeptiQuant™ Plus Human Plasma Biomarker Assessment Kit	270	20, 50, or 100 samples	<ul style="list-style-type: none"> <li>• 6490/6495 QqQ</li> <li>• QTRAP 6500</li> <li>• Q Exactive Plus</li> </ul>
BAK-CNCR50	DiseaseQuant Human Tissue Cancer Pathway Proteomics Kit	50	50 or 100 samples	<ul style="list-style-type: none"> <li>• 6490/6495 QqQ</li> <li>• Q Exactive Plus</li> </ul>
<b>Mouse</b>				
M-BAK-125*	PeptiQuant™ Plus Mouse Plasma Biomarker Assessment Kit	125	20, 50, or 100 samples	<ul style="list-style-type: none"> <li>• 6490/6495 QqQ</li> <li>• QTRAP 6500</li> <li>• Q Exactive Plus</li> <li>• 6545 Q-TOF</li> </ul>

\*Alternate sets of 125 target proteins are available.

PeptiQuant is a trademark of MRM Proteomics Inc.

## CIL – Advancing Your Research

The global and targeted measurement of biomolecules continues to be two areas of growing focus in analytical chemistry and biomedicine. Drivers for this research include efforts to better understand the underlying mechanisms of disease pathogenesis and to improve precision medicine through the qualitative/quantitative screening of candidate biomarkers. To address these objectives, MS-based approaches are increasingly utilized and have been aided by advancements in experimental methodologies, instrumentation technologies, and bioinformatic tools. CIL offers a wide range of isotope-labeled compounds to enhance these research efforts. Please visit [isotope.com](http://isotope.com) for a complete listing of isotope-labeled compounds.



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MS\_RSCH\_MIXES\_KITS (1/23/24)  
Supersedes all previously published literature