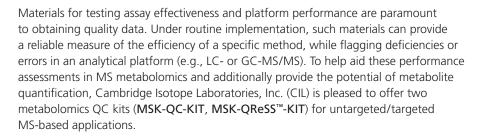


## Metabolomics QC Kits

# For Untargeted/Targeted Mass Spectrometry





#### **Example Features and Benefits**

- Mixes (in neat form) with user manual
- Predominantly <sup>13</sup>C and/or <sup>15</sup>N metabolites
- Offers flexibility in use and application
- Reduces development time and cost
- Provides enhanced reproducibility

#### MSK-QC-KIT ← Click for additional information

This kit contains the following materials and tools:

- 2 vials of stable isotope-labeled metabolites (dried down)
- Detailed user manual

**Table.** Mix composition. Reconstitution in 1 mL of solvent (e.g., 50% methanol) yields the concentrations specified.

Description	Conc. (µg/mL)	Vial
L-Alanine (13C <sub>3</sub> , 99%)	4	1
L-Leucine (13C <sub>6</sub> , 99%)	4	1
L-Phenylalanine (13C <sub>6</sub> , 99%)	4	1
L-Tryptophan (13C <sub>11</sub> , 99%)	40	1
L-Tyrosine (13C <sub>6</sub> , 99%)	4	1
Caffeine (13C <sub>3</sub> , 99%)	4	2
D-Glucose (13C <sub>6</sub> , 99%)	4	2
Sodium benzoate (13C <sub>6</sub> , 99%)	4	2
Sodium citrate (13C3, 99%)	4	2
Sodium octanoate (13C <sub>8</sub> , 99%)	4	2
Sodium propionate (13C <sub>3</sub> , 99%)	4	2
Stearic acid, sodium salt (13C <sub>18</sub> , 98%)	0.4	2
Succinic acid, disodium salt (13C <sub>4</sub> , 99%)	4	2
D-Sucrose (13C <sub>6</sub> , 98%)	4	2

Individual vials and companion unlabeled mixtures may also be available. Please inquire.

#### **Example Reference**

Barco, S.; Lavarello, C.; Cangelosi, D.; et al. **2022**. Untargeted LC-HRMS based-plasma metabolomics reveals 3-O-methyldopa as a new biomarker of poor prognosis in high-risk neuroblastoma. *Front Oncol.* **12**. 845936-845946.

Chemical purity (CP) is 98% or greater, unless otherwise indicated. For research use only. Not for use in diagnostic procedures.

### Cambridge Isotope Laboratories, Inc.

#### MSK-QReSS-KIT ← Click for additional information

This kit contains the following materials and tools:

- 2 vials of stable isotope-labeled metabolites (dried down)
- Detailed user manual

**Table.** Mix composition. Reconstitution in 1 mL of solvent (e.g., 50% methanol) yields the concentrations specified.

Description	Conc. (µg/mL)	Vial
L-Alanine (13C <sub>3</sub> , 99%; 15N, 99%)	100	1
1,4-Butanediamine·2HCl (¹³C₄, 99%)	10	1
Creatinine (N-methyl-D <sub>3</sub> , 98%)	100	1
Ethanolamine·HCl (1,1,2,2-D <sub>4</sub> , 98%)	10	1
Guanosine·2H <sub>2</sub> O (¹⁵N₅, 96%)	2	1
Hypoxanthine (13C <sub>5</sub> , 99%)	10	1
L-Leucine ( <sup>13</sup> C <sub>6</sub> , 99%)	5	1
L-Phenylalanine (ring-13C <sub>6</sub> , 99%)	100	1
Thymine (1,3-15N <sub>2</sub> , 98%)	20	1
L-Tryptophan (13C <sub>11</sub> , 99%)	100	1
L-Tyrosine (ring- <sup>13</sup> C <sub>6</sub> , 99%)	100	1
Vitamin B <sub>3</sub> (13C <sub>6</sub> , 99%)	5	1
Citric acid (1,5,6-carboxyl- <sup>13</sup> C <sub>3</sub> , 99%)	10	2
Fumaric acid (13C <sub>4</sub> , 99%)	100	2
Indole-3-acetic acid (phenyl-13C <sub>6</sub> , 99%)	5	2
$\alpha$ -Ketoglutaric acid, disodium salt (1,2,3,4- $^{13}$ C <sub>4</sub> , 99%)	100	2
Sodium palmitate (U-13C <sub>16</sub> , 98%)	10	2
Sodium pyruvate (13C <sub>3</sub> , 99%)	100	2

**Example Reference:** Lippa, K.A.; Aristizabal-Henao, J.J.; Beger, R.D.; et al. **2022**. Reference materials for MS-based untargeted metabolomics and lipidomics: a review by the metabolomics quality assurance and quality control consortium (mQACC). *Metabolomics*, *18(4)*, 24-52.

Example Application Note: Percy, A.J.; Souza, A.; Ntai, I.; et al. 2022. From QC to quantitation: Utility of QReSS™ metabolites in FBS measurements. (CIL application note #51)