



# NSK-A – Amino Acid Reference Standards

This set contains ten vials of a dry mixture of twelve isotopically labeled amino acids. Accurate and complete reconstitution of the contents of one vial in 1 ml of high purity solvent will produce the concentrations presented in the [Standards Concentrations](#) table. Mix well. This solution becomes the concentrated amino acid stock standard.

## Dilution of Reference Standards Concentrated Working Stock

To prepare working stock solutions, one of the following procedures is suggested: dilute 1 ml (reconstituted vial contents per instructions above) of the concentrated amino acid stock standard with pure solvent. If Set B (Acylcarnitine Reference Standards) was purchased, mix 1 ml (reconstituted vial contents) of concentrated standards from Set A with 1 ml of the concentrated standards from Set B. Store the diluted standards in a tightly sealed vial at 4°C. In order to maintain the integrity of the solution, we recommend storing the sealed vials in a second sealed container. We recommend discarding this concentrated working stock solution after ~1 month. Stability data is being obtained.

Standards Concentrations	
Reference Standard	Concentration (nmol/mL)
<sup>15</sup> N; 2- <sup>13</sup> C-Glycine	2500
<sup>2</sup> H <sub>4</sub> -Alanine	500
<sup>2</sup> H <sub>8</sub> -Valine	500
<sup>2</sup> H <sub>3</sub> -Leucine	500
<sup>2</sup> H <sub>3</sub> -Methionine	500
<sup>13</sup> C <sub>6</sub> -Phenylalanine	500
<sup>13</sup> C <sub>6</sub> -Tyrosine	500
<sup>2</sup> H <sub>3</sub> -Aspartate	500
<sup>2</sup> H <sub>3</sub> -Glutamate	500
<sup>2</sup> H <sub>2</sub> -Ornithine	500
<sup>2</sup> H <sub>2</sub> -Citrulline	500
<sup>2</sup> H <sub>4</sub> ; 5- <sup>13</sup> C-Arginine	500

For research use only – Not for diagnostic purposes