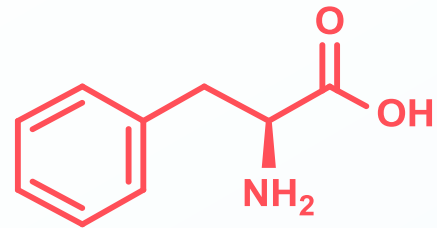




# Amino Acid Panel



## Amino Acids

Amino Acids (AA) are the foundational building blocks for peptides and proteins. These small molecules regulate metabolic pathways that are involved in cell maintenance, growth, reproduction, and immunity. Branched chain amino acids play a large role in building muscle tissue and participate in increasing protein synthesis. Amino acids also play a role in cell signaling, gene expression and protein phosphorylation. Maintaining an optimal balance of amino acids is vital to maintaining a stable equilibrium of physiological processes.

## Applications

The amino acid panel measures **free** amino acids in biofluids, cells and tissues and can be used in many different applications including the following:

- ▶ Metabolic disorders
- ▶ Human and animal nutrition
- ▶ Bioprocessing
- ▶ Drug development

Amino Acid Panel	LLOQ
	Plasma/Serum
Alanine	1.00 µg/mL
Arginine	1.00 µg/mL
Asparagine	0.250 µg/mL
Aspartic acid	0.250 µg/mL
Glutamic Acid	0.500 µg/mL
Glutamine	2.50 µg/mL
Glycine	0.750 µg/mL
Histidine	0.500 µg/mL
Isoleucine	0.250 µg/mL
Leucine	0.500 µg/mL
Lysine	1.00 µg/mL
Methionine	0.125 µg/mL
Phenylalanine	0.400 µg/mL
Proline	1.00 µg/mL
Serine	0.400 µg/mL
Threonine	0.500 µg/mL
Tryptophan	0.500 µg/mL
Tyrosine	1.00 µg/mL
Valine	1.00 µg/mL
trans-4-hydroxyproline	0.0500 µg/mL
Ornithine	0.250 µg/mL
Citrulline	0.200 µg/mL

The panel is for non-GxP testing and is not for diagnostic use

## Analysis Method and Instrumentation

LC-MS/MS (Agilent 1290 UHPLC/Sciex QTrap 5500)

## Sample Type and Required Amounts

Sample Type	Sample Requirement
Plasma/Serum	100 - 150 µL
Cell cultures & supernatants	2 million cells / 100 - 150 µL
Others on request	

Contact us to get started  
[info@metabolon.com](mailto:info@metabolon.com)

+1 (919) 572-1711  
[metabolon.com](http://metabolon.com)  
 617 Davis Drive, Suite 100, Morrisville, NC, 27560  
 © 2021 Metabolon, Inc. All rights reserved. TA.AA.211111