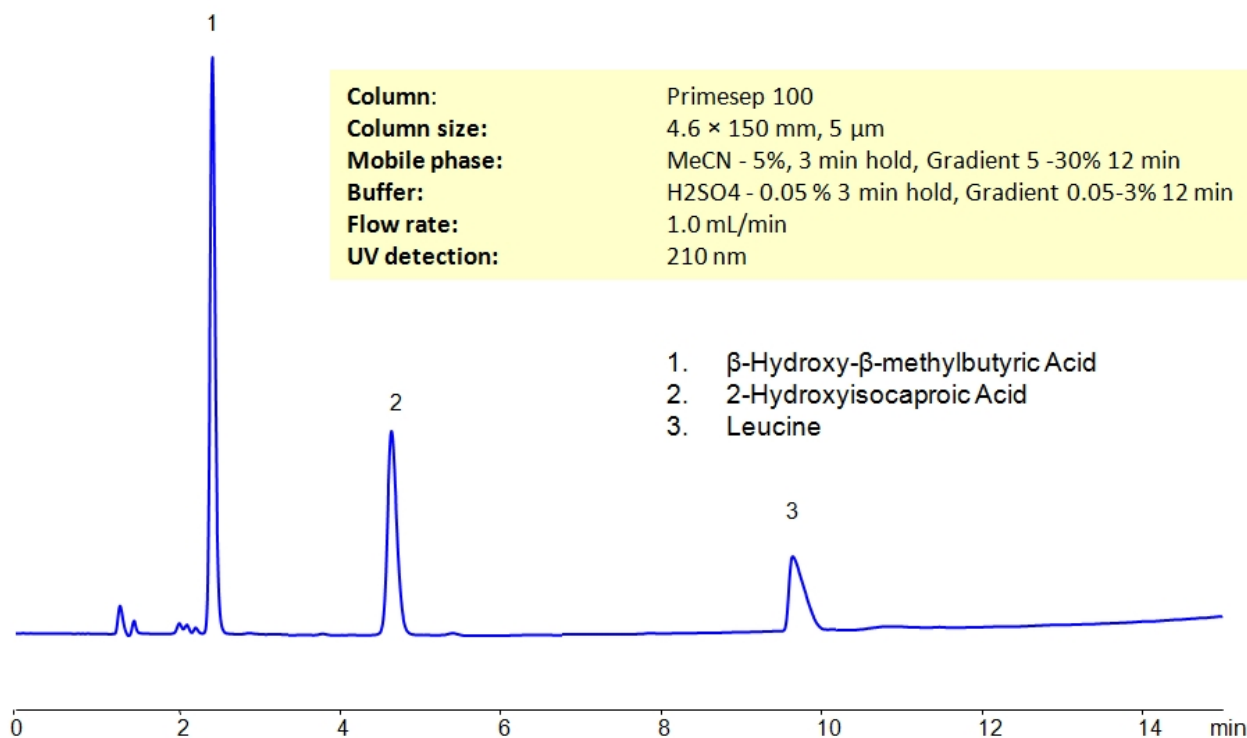


HPLC Separation of β -Hydroxy- β -methylbutyric Acid, 2-Hydroxyisocaproic Acid and Leucine on Primesep 100 Column

<https://sielc.com/hplc-separation-of-B-Hydroxy-B-methylbutyric-acid-and-leucine>

Chromatogram



Description

High Performance Liquid Chromatography (HPLC) Method for Analysis of β -Hydroxy- β -methylbutyric Acid (HMB), D-Leucine, Leucine, 2-Hydroxyisocaproic Acid (HICA)

Both β -hydroxy- β -methylbutyric acid (HMB) and 2-hydroxyisocaproic acid (HICA) are metabolites of the essential dietary branched chain amino acid leucine.

β -Hydroxy- β -methylbutyric Acid (HMB), D-Leucine, Leucine, 2-Hydroxyisocaproic Acid (HICA) can be retained and analyzed using the Primesep 100 stationary phase column. The analysis utilizes a gradient method with a simple mobile phase consisting of water and acetonitrile (MeCN) with a sulfuric acid buffer. Detection is performed using UV.

Method Parameters

Mobile Phase	MeCN – 5%, 3 min hold, Gradient MeCN 5-30% 12 min
Buffer	H ₂ SO ₄ – 0.05 % 3 min hold, Gradient H ₂ SO ₄ 0.05-3% 12 min
Flow Rate	1.0 ml/min
Detection	UV, 210 nm

Class of Compounds	Acid, Hydrophilic, Ionizable, Normal human metabolite, Dietary supplement, Essential amino acid, Branched-chain amino acid (BCAA)
Analyzing Compounds	β -Hydroxy- β -methylbutyric Acid (HMB), D-Leucine, Leucine, 2-Hydroxyisocaproic Acid (HICA)

HPLC Column Used

Primesep 100, 4.6 x 150 mm, 5 μ m, 100 A, dual ended

[Order this column at hplc-shop.de](https://www.hplc-shop.de) →