

Supplementary data on method for analysis of β -Hydroxy β -methylbutyrate (HMB)

Method based on article

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Material

3-Hydroxy-3-methylbutyric acid (purity 96%) was obtained from Alfa Aesar, 30 Bond Street, Ward Hill MA, 01835. b-Hydroxyisovaleric acid-d8 was obtained from Toronto Research Chemicals Inc, Toronto, CA.

Instrumentation

Agilent 7010B GC/TQ and Agilent 8890 GC System

Chromatography and detection

GC-MS/MS; positive-ion multiple reaction monitoring (MRM); retention time = 6.10 min.

3-Hydroxy-3-methylbutyrate precursor ion = 190 m/z; product ion = 107 m/z. 3-Hydroxy-3-methylbutyrate-d8 precursor ion = 198 m/z; product ion = 108 m/z.

Method performance

Linear range: - - 1000 µmol/L.

Linearity: r2: 0.99.

LOD (S/N >5): - μ mol/L.

Within-day CV: - %. Between-day CV: - %.