

Supplementary data on method for analysis of Lactate (Lac).

Method based on article

Midttun et al (2016), PMID 27715010.

Material

Lactate (purity $\geq 85\%$) was obtained from Sigma-Aldrich, St.Louis, MO 63103 USA or 89555 Steinheim Germany.

Lactate-d4 (purity 99.4%) was obtained from C/D/N Isotopes Inc., 88 Leacock Street Pointe-Claire, Quebec, Canada.

Instrumentation

Agilent 7010B GC/TQ and Agilent 8890 GC System.

Chromatography and detection

GC-MS/MS; positive-ion multiple reaction monitoring (MRM);
retention time = 2.75 min.

Lactate precursor ion = 132.0 m/z; product ion = 59.0 m/z.

Lactate-d4 precursor ion = 135.0 m/z; product ion = 63.0 m/z.

Method performance

Linear range: 10 - 5000 $\mu\text{mol/L}$.

Linearity: r^2 : 0.995.

LOD (S/N >5): 10 $\mu\text{mol/L}$.

Within-day CV: 4-6 %.

Between-day CV: 5-7 %.