

Supplementary data on method for analysis of 1-Methylhistidine (m1His)

Method based on article

Midttun et al (2013), PMID 23232958.

Material

1-Methylhistidine (purity ≥98%) was obtained from Sigma Aldrich, St. Louis, USA. 1-Methylhistidine-d3 was obtained from BUCHEM BV, AW Apeldoorn, The Netherlands.

Instrumentation

Same as in PMID 23232958

Chromatography and detection

LC-MS/MS; positive-ion multiple reaction monitoring (MRM); retention time = 2.1 min.

m1His precursor ion = 169.8 m/z; product ion = 95.6 m/z, m1His precursor ion = 169.8 m/z; product ion = 95.6 m/z, m1His precursor ion = 169.8 m/z; product ion = 95.6 m/z, m1His precursor ion = 169.8 m/z; product ion = 95.6 m/z, m1His precursor ion = 169.8 m/z; product ion = 95.6 m/z, m1His precursor ion = 169.8 m/z; product ion = 95.6 m/z, m1His precursor ion = 169.8 m/z; product ion = 95.6 m/z, m1His precursor ion = 169.8 m/z; product ion = 95.6 m/z, m1His precursor ion = 169.8 m/z; product ion = 95.6 m/z, m1His precursor ion = 169.8 m/z; product ion = 95.6 m/z, m1His precursor ion = 169.8 m/z; product ion = 95.6 m/z, m1His precursor ion = 169.8 m/z; product ion = 95.6 m/z.

m1His precursor ion = 169.8 m/z; product ion = 95.6 m/z. m1His-d3 precursor ion = 172.8 m/z; product ion = 98.6 m/z.

Method performance

LOD (S/N >5): 0.25 μmol/L. Within-day CV: 3-4 %.

Between-day CV: 4-5 %.