



Assessment of disease risk
by targeted metabolomics

Supplementary data on method for analysis of Carboxyethyllysine (CEL).

Method based on article

Midttun et al (2016), PMID 27715010.

Material

Carboxyethyllysine (purity $\geq 98\%$) and Carboxyethyllysine-d4 (purity $\geq 98\%$) was obtained from Toronto Research Chemical, 20 Martin Ross Ave, Toronto, ON, M3J 2K8 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 = 6.91 min.

Carboxyethyllysine precursor ion = 285.0 m/z; product ion = 156.0 m/z.

Carboxyethyllysine-d4 precursor ion = 289.0 m/z; product ion = 160.0 m/z.

Method performance

Linear range: 0.03 - 100 $\mu\text{mol/L}$.

Linearity: r^2 : 0.999.

LOD (S/N >5): 0.03 $\mu\text{mol/L}$.

Within-day CV: 3-5 %.

Between-day CV: 3-5 %.