

GC quadriceps sample preparation protocol

For GC-TOF-MS, 40 μL sample extracts were transferred to a glass vial (2 mL Agilent) and evaporated under a stream of nitrogen gas at 37 °C. Derivatisation was achieved via oximation and silylation. To oximate the samples, methoxyamine hydrochloride (20 mg/mL in pyridine, 50 μL) was added and the samples were vortex mixed for ~1 minute to dissolve the dried compounds. The samples were then incubated at 60 °C for 1 h. Thereafter the samples were silylated by adding BSTFA (WQ: 50 μL ; SOL: 25 μL) containing 1% (v/v) TMCS (catalyst for silylation reaction) and incubated at 60 °C for 1 h. The final volume (100 μL) was then transferred to 250 μL pulled point glass inserts. Finally, each vial was loaded onto an Agilent© 7693 auto sampler for GC-TOF-MS analysis.