

GC soleus sample preparation protocol

For GC-TOF-MS, 200 μL sample extracts were transferred to a glass vial (1.1 mL microvial) and evaporated under a stream of nitrogen gas at 37 $^{\circ}\text{C}$. Derivatisation was achieved via oximation and silylation. To oximate the samples, methoxyamine hydrochloride (20 mg/mL in pyridine, 25 μL) was added and the samples were vortex mixed for ~ 1 minute to dissolve the dried compounds. The samples were then incubated at 60 $^{\circ}\text{C}$ for 1 h. Thereafter the samples were silylated by adding BSTFA (25 μL) containing 1% (v/v) TMCS (catalyst for silylation reaction) and incubated at 60 $^{\circ}\text{C}$ for 1 h. Finally, each vial was loaded onto an Agilent $^{\circ}$ 7693 auto sampler for GC-TOF-MS analysis.