



TANDEM MASS SPECTROMETER, COUPLED WITH ULTRA-HIGH PERFORMANCE LIQUID CHROMATOGRAPHY AND IONIC CHROMATOGRAPHY (UHPLC-IC-MS/MS)

(UHPLC-IC-TQ; mod. Vanquish Core/IC Inuvion/TSQ Quantis Plus)

VENDOR: THERMO FISHER SCIENTIFIC SPA

YEAR OF ACQUISITION: 2024

SUPERVISING FACULTY MEMBER: Prof.ssa Silvia Rivara

Technical features:

Mass spectrometer

- Mass range suitable for the determination of small and large molecules (up to 3000 m/z).
- ESI and APCI sources.
- Acquisition modes: Full Scan MS, Selected Ion Recording (SIR), Parent Scan, Daughter Scan, Multiple Reaction Monitoring (MR), Neutral Loss Scan.

Ultra-High Performance Liquid Chromatography

- Eluent management system with low pressure quaternary mixing.
- Thermostatically controlled column compartment.
- Autosampler, thermostatable.

Ionic Chromatography

- Isocratic pump, compatible with aqueous eluents and organic solvents.
- Conductivity detector.
- Autosampler.
- Managed by the MS software.

Instrumental management and data processing software

- Software Chromeleon.

Applications:

- Target and semi-untargeted analysis of ionic/ionisable compounds.

Acquired for the Department of Excellence MUR 2023-2027