

## LC/Q-TOF /MS (Liquid Chromatography –/Quadrupole- Time-of-Flight/Mass Spectrometry)

LC / MS systems are systems in which the physical separation power of liquid chromatography is combined with the mass analysis power of the mass spectrometer. In the QTOF LC / MS system, the sample is separated according to its physical characteristics in the UHPLC device, ionized, diagnosed, and quantitated even with quadrupole and flight time detectors and samples in very small concentrations. Available in our laboratory, the Agilent 6550 QTOF LC / MS instrument enables unmatched speed and precision measurements for quantitative and qualitative analysis. It provides the lowest detection limit that a high resolution LC / MS device can provide. It can be used in proteomic and metabolomic studies.

### LC / Q-TOF / MS Applications

- -omic studies
- Pharmacology
- Food safety
- Forensic Medicine
- Toxicology
- Environmental practices

Instrument Name: Agilent iFunnel 6550 QTOF LC/MS

### Instrument Hardware and Features:

Sensitivity: Femtogram Level

Resolution: 40 k (Ion Beam Compression and Shaping (IBCS))

Mass range: m / z 20-10000

Scan Rate: 50 spectrums per minute.

Ion Sources: Dual spray atmospheric electrospray ionization (ESI), Atmospheric pressure photo ionization (APPI), Atmospheric pressure chemical ionisation (APCI)

Software: Mass Hunter Workstation Software

LC Instrument: Agilent 1260 Binary LC

Libraries: METLIN, METLIN METABOLOMICS, FOR\_TOX, PESTICIDES, VET\_DRUGS, WATER, AMINOACID