

Proteomics and Metabolomics



Instruments



Orbitrap Exploris 480 (Thermo Fisher)

Orbitrap Exploris 480 mass spectrometer equipped with a FAIMS Pro (Thermo Scientific) interface for shotgun proteomics target and untarget for qualitative and quantitative analysis. The performance of the instrument is evaluated in data-dependent acquisition (DDA) and data-independent acquisition (DIA) modes with fast scanning HCD methods in combination with front-end Field Asymmetric Ion Mobility Spectrometry (FAIMS).

Equipped with the nano chromatographic system easy nLC-1200 (Thermo Fisher).

Orbitrap Exploris 240 (Thermo Fisher)

Exploris 240 is a high resolution and high versatility mass spectrometer. It is used for targeted and untargeted analysis (quantitative and qualitative) in Metabolomics and Lipidomics. It is coupled to the Vanquish Flex (Thermo Fisher) for targeted/untargeted and stable isotope tracing metabolomics analysis and with the Vanquish Neo (Thermo Fisher) for nanoLC analysis.





Orbitrap QExactive HF (Thermo Fisher)

The **Q-exactive** is an hybrid quadrupole-Orbitrap high resolution/high mass accuracy mass spectrometer useful for untargeted or targeted screening and a broad range of qualitative and quantitative analysis.

Equipped with the nano chromatographic system easy nLC-1200 (Thermo Fisher).

TripleTOF 6600 (AB Sciex)

The **TripleTOF** combines comprehensive qualitative exploration, rapid profiling, and HR/HMA quantitation on a single platform. Thanks to his speed and sensitivity it is ideal for targeted and untargeted proteomics, lipidomics and metabolomics applications.

Equipped with the nano and semi-micro chromatographic system expert nLC 400 e 415 (eksigent)





Softwares

- Mascot (Matrix Science) and Sequest (Thermo Fisher Scientific).
- Proteome Discoverer (Thermo Fisher Scientific)
- Scaffold (Proteome Software)
- MaxQuant e Perseus (Max Planck Institute of Biochemistry, Martinsried, Germany)
- Spectronaut (Biognosys)
- Coumpound Discoverer (Thermo Fisher Scientific)
- MS-DIAL (GitHub)