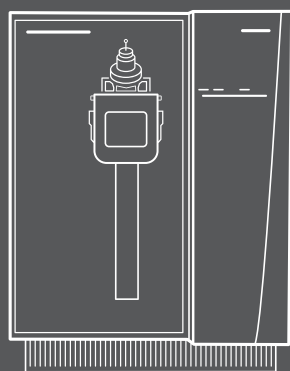


10 reasons to use Orbitrap Exploris Isotope Solutions

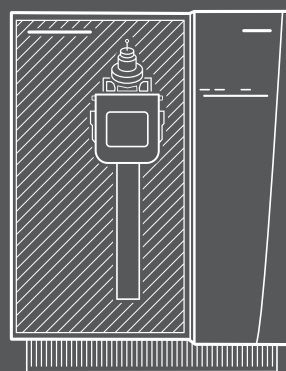
Expand your isotope research

Intramolecular isotopic information is important as it can provide a better understanding of the processes of molecule formation and provide new geochemical proxies for understanding the world around us. Current technology for deriving intramolecular isotopic information is restricted either by large sample sizes, long analysis times or limited applicability across a range of sample types. The powerful, new Thermo Scientific™ Orbitrap Exploris™ Isotope Solutions for natural abundance isotope ratio analysis open new dimensions for deriving intramolecular isotopic information. Explore why!

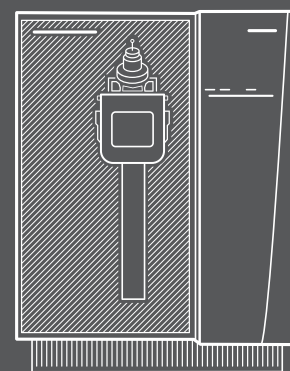
Orbitrap Exploris Isotope Solutions



Thermo Scientific™ Orbitrap Exploris™ 120 MS: the ultimate workhorse for isotope ratio analysis of Oxy anions and small organic molecules (<100 m/z)



Thermo Scientific™ Orbitrap Exploris™ 240 MS: the instrument of choice for isotope ratio analysis of Oxy anions and medium sized organic molecules (<200 m/z)



Thermo Scientific™ Orbitrap Exploris™ 480 MS: for customers wanting to push the boundaries of isotope research of Oxy anions and large organic molecules such as metabolites (<250 m/z)

Learn more at thermofisher.com/orbitrap-for-isotopes

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10x more productivity, faster analysis by eliminating several sample introduction systems and multiple IRMS systems from the workflow

2 **10x less sample preparation,** e.g. by avoiding time consuming (and error-inducing) microbial processing, wet chemistry and mineral precipitation

3 **Reduced sample sizes** due to increased sensitivity compared to classical IRMS approaches

7 **Extraction of accurate isotopic information from singly- and multi-substituted isotopologues** utilizing methodology for amplifying signals from minor isotopologues

8 **Position specific isotope information from functional groups** through controlled fragmentation of molecular ions

9 **Utilization of proven Dual Inlet principles** for determination of accurate isotope ratios of unknown samples relative to a reference

4 **Direct measurements of polar analytes in liquid samples** without chemical derivatization or conversion

5 **Analysis of intact molecules** using soft electrospray ionization

6 **Simultaneous acquisition of all major and many minor isotopologues** by high-resolution accurate mass IRMS

10 **Automation of sample introduction** by coupling the Orbitrap Exploris Isotope Solutions to Thermo Scientific™ Vanquish™ Neo UHPLC system

thermo scientific