

# AnthrovisION

*A complete solution for stable isotope analysis  
in the Humanities and Sport Sciences*



Small footprint



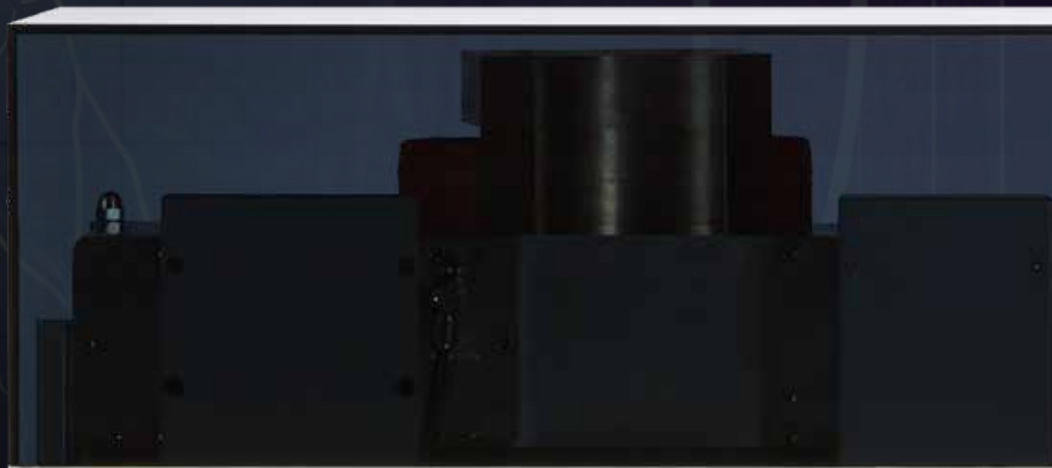
Ease of use



Advanced data analysis



Low cost of ownership



# AnthrovisiON

*Evidence or  
Conjecture?*

Stable isotope analysis crosses many applications but the question it answers remains broadly the same: where does this sample come from? **AnthrovisiON** answers many of society's questions when this is what we want to know. Where did this athlete's testosterone come from? Where did the ancient Egyptians source their food? Where is the clandestine laboratory that

manufactured these illegal drugs? These and many more questions can be answered when stable isotope analysis is used to pick out this hidden information.

Exceptional, robust performance combined with simplicity and powerful audit trails makes **AnthrovisiON** the ideal choice for high profile laboratories working in this highly regulated and sensitive domain.

*A powerful combination.*

## ④ **Elementar**

Market leading **isoprime visION**  
stable isotope analyzer



## ionOS® is the most advanced stable isotope software ever produced.



### ionOS KEY FEATURES

- Incredible new capabilities for acquisition and data processing.
- Elegant user interface with contextual control.
- Intelligent and automatic instrument performance optimization.
- Instantaneous data processing with dynamically updating results.
- Import your data from 3<sup>rd</sup> party instruments.

ionOS works in concert with the **isoprime visION** and **centrION** to provide an unrivalled level of intelligent control. Designed completely from the ground up and uniquely for stable isotope analysis, ionOS is the most sophisticated yet simple software ever created. Its clean user interface belies the level of sophistication within, giving users unrivalled capabilities to generate exceptional data with ease.

Anthro**visION** reclaims responsibility for sample analysis from the user by offering incredible functionality both pre- and post-acquisition significantly reducing instrument contact time.

## isoprime visION is the most elegantly simple stable isotope analyzer ever created.

Simplicity is what **isoprime visION** is about. Creating something simple seems, well, simple. In fact, simplicity can only be achieved once the fundamental requirements of our customers are understood. With this clarity, **isoprime visION** offers a completely new experience of stable isotope analysis. An experience where the user is free from the routine chores of maintenance allowing them to focus on the science, not the instrumentation.

**isoprime visION** offers exceptional bulk and compound specific isotope analysis through market leading technology from Elementar and Agilent Technologies. Harnessing this technical ability through the **isoprime visION** finally opens the power of stable isotopes to practically any laboratory.



### isoprime visION KEY FEATURES

- Almost 50 % smaller instrument than any other currently available
- Straightforward analysis and intelligent control for incredible ease of use
- Significantly reduced consumption of laboratory resources
- Powerful ionOS Peak Mapping reduces data processing time of complex chromatograms to minutes rather than hours, generating a large increase in lab productivity
- Intelligent monitoring gas injection and inlet handling with **centrION**
- 100 V amplification gives large dynamic range for high and low concentration metabolites
- Good-For-Go control significantly reduces instrument contact time
- Exceptional limits of detection and quantification for low level compound specific isotope analysis

### Agilent Technologies

Market leading 7890B  
gas chromatograph



## Anthro**vision** ENHANCEMENTS

- For complete confidence in your GC-IRMS analysis, add the Agilent 5977A mass selective detector for simultaneous compound detection and isotope analysis, ideal for positive identification of steroids and metabolites in a complex chromatogram
- Expand your capabilities by adding complementary bulk elemental and isotope analysis of bone collagen for dietary reconstruction
- High sensitivity bulk sulfur isotope analysis is routine with Advanced Purge and Trap (APT) chromatography for exceptional separation of combustion gases; analyze C, N, S isotopes sequentially for increased discriminatory power
- Upgrade further with O & H isotope analysis; discriminate geographical origin based on local hydrology

*Expand your research further.*

### Ⓢ Elemental Analysis

Conversion of organic materials to sample gases prior to isotope analysis

### Ⓢ Isotope Analysis

Intelligent analysis of sample gases from GC & EA inlets

### Ⓢ Gas Chromatography

Separation of volatile organics and real time conversion to sample gases



## RESEARCH AREAS SERVED

- World Anti-Doping Agency accredited labs
- Academic archaeology research groups
- Public and private criminal forensic labs
- Pharmaceutical and industrial chemical labs

## SAMPLE TYPES ANALYZED

- Lipid residues from archaeological samples
- Bone collagen and preserved archaeological materials
- Athlete urine and blood samples
- Seized drugs of abuse and other criminal evidence samples
- Pharmaceuticals and industrial chemicals



### Small footprint

Almost 50 % smaller than any other commercial stable isotope analyzer



### Ease of use

Good-For-Go control allows one click instrument set-up



### Advanced data analysis

The most powerful stable isotope data processing software ever created



### Low cost of ownership

Instrument sleep / wake-up functions for reduced consumption of resources

### Elementar – your partner for elemental analysis

Elementar is the world leader in high performance analysis of organic elements. Continuous innovation, creative solutions and comprehensive support form the foundation of the Elementar brand, ensuring our products continue to advance science across agriculture, chemical, environmental, energy, materials and forensics markets in more than 80 countries.

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