

Now available for
1290 Infinity II LC system -
6470 Agilent triple quadrupole mass spectrometer

BIOCRATES

LIFE SCIENCES

The Deep Phenotyping Company

The Standard in Targeted Metabolomics

Absolute/DQ[®] p180 Kit



High Throughput &
Minimal Sample
Volume



Simple & Guided
Workflow



Proven
Translational
Value



Global User
Network



Selection from more than 800 Publications

Papathanassiou et al., Nat Commun 2017
Feldman et al., Am J Gastroenterol 2017
Toledo et al., Alzheimers Dement 2017
Ryan et al., Microbiome 2017
Ward-Caviness et al., Heart 2017

Ang et al., Mol Cancer Ther 2017
Newman et al., Nutrients 2017
Bachmayr-Heyda et al., Clin Cancer Res 2016
Franko et al., Diabetes 2016
Neugebauer et al., Crit Care Med 2016

For Research Use Only. Not for use in diagnostic procedures.

Key Benefits

The Standard in Targeted Metabolomics

The AbsoluteID^Q p180 Kit quantifies a **broad metabolite spectrum**, reflecting diverse physiological processes such as cell cycle control, mitochondrial function, and inflammation. The technology has contributed to **more than 800 scientific publications** and has set the standard for hypothesis-driven metabolic research. Due to the combination of small sample volumes, high throughput, and excellent reproducibility, the kit is suitable for **all stages of biomedical research** – from cell culture and rodent models to large-scale epidemiological studies.



Ready-to-Use

- All in one box: no method or reagent development required
- Implemented within one day
- For a broadly established standard instrument base



Simple, Guided, Automated Workflow

- Workflow manager guided procedure for enhanced process safety
- Automated signal identification, quantification, and technical validation



High Throughput & Minimal Sample Volume

- Up to 500 samples per week and instrument
- Only 10 µl biofluid required



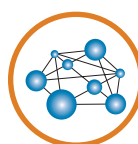
Superior Data Quality

- Quantitative results
- Excellent accuracy and precision
- Proven longitudinal and inter-laboratory reproducibility



Proven Translational Value

- Protocols for numerous matrices and species established
- Supports drug discovery, preclinical and clinical research



Global User Network

- Used by more than 100 laboratories worldwide
- Data from large epidemiological cohorts available
- Successfully applied in academic research and by 8 of the 10 largest pharmaceutical companies

Key Features

Quantification of up to 188 Metabolites from Key Metabolite Classes

Metabolite Coverage

- | | | |
|------------------------|-----------------------|---------------------------------|
| • Amino acids (21) | • Hexose (1) | • Lysophosphatidylcholines (14) |
| • Biogenic amines (21) | • Acylcarnitines (40) | • Phosphatidylcholines (76) |
| | | • Sphingolipids (15) |

Kit Components

Reagents & Consumables

- Patented 96-well filter plate
- Internal & calibration standards
- Quality controls
- Testmix

Methods & Protocols

- Sample preparation protocol
- Instrument-specific acquisition & quantification methods
- System suitability test

Workflow Manager Met/DQ™

- Process guidance
- Automated technical validation
- Basic statistics (optional)

Instrument Platforms*

- | | | |
|--------------------------------|-----------------------|---|
| • Waters Xevo TQ-XS UHPLC | • SCIEX 6500+ (U)HPLC | • Thermo TSQ Vantage (U)HPLC |
| • Waters Xevo TQ-S UHPLC | • SCIEX 6500 (U)HPLC | |
| • Waters Xevo TQ-S micro UHPLC | • SCIEX 5500 (U)HPLC | |
| | • SCIEX 4500 (U)HPLC | |
| | • SCIEX 4000 HPLC | |
| | | • NEW: 1290 Infinity II LC system - 6470 Agilent triple quadrupole mass spectrometer |

* not suited for nano or micro flow systems

Simple, Guided, Automated Workflow

Standardized and Automated Workflow Designed for High Throughput and Robustness

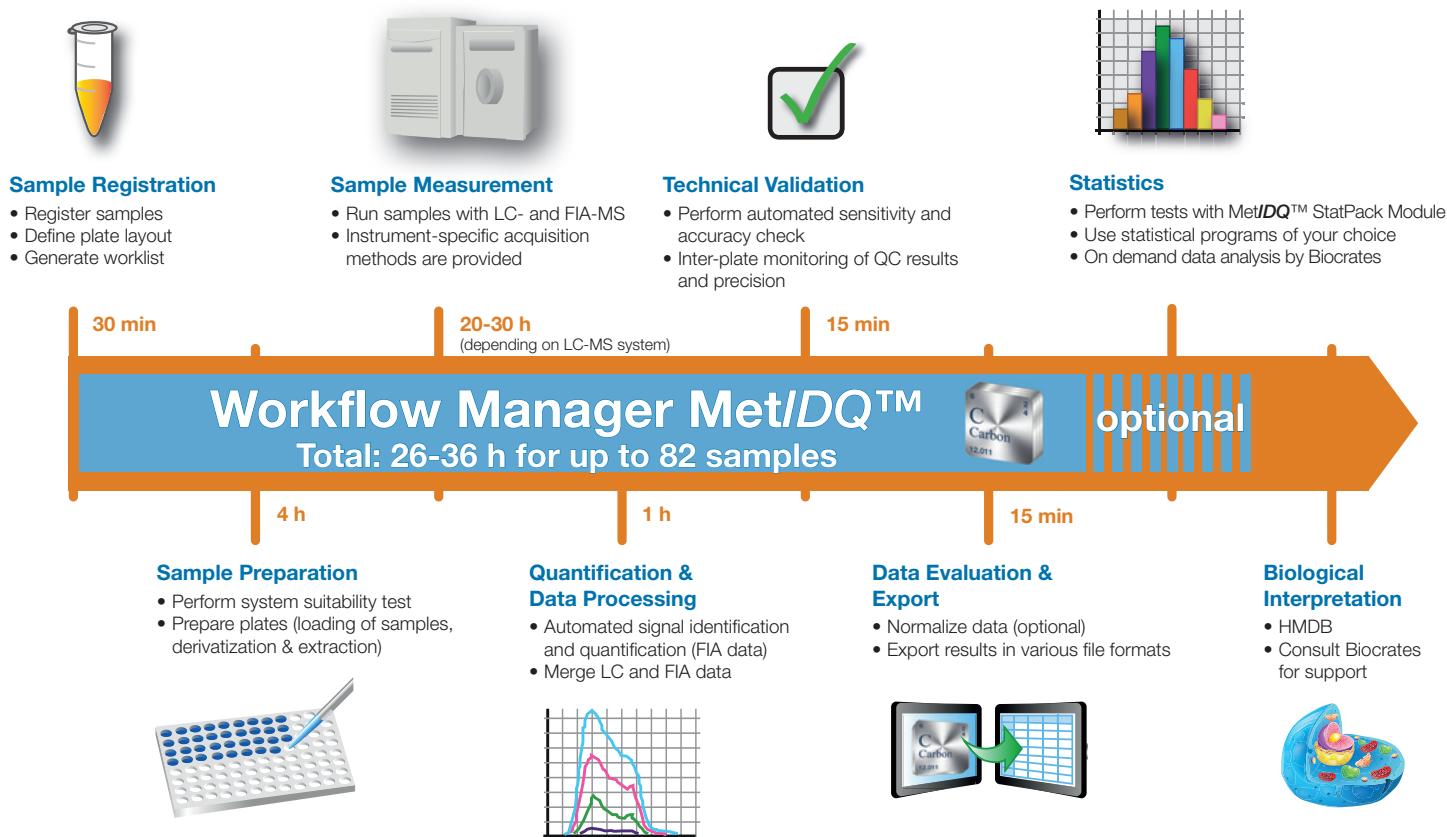
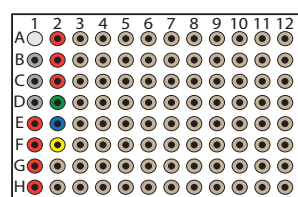


Plate Layout

Easy to Use 96-Well Format, for up to 82 Samples



Absolute/DQ® p180 Kit plate

- Internal standards (ISTDs)
- Blank: no sample, no ISTDs
- Zero sample: no sample, only ISTDs
- Sample
- 7-point calibration standards for LC-MS part
- Quality control in low, medium, high concentration



Superior Data Quality

Proven Suitability for Multi-Center and Longitudinal Studies

The Absolute/DQ® p180 Kit provides highly robust, quantitative metabolomics data with **excellent accuracy and precision**. Its outstanding inter-instrument, inter-laboratory, as well as long-term reproducibility have been proven by an **independent, international ring trial** (Siskos et al., Anal Chem 2017).

This qualifies the kit also for the analysis of large-scale cohorts faced in **multi-center, longitudinal epidemiological studies**.

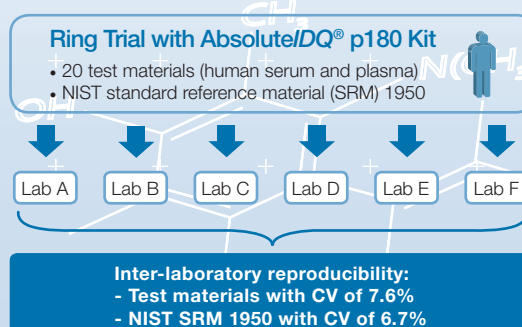


Figure: Summary of independent ring trial with Absolute/DQ® p180 Kit across 6 laboratories and different (U)HPLC-MS/MS instruments (adapted from Siskos et al., 2017)

Proven Translational Value

From Basic to Pre-Clinical and Clinical Research

The replication of results generated from basic research in pre-clinical and clinical studies is a common challenge. Metabolomics has already been remarkably successful in translational research. The Absolute/IDQ® p180 Kit has proven to be especially suited for translational approaches: a number of scientific publications have shown that **results generated in cell culture or animal models** can **successfully** be **transferred to humans**. The kit may, therefore, also support the entire pharmaceutical development process. Please contact us for more detailed information.

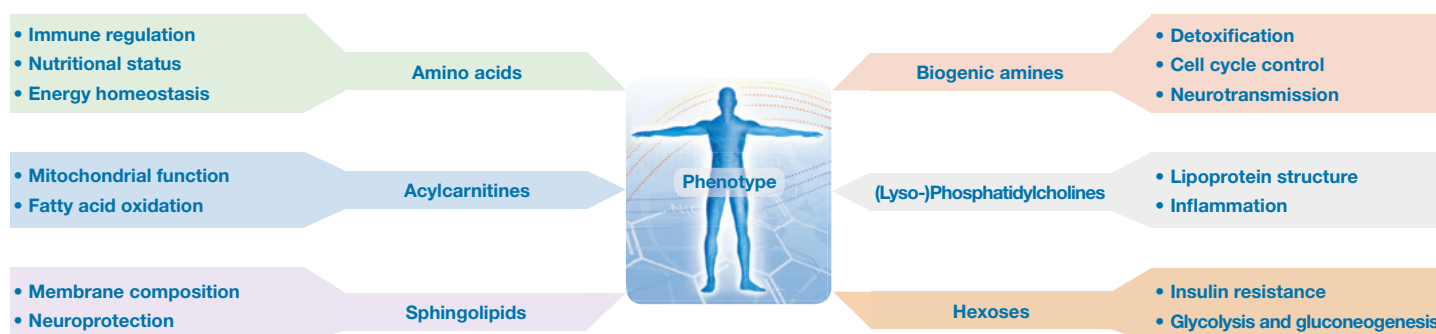
The Absolute/IDQ® p180 Kit has been applied to a wide variety of biofluids and other matrices from more than a dozen different species:

- **Matrices:** biofluids (plasma, serum, urine, CSF, milk,...), tissue, cell culture samples, dried blood spots, ...
- **Species:** human, non-human primates, mouse, rat, cow, pig, chicken, horse, zebrafish,...

Coverage of Metabolic Pathways with Known Relevance

Importance in Myriad Biological Processes

The Absolute/IDQ® p180 Kit has been designed to cover metabolic pathways that are known to be of **central biological relevance**. Here, the most important examples are highlighted. Please, contact us for more information.



How to Get Started

Global Access to High Quality Targeted Metabolomics Results

Your Laboratory	Collaborating Laboratory	Metabolic Phenotyping Services
You have the right instrumentation to run the kit? → Please contact us for a detailed list of requirements and a quote.	You want to run the kit in a collaborating laboratory? → Please contact us, and we will help you to find the right partner within a global network of >100 established laboratories.	You want us to measure your samples? → Biocrates can perform the full kit workflow, as well as additional services, with short turnaround times. Please contact us for further information.

Absolute/IDQ® p180 Kit Ordering Information

Products	Product Number
Absolute/IDQ® p180 Kit	Contact us
Absolute/IDQ® p180 Starter Kit	Contact us
MetIDQ™ StatPack Module	9120052120189
Metabolic Phenotyping Services	Contact us
Data Analysis Service	Contact us

Product IP protected kit: PCT/EP2006/006328, PCT/EP2006/006327, EP20080015225

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If you want to learn more, contact us!

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