Tecan AC Extraction Plate™

SAMPLE PREPARATION FOR LC-MS MADE EASY
AC Extraction Plate for higher throughput, faster sample preparation

The AC Extraction Plate is a convenient, automation-friendly solution for your LC-MS sample preparation challenges. It reduces the process to a simple ‘pipette and shake’ routine, eliminating the need for filtration, centrifugation and solvent evaporation steps.

Sample preparation in 6 easy steps


KEY BENEFITS

Flexible method development
The AC Extraction Plate is suitable for both automated and manual processes. Transferring your manually optimized protocols to an automated liquid handling platform has never been easier.

Ideal for high throughput
The standard ANSI/SLAS format of the AC Extraction Plate allows easy automation on a liquid handling platform such as the Freedom EVO®.

Convenient and fast
After unpacking, the AC Extraction Plate can be used immediately, without the need for conditioning or other pre-treatments.

A wide range of applications
The AC Extraction Plate offers an open development platform that can be applied to sample preparation for a broad range of small molecule analytes from biological fluids such as vitamin D, steroids, immunosuppressants and other small molecules.

Faster and easier workflow
The sample preparation routine consists of simple pipette and shake steps, all performed in one microplate. This eliminates the need for sample transfers, centrifuges or vacuum systems.

Highly reproducible results
Sample preparation is easily standardized and automated with the AC Extraction Plate to eliminate random errors and increase consistency of results.
How does the AC Extraction Plate based on TICE™ technology work?

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Sample preparation process

Sample preparation is a straightforward three-step process. First, the analyte is extracted from a biological fluid, such as serum, plasma, urine or whole blood.

This is followed by a wash step to ensure removal of matrix materials – such as proteins, phospholipids and salts.

And, finally, elution from the absorptive coating by a specifically selected solvent mixture. The resulting eluate is of sufficiently high purity that it can be injected directly into an LC-MS system for analysis.

Sample addition

Analyte extraction

Sample removal

Wash

Wash removal

Sample addition

Analyte elution

: analytes

: phospholipids

: salts

: proteins

Tecan AC Extraction Plate.

Graphical representation of the Tecan AC Extraction Plate (left) and a cross section of a single well (right), showing the presence of the TICE coating to approximately half the well’s height.
SPECIFICATIONS

Chemical resistance
Known compatible solvents: methanol, acetonitrile, ethanol, isopropanol, 2% acetic acid 2% formic acid, 2% ammonium hydroxide, ammonium acetate

Known incompatible solvents: aromatic hydrocarbons, esters, ketones and concentrated acids

Operational conditions
Standard laboratory range 15° to 32°C (59° to 90°F).
The relative operating humidity must be 30 to 80% (non-condensing).

Storage:
15° to 32°C (59° to 90°F). Must be kept dry and protected against direct sunlight.

Tested pH range:
Aqueous solutions with a pH range of 2 to 10

Max. liquid volume:
500 µl

Expiration date:
The AC Extraction Plate can be used for up to 12 months from the date of manufacture when properly stored. The expiration date is indicated on the primary packaging label.

Number of tests:
96 tests

Dimensions:
127.8 x 85.5 x 27.1 mm (WxDxH)

Order information
Material number:
30072211

Package contents:
AC Extraction Plate, 96-wells with TICE coating, 1 plate per unit, Certificate of Analysis, instructions for use.

The AC Extraction Plate is sealed in an aluminum protective foil and packaged in a robust box together with the Certificate of Analysis and instructions for use.

Tecan – Who we are

Tecan is a leading global provider of laboratory instruments and solutions in biopharmaceuticals, forensics, clinical diagnostics, academic centers and life science industries, and specializes in the development and production of automation solutions, detection instruments such as microplate readers, microarray-related products and washers.

Founded in Switzerland in 1980, Tecan has manufacturing, research and development sites in both North America and Europe, and maintains a sales and service network in 52 countries. To date, Tecan has distributed approximately 20,000 microplate readers worldwide and is committed to continuous technological improvements and compliance to global quality standards.

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