# Positive pressure extraction for MS sample prep.

SIMPLIFY YOUR SAMPLE PREPARATION

# The perfect tools for your sample preparation.

**Tecan offers smart extraction consumables and compact benchtop units for MS sample prep workflows, enabling applications such as analyte enrichment and sample clean-up to be performed using positive pressure. Gas-based positive pressure SPE delivers maximum process reproducibility and uniformity across columns and well plates. Resolvex™ positive pressure workstations benefit from adjustable or programmable pressure settings, allowing you to optimize flow rates, reduce processing times and enhance analytical performance.**

Resolvex M10 48:
For 1, 3 and 6 ml cartridges

Resolvex M10 96:
For 1 ml cartridges and 96-well plates

**Manual processing**
The manual Resolvex M10 48/96 are positive pressure manifolds for 1, 3 and 6 ml cartridges or 1 ml cartridges and 96-well plates, respectively. Restricted-flow gas ports allow individual pressure control for each well, ensuring consistent processing of all samples. The easy-to-use Resolvex M10 workstation is ideal for a wide range of MS sample prep applications.

**Simplicity in operation**
The Resolvex M10 offers ease of use and robustness for daily operation. It automatically adjusts to various plate heights and is intuitively controlled, avoiding the need for extensive training.

**Controlled positive pressure processing**
Pressure adjustment allows smooth and immediate column flow responses to be achieved. An intuitive flow toggle enables switching between the low setting – for precise flow control of liquid samples – and a high setting, for drying the sorbent bed.

**Uniformity of flow**
Individual flow restrictors in each channel ensure that even partly filled plates or tube racks can be processed reliably, with minimal variation.

**Viscous sample processing**
The M10 can accommodate gas pressures up to 80psi, providing enough force to process even viscous samples reliably.

**Automated processing**
The Resolvex A200 is a compact benchtop automation system for MS sample prep in columns or plates. The need for manual intervention is minimized using programmable dispensing of up to 11 conditioning, wash and elution solvents.

**Programmable positive pressure processing**
Gas-based positive pressure SPE maximizes reproducibility and processing uniformity across columns and plate wells. Individual channel flow restriction guarantees robust processing of partly filled plates or column set-ups. Programmable pressure profiles allow optimization of flow rates, reducing processing times and enhancing analytical performance.

**Automated liquid dispensing**
Fast dispensing of up to 11 protocol solvents via the integrated eight-channel dispensing module.

**Simplicity in operation**
Intuitive touchscreen control for immediate productivity and seamless integration into standard laboratory operations.

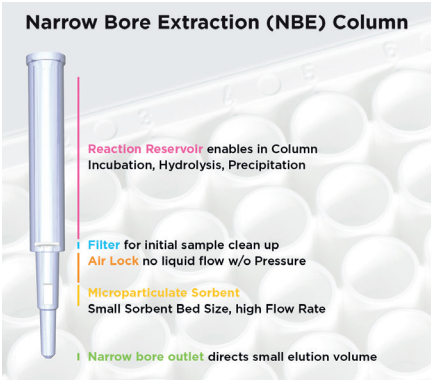
**Smart extraction consumables**
Our SPE consumables use microparticulate sorbents with extra small flow paths to ensure greater contact with the analytes as they pass through the sorbent bed. This enables sample matrix components – salts, proteins, fatty acids and phospholipids – to be easily removed. Cleaner samples reduce ion suppression and the number of interfering peaks in LC-MS analysis.
Smart consumables are available in 1, 3 and 6 ml sizes, plus narrow bore formats.

A patent-pending air gap technology prevents sample flow until positive pressure is applied – turning the extraction column into a reaction vessel. This enables on-column digestions and reduces sample transfers, while lowering the risk of cross-contamination, for faster turnaround times.

**High efficiency filter**
Suitable for extraction from biological fluids, including plasma, serum, urine, saliva and whole blood. The filtration capacity is equivalent to 1 ml columns.

Resolvex A200:
For SBS format 96-well plates and 1 ml columns

96-well NBE plate




The NBE format extraction consumables offer significant workflow advantages

| Analyte of interest | Suggested Tecan SP Sorbent (Cerex and NBE) |
|---|---|
| Buprenorphine, norbuprenorphine, and naloxone | Trace-B, HPSCX |
| Broad spectrum drugs (pain panel) | OFX, HSPCX |
| THC, THCA, synthetic cannabinoids | Trace-N, HPSAX, THC, PSCX |
| Amphetamines/methamphetamines | HPSCX, Trace-B |
| Benzodiazepines | HPSCX, Trace-B, Trace-J |
| EtG/EtS | EtGS |
| Nicotine and nicotine metabolites | PSCX, Tace-B |
| Thyroid hormones (rT3, T3, T4) | THY II |
| Tesosterone | WWP/Maestro |
| Vitamin D Metabolites | Maestro |
| 25-OH-Vitamin D | Trace-N |
| 17-alpha-hydroxyprogesterone, androstenedione, cortisol, testosterone, dortisone, estrogen, DHEA, estradiol, aldosterone, progesterone, 11-deoxycortisol, cortic osterone, dihydrotestosterone | WWP2 |

# Everything for your sample preparation

**M10 48**

**M10 96**

**A200**

| | M10 48 | M10 96 | A200 |
|---|---|---|---|
| **Column size** | | | |
| 1 ml | x | x | x |
| 3 ml | x | - | - |
| 6 ml | x | - | - |
| NBE | x | x | x |
| SBS format 96-well plates | - | x | x |
| **High reproducibility** | | | |
| Uniform column-to-column flow | x | x | x |
| **More convenient** | | | |
| No caps or plugs required for open column ports | x | x | x |
| **Easier to use** | | | |
| High pressure differential for viscous samples | x | x | x |
| **Reduced carry-over** | | | |
| Pressure-sealed column processing | x | x | x |
| **More powerful** | | | |
| Built-in nitrogen or air drying of extracts | x | x | x |
| **Manual processing** | x | x | - |
| **Automated processing** | - | - | x |

Are you interested? For inquiries/orders, please contact:

**orders@tecan.com**

**Australia** +61 3 9647 4100 **Austria** +43 62 46 89 33 **Belgium** +32 15 42 13 19 **China** +86 21 220 63 206 **Denmark** +45 70 23 44 50 **France** +33 4 72 76 04 80
**Germany** +49 79 51 94 170 **Italy** +39 02 92 44 790 **Japan** +81 44 556 73 11 **Netherlands** +31 18 34 48 17 4 **Singapore** +65 644 41 886 **Spain** +34 93 490 01 74
**Sweden** +46 8 750 39 40 **Switzerland** +41 44 922 89 22 **UK** +44 118 9300 300 **USA** +1 919 361 5200 **Other countries** +43 62 46 89 33

Tecan Group Ltd. makes every effort to include accurate and up-to-date information within this publication; however, it is possible that omissions or errors might have occurred. Tecan Group Ltd. cannot, therefore, make any representations or warranties, expressed or implied, as to the accuracy or completeness of the information provided in this publication. Changes in this publication can be made at any time without notice. For technical details and detailed procedures of the specifications provided in this document please contact your Tecan representative. This brochure may contain reference to applications and products which are not available in all markets. Please check with your local sales representative.
All mentioned trademarks are protected by law. In general, the trademarks and designs referenced herein are trademarks, or registered trademarks, of Tecan Group Ltd., Männedorf, Switzerland. A complete list may be found at www.tecan.com/trademarks. Product names and company names that are not contained in the list but are noted herein may be the trademarks of their respective owners.

© 2018, Tecan Trading AG, Switzerland, all rights reserved. For disclaimer and trademarks please visit www.tecan.com

400724 V1.0, 2018-06, 30143663

**www.tecan.com**

TECAN.