

The Reveleris® *iES* Flash Chromatography System


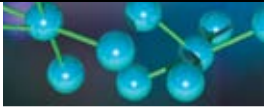


The award-winning Reveleris® flash purification system product suite is now expanded with the newest LC system innovation. Introducing the new Reveleris® *iES* flash chromatography system that is designed specifically to enable an increase in the speed of isolation of new molecular entities and natural products extracts important to pharmaceutical, agrichemical and other industries. By incorporating leading-edge RevealX™ detector technology, the system is optimized to isolate low abundance levels of desired components from various quantities of crude mixtures and increase laboratory productivity.

The Reveleris® *iES* system is designed to detect and collect smaller quantity compounds for scientists whose applications demand the increased lab productivity the flash purification technique offers coupled with these key features:

- Low mg quantity limit of collection enabled by patent-pending RevealX™ detection
- RevealX™ flow sampling yields high recoveries of chromophores and nonchromophores
- Simple, easy to use RevealX™ Operating System with intuitive one-screen touch operation
- High loading on columns, multiple options for sample loading
- Enhanced solvent management for added safety, security and rapid solvent switching



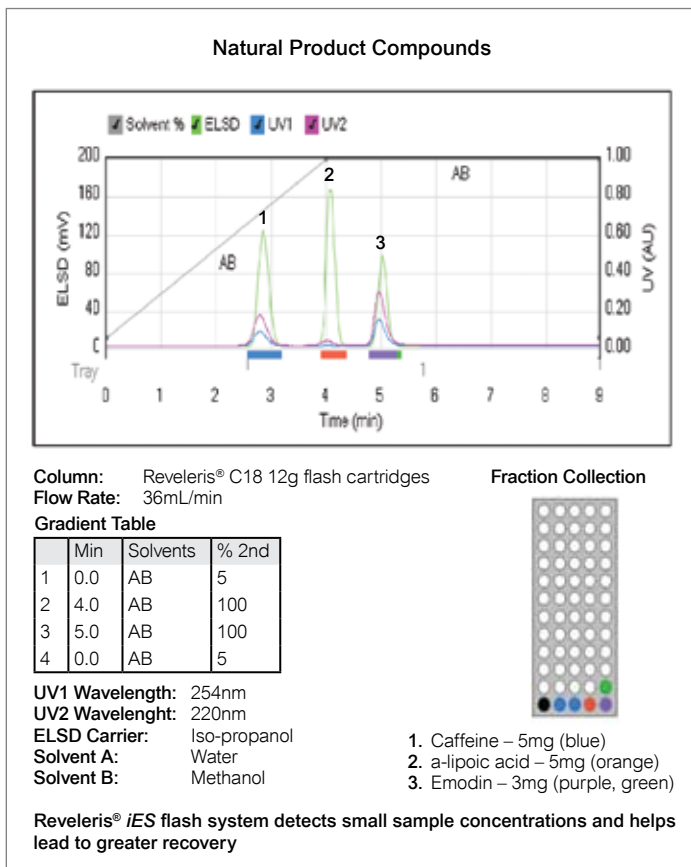
The Reveleris® *iES* System Simplifies Unique Purification Challenges

<p>Natural Products</p>  <p>Isolating small quantities of compounds from large amounts of naturally occurring materials is not trivial. Multiple stages of extraction and chromatography including size exclusion and reversed phase are often required. Challenged by identifying nonchromophoric compounds and separating complex mixtures, scientists need rapid LC methods to successfully isolate materials of interest for further testing.</p>	<p>Impurity Isolations</p>  <p>Low-level impurities present in high-abundance API drug mixtures must be fully isolated and characterized. Detecting the impurities adequately from a single injection (including all starting materials, by-products, salts, etc.) is required to trigger collection of mg quantities. This is necessary to isolate enough material for full identification and testing from a single injection.</p>
<p>Lead Generation Synthesis</p>  <p>Parallel reaction techniques, used in high throughput and/or combinatorial synthesis, involve recovering small (mg) quantities of new molecular entities from larger crude reaction mixtures. Purification techniques have been complex and time-consuming, requiring sorting and tracking fractions that may or may not contain adequate NME amounts.</p>	<p>Clinical Support</p>  <p>Rapid isolation of vitamins and other nutraceuticals, as well as radio-labeled substances isolated from in vivo matrices or synthesis, often poses extreme challenges to purify. Low sample quantities, coupled with complex matrices and short half-lives, require sophisticated detection and fraction collection.</p>

Isolating small target quantities is now simpler, takes less time than alternate techniques and helps reduce solvent costs.

Detect and Collect Low Abundance Compounds

The Reveleris® *iES* flash system, equipped with high performance flash cartridges and more universal RevealX™ detection, saves time and guesswork in mg scale purifications.



Reveleris® *iES* Flash System Improves Laboratory Productivity:

Purification bottlenecks encountered when using flash chromatography may include (1) the necessity of collecting everything eluted during a run, (2) checking the composition of every fraction collected, and (3) replacing an interfering solvent with a more compatible one. By using the RevealX™ detection technology of the Reveleris® *iES* system, which independently triggers fraction collection from multiple detectors including UV and ELSD, bottlenecks can be reduced or eliminated without reducing the recovery of compounds of interest.

Columns to enable optimal performance

Reveleris® *iES* flash system is flexible. Other purification techniques limit loading amounts and utilize just a few column bed sizes. Reveleris® *iES* flash system offers improved detection capabilities with the flexibility of flash chromatography. Cartridge sizes range from 4g to 330g and samples from single milligram to multiple grams can be purified using a single system.

The Reveleris® SRC™ flash cartridges use Radio Frequency ID (RFID) and higher pressures to improve purification by maximizing system resolution, sample loading and recovery. By increasing sample loads on a given cartridge size and reducing run times, sample throughputs and yields increase, helping to lower overall purification costs.

Flash system capabilities are now further expanded with the new Reveleris® C18 reversed-phase cartridges. The superior packed C18 cartridges are inverted on the system to overcome the channeling and voiding that is often problematic in flash RP cartridges. Reversed-phase cleanup on flash has never been easier than with fast system flush and changeover.

Reveleris® SRC™ Cartridges (up to 200psig)

Description	Qty	Part No.
Silica 4g	20	5146130
Silica 12g	20	5146131
Silica 40g	15	5146132
Silica 80g	12	5146133
Silica 120g	10	5146134
Silica 330g	4	5146135



Reveleris® Reversed-Phase Cartridges

Description	Package	Part No.
C18 4g	Each	5152990
C18 12g	Each	5152103
C18 40g	Each	5152104
C18 80g	Each	5152105
C18 120g	Each	5152991

Reveleris® *iES* System

Description	Part No.
Reveleris® <i>iES</i> Flash Chromatography System*	5155775

*Included with the system:

- (2) 18 x 150mm Fraction Collection Trays (PN 5148885)
- (1) 3g Adjustable Solid Loader Plunger (PN 5148510)
- (1) 3g Filled Solid Loader (PN 5152371)
- RevealX™ software control accessed via 12" touchscreen
- RFID identification technology for cartridge/fraction tray
- 4-Solvent gradient system (200mL/min max flowrate and 200psi)
- Necessary solvent tubing and filters



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