

# Dissecting Raptor™ LC Columns

*A closer look at a new species*

## Raptor™ LC Column

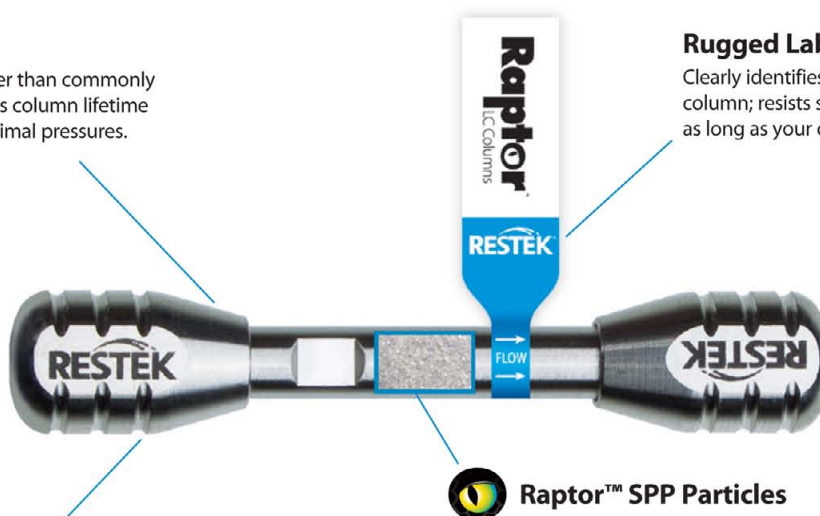
Restek's dedicated R&D group studied every aspect of superficially porous particles (commonly referred to as SPP or "core-shell" particles) to develop the bonding chemistries that are best suited to both the SPP construction and our highly selective USLC® phases. But we didn't stop there. In addition to implementing a new, proprietary column-packing technique, we upgraded our LC column hardware. By looking at not only the particles, but also the packing and hardware, we have made sure that you will get repeatable, rugged performance from each and every Raptor™ LC column.

### Larger 2 µm Frit

Prevents clogging better than commonly used 0.5 µm frits; boosts column lifetime and helps maintain optimal pressures.

### Rugged Label

Clearly identifies both flow direction and column; resists solvents and tearing to last as long as your column does.



### Proprietary Column-Packing Technique

Provides greater pressure stability (600 bar for 2.7 µm; 400 bar for 5 µm); achieves higher linear velocities without sacrificing efficiency or lifetime.

### Raptor™ SPP Particles

**Robust 2.7 and 5 µm Particles**  
Let you run high-speed analyses without UHPLC.

**Narrow Silica Distribution**  
Ensures high efficiency and consistent flows.

**Updated Bonding and QC**  
Guarantee retention time stability, run to run and column to column.

**Experience *Selectivity Accelerated*. Put Raptor™ LC columns and guards to the test today on your most challenging workflows.**

Visit [www.restek.com/raptor](http://www.restek.com/raptor) for a complete product listing.

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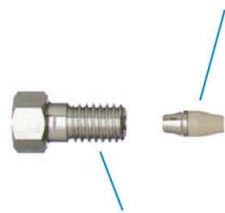


## Raptor™ EXP® Guard Column

To help protect your investment and further extend the life of our already-rugged Raptor™ LC columns, we have mated our new superficially porous particles with patent-pending guard column hardware developed by Optimize Technologies. A Raptor™ LC guard column cartridge in an EXP® direct connect holder is the ultimate in column protection.

### Patented Titanium Hybrid Ferrules

Can be installed repeatedly without compromising high-pressure seal.



### Flexible Design

Replace nut with longer or even tool-free options (below) to best suit your needs.

### Free-Turn® Architecture

Allows you to change cartridges without breaking inlet/outlet fluid connections—and without tools.



### Auto-Adjusting Connection

Provides ZDV (zero dead volume) connection to any 10-32 female port.



### Unidirectional Raptor™ Cartridge

#### In-Tandem Development

Made to pair perfectly with Raptor™ LC columns.

#### Superior Packing Technique

Withstands 600 bar (2.7 μm) / 400 bar (5 μm) operating pressures.

#### Restek® Quality

Backed by the manufacturing and QC systems you trust.



View our full selection of Raptor™ EXP® guard column cartridges at [www.restek.com/raptor](http://www.restek.com/raptor)

## Restek also recommends:



### Hand-Tight Nut (cat.# 25937–25939)

Upgrade the supplied nut to install your Raptor™ EXP® guard column by hand—no tools needed.



### Long Hex-Head Nut (cat.# 25934)

Extend the nut on your Raptor™ EXP® guard column for easier access in tight spaces—no more bumped knuckles.



### EXP® Hand-Tight Coupler (cat.# 25940)

Achieve tool-free 8,700+ psi (600+ bar) seals anywhere in your LC system with EXP® hand-tight couplers and connectors.

Visit [www.restek.com/exp](http://www.restek.com/exp) for more EXP® hex-head fittings, couplers, replacement parts, and more!

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