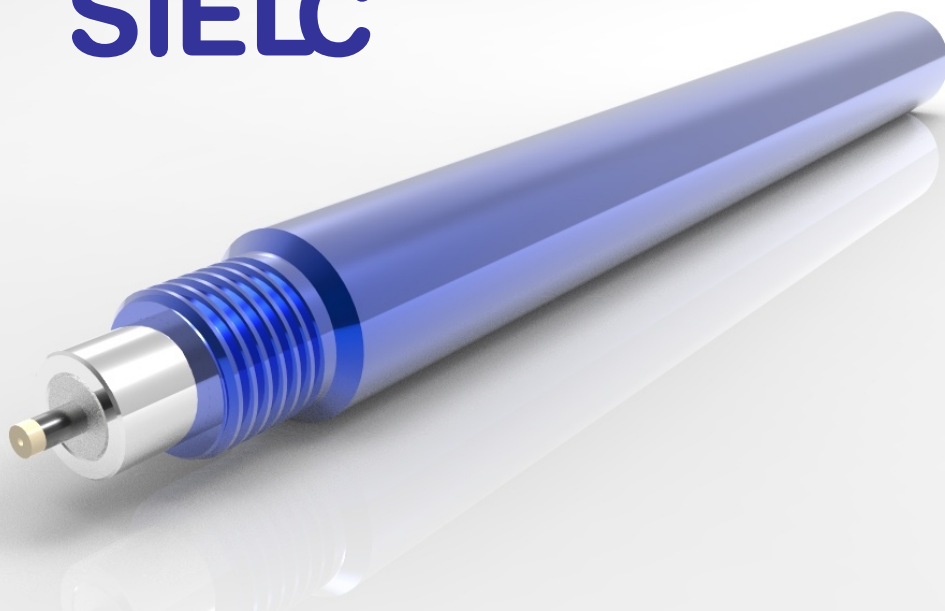


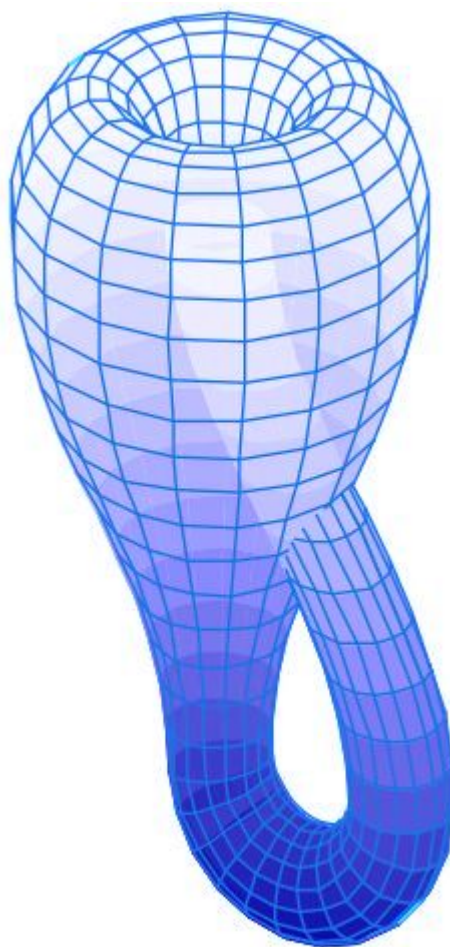
SiELC Technologies, Inc.
Wheeling, IL 60090 USA
P. 847-229-2629 F. 847-655-6079
mail@sielc.com www.sielc.com

SiELC



NEWCROM[®]

HPLC COLUMNS OF THE FUTURE



HPLC COLUMN OF THE FUTURE

SIELC introduces a new single ended column design

For as long as people have done HPLC they have used the same column format, the same method of connecting the column to the HPLC, and they have experienced the same problems:



- Clogging at the tube-column junction
- Leakage around the high pressure solvent connections
- Installation problems with tubing to achieve zero dead volume
- Sorting through many available high pressure fittings
- Selecting the proper tube length and ID

To address these issues a new column design was developed. This column and corresponding adapter entirely eliminate the need for any high-pressure fittings or tubing as well as minimizing all possible dead volumes. Furthermore, if a leak ever occurs in the high-pressure column inlet, the mobile phase is contained within the column adapter (no external leakage).

You need to install a column adapter once on your HPLC. Then without any tools you can install a column which never leaks, it is easy to replace and can be changed in seconds. The column hardware was designed specifically to be used with any HPLC instrument. It can be installed in most column heaters as well.

A new single ended column guard system

If your method requires a guard column then use our special guard-column adapter. It is a single piece of hardware which combines a column and a guard all in one convenient assembly.

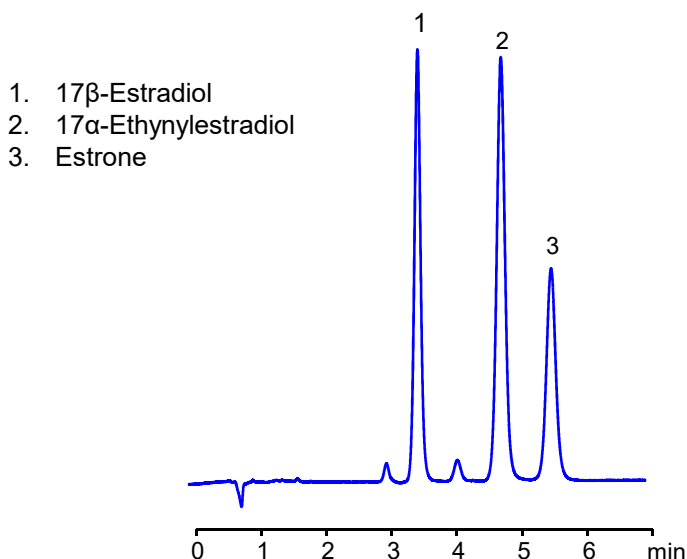
- Special guard column with an inlet and outlet at one end allows you to replace the guard without disconnecting the column from your HPLC system.
- The finger-tightening installation is entirely tool free.
- Compact design allows you to install a column with guard into any column heater.



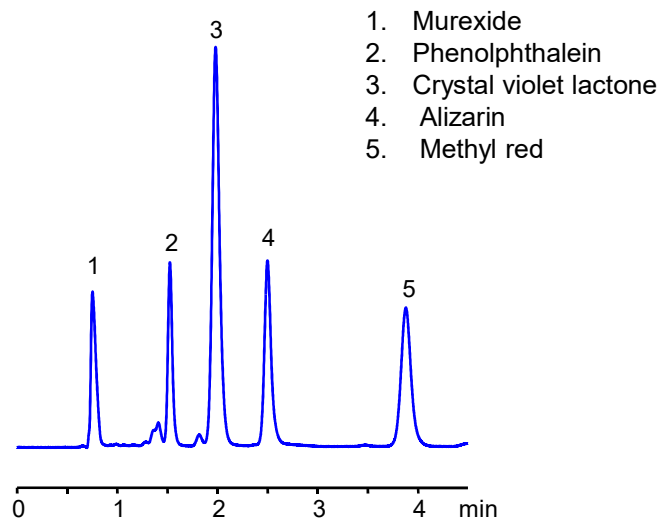
A column with a new outer design and with new chemistry inside.

Newcrom R1 takes full advantage of new chemistry with advanced proprietary end-capping.

Available in 5 μm and 3 μm particle size with diameter 2.1, 3.2, and 4.6 mm and length 50, 100, and 150 mm.

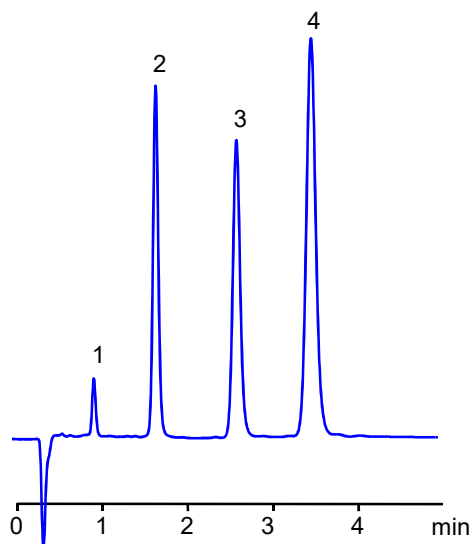


Column: Newcrom R1
Column Size: 3.2x100 mm, 5 μm
Mobile phase: MeCN/Water/H₃PO₄ – 45/55/0.2%
Flow rate: 0.5 mL/min
Detection: UV 230 nm



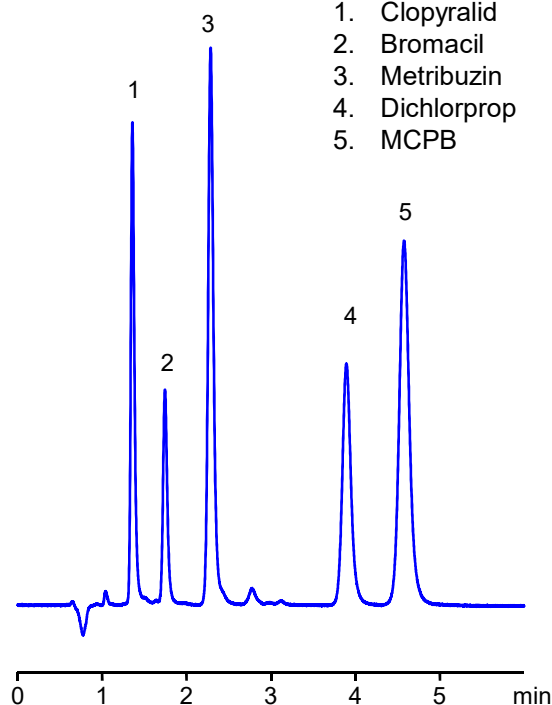
Column: Newcrom R1
Column Size: 3.2x100 mm, 5 μm
Mobile phase: MeCN/Water/H₃PO₄ – 55/45/0.2%
Flow rate: 0.5 mL/min
Detection: UV 300 nm

1. CBC (Cannabichromene)
2. CBD (Cannabidiol)
3. CBN (Cannabinol)
4. THC (Tetrahydrocannabinol)



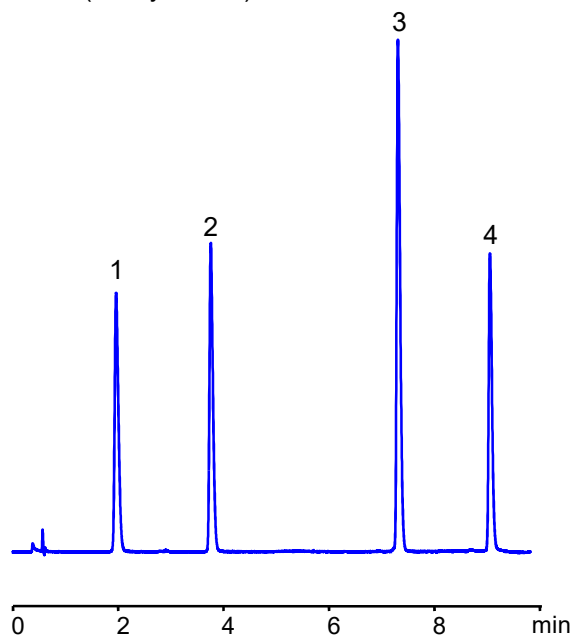
Column: Newcrom R1
Column Size: 3.2x100 mm, 5 μm
Mobile phase: MeCN/Water/H₃PO₄ – 80/20/0.2%
Flow rate: 1 mL/min
Detection: UV 210 nm

1. Clopyralid
2. Bromacil
3. Metribuzin
4. Dichlorprop
5. MCPB



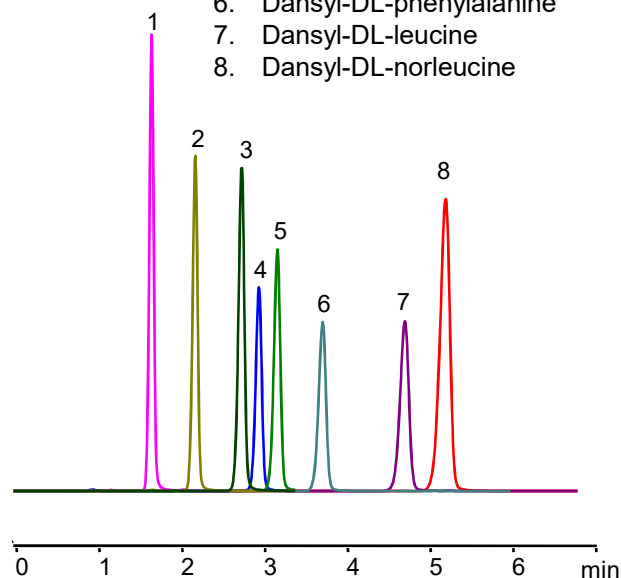
Column: Newcrom R1
Column Size: 3.2x100 mm, 5 μm
Mobile phase: MeCN/Water/H₃PO₄ – 60/40/0.2%
Flow rate: 0.5 mL/min
Detection: UV 210 nm

1. MIT (3-Iodo-L-tyrosine)
2. DIT (3,5-Diiodo-L-tyrosine dihydrate)
3. T2 (3,5-Diiodo-L-thyronine)
4. T3 (Liothyronine)

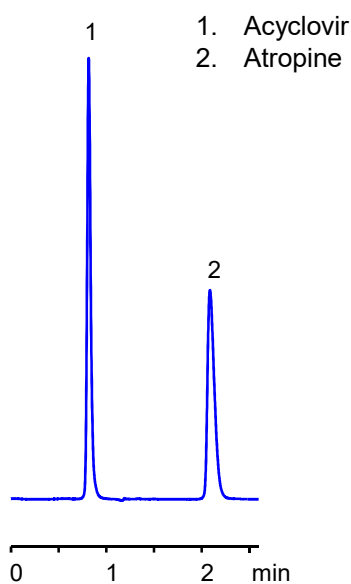


Column: Newcrom R1
Column Size: 3.2x100 mm, 5 µm
Mobile phase: MeCN Gradient 10-40%/10 min
H₃PO₄ – 0.2%
Flow rate: 0.5 mL/min
Detection: UV 270 nm

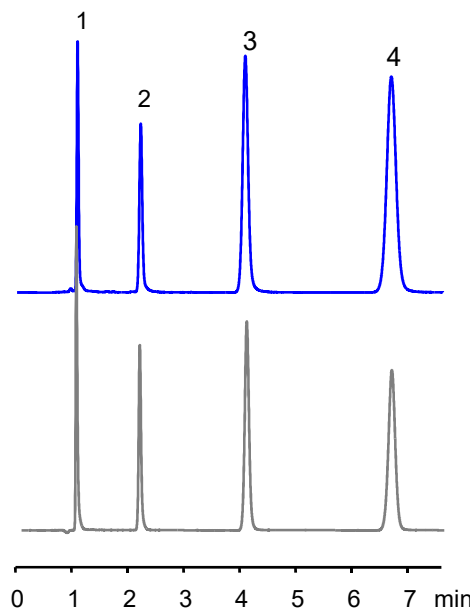
1. Dansyl-y-amino-n-butyric acid
2. Dansyl-DL-α-amino-n-butyric acid
3. Dansyl-DL-methionine
4. Dansyl-DL-norvaline
5. Dansyl-DL-tryptophan
6. Dansyl-DL-phenylalanine
7. Dansyl-DL-leucine
8. Dansyl-DL-norleucine



Column: Newcrom R1
Column Size: 3.2x100 mm, 3 µm
Mobile phase: MeCN/Water/H₃PO₄ –
40/60/0.1%
Flow rate: 0.5 mL/min
Detection: UV 270 nm



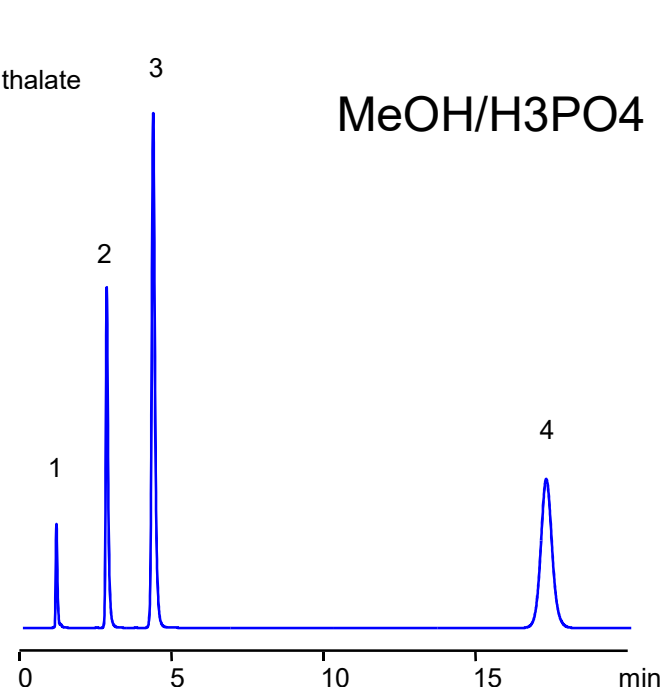
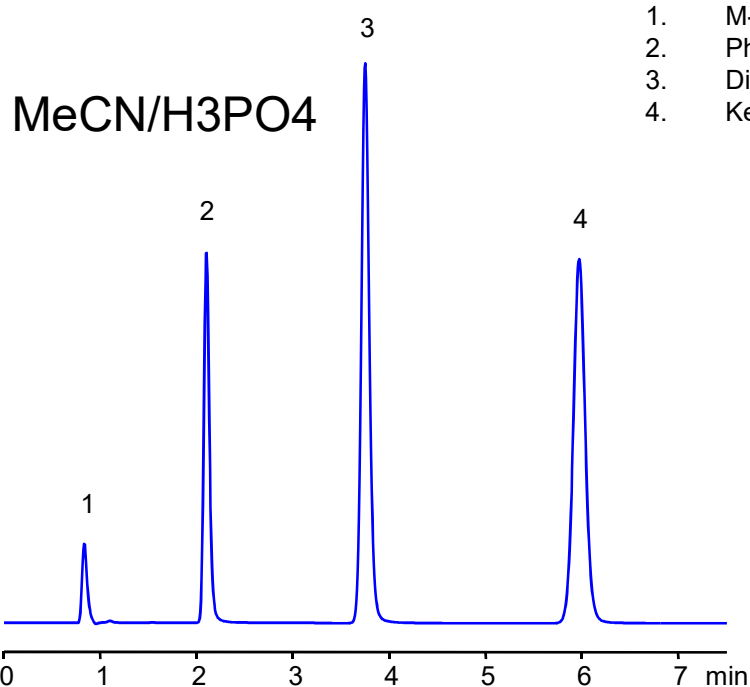
1. Acyclovir
2. Atropine



	Plates	
	5 µm	3 µm
1. Caffeic Acid	5583	6386
2. Phenol	8644	11979
3. Dimethylphthalate	8426	12848
4. Ketoprofen	7552	13295

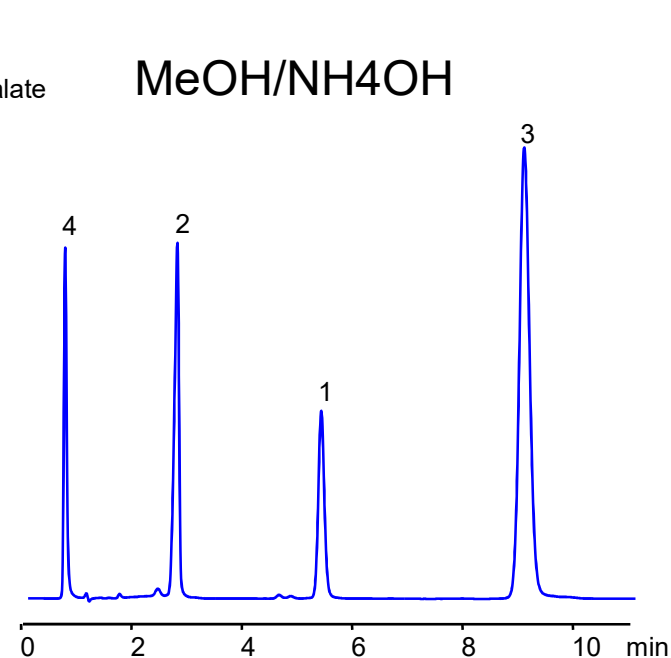
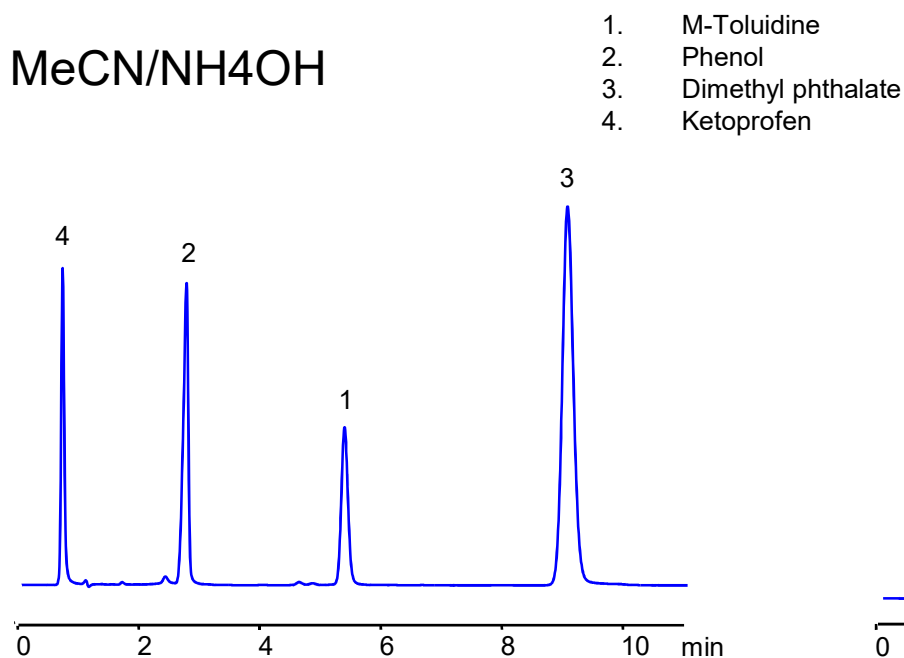
Column: Newcrom R1
Column Size: 3.2x100 mm, 3 µm
Mobile phase: MeCN/Water/H₃PO₄ – 20/80/0.2%
Flow rate: 0.5 mL/min
Detection: UV 210 nm

Column: Newcrom R1
Column Size: 3.2x100 mm
Mobile phase: MeCN/Water/H₃PO₄– 40/60/0.2%
Flow rate: 0.5 mL/min
Detection: UV 270 nm



Column: Newcrom R1
Column Size: 3.2x100 mm, 3 µm
Mobile phase: MeCN/H₂O/H₃PO₄ – 40/60/0.1%
Flow rate: 0.5 mL/min
Detection: UV 270 nm

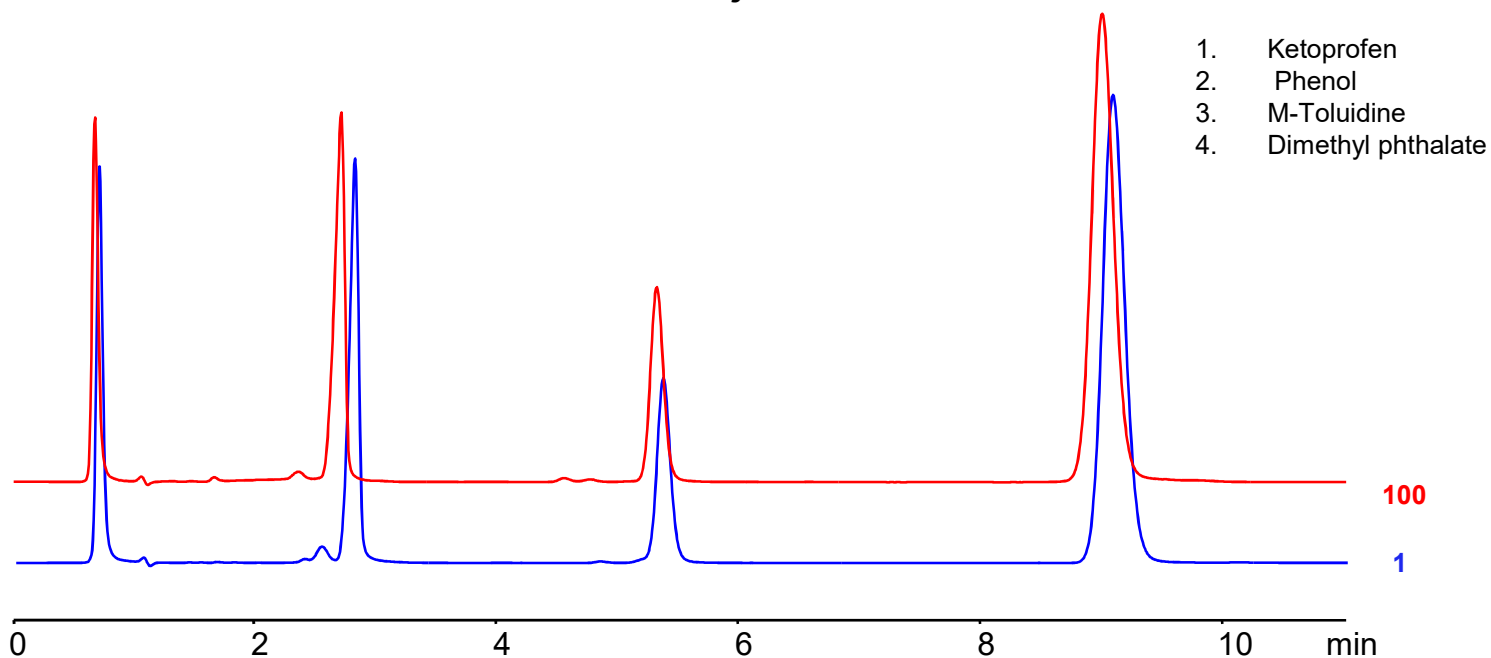
Column: Newcrom R1
Column Size: 3.2x100 mm, 3 µm
Mobile phase: MeOH/Water /H₃PO₄ – 50/50/0.1%
Flow rate: 0.5 mL/min
Detection: UV 270 nm



Column: Newcrom R1
Column Size: 3.2x100 mm, 3 µm
Mobile phase: MeOH/H₂O – 30/70 %
NH₄OH- 20 mM
Flow rate: 0.5 mL/min

Column: Newcrom R1
Column Size: 3.2x100 mm , 3 µm
Mobile phase: MeOH/Water– 30/70 %
NH₄OH- 20 mM
Flow rate: 0.5 mL/min

One hundred injections



Column: Newcrom R1

Column Size: 3.2x100 mm, 3 μ m

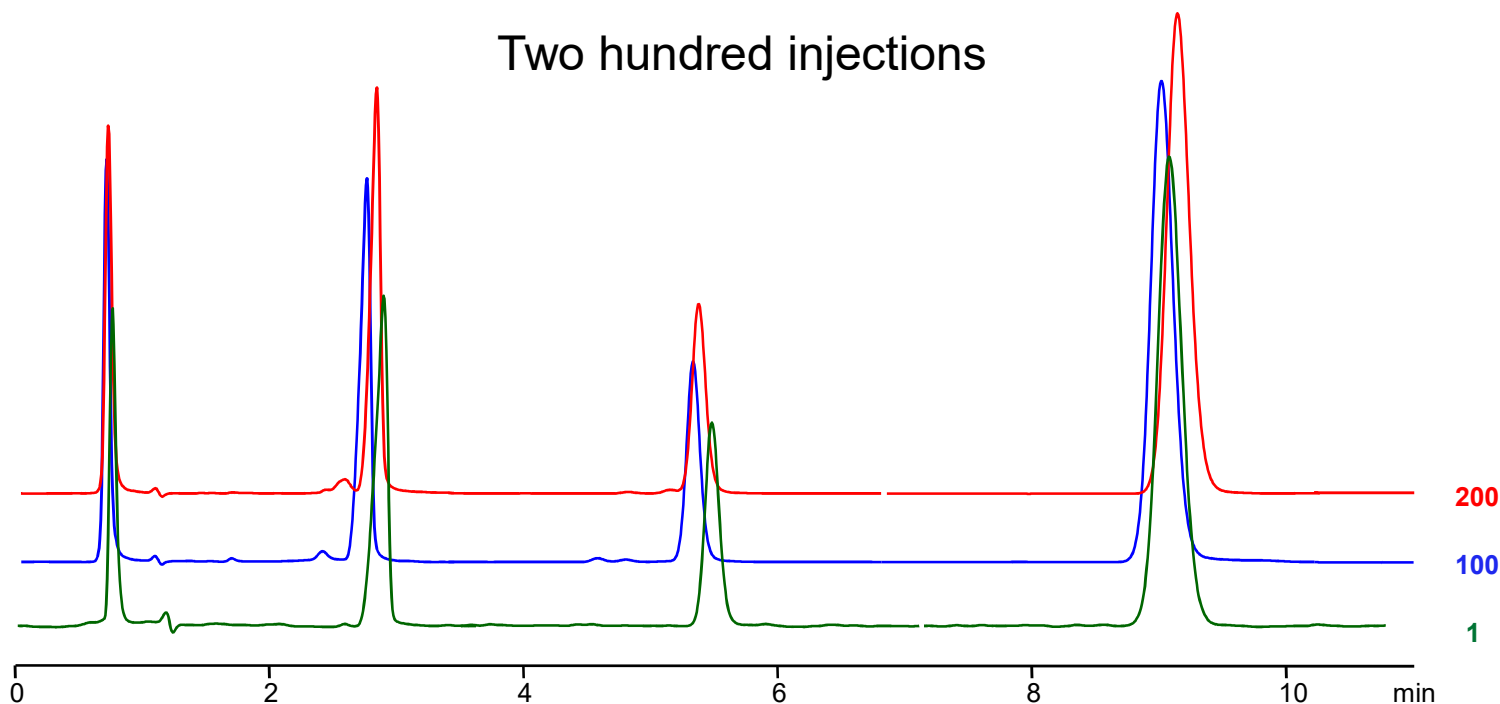
Mobile phase: MeOH/H₂O 30/70 %

Flow rate: 0.5 mL/min

Detection: UV 270 nm

(NH₄)₂CO₃ – 20mM pH- 8.3

Two hundred injections



Column: Newcrom R1

Column Size: 3.2x100 mm, 3 μ m

Mobile phase: MeCN/H₂O 30/70 %

Flow rate: 0.5 mL/min

Detection: UV 270 nm

(NH₄)₂CO₃ – 20mM pH-8.3