



Orachrom, Inc.

The Vanguard of Liquid Chromatography.

10-B Henshaw Street Woburn, MA 01801 USA

Phone (781) 932 0151

Fax (781) 932 0787

E-mail: info@orachrom.com

www.orachrom.com

APPLICATION NOTE

0.50 meter long, 1 mm ID column with Simulated-Monolith™ STYROS® polymeric.

50 cm is indeed the length of the column used and 1 mm is the ID. 0.2 ml/min of volumetric flow on this column is equivalent to over 1,500 cm/hr of linear flow rate on an empty column.

(Vaccines manufacturers insist to use the outdated soft gel requiring extra-large ID not to exceed linear flow rates of 100 cm/hr to maintain dynamic capacities of the leaching media).

15 times faster with no need of POLISING:

Simple and obvious result

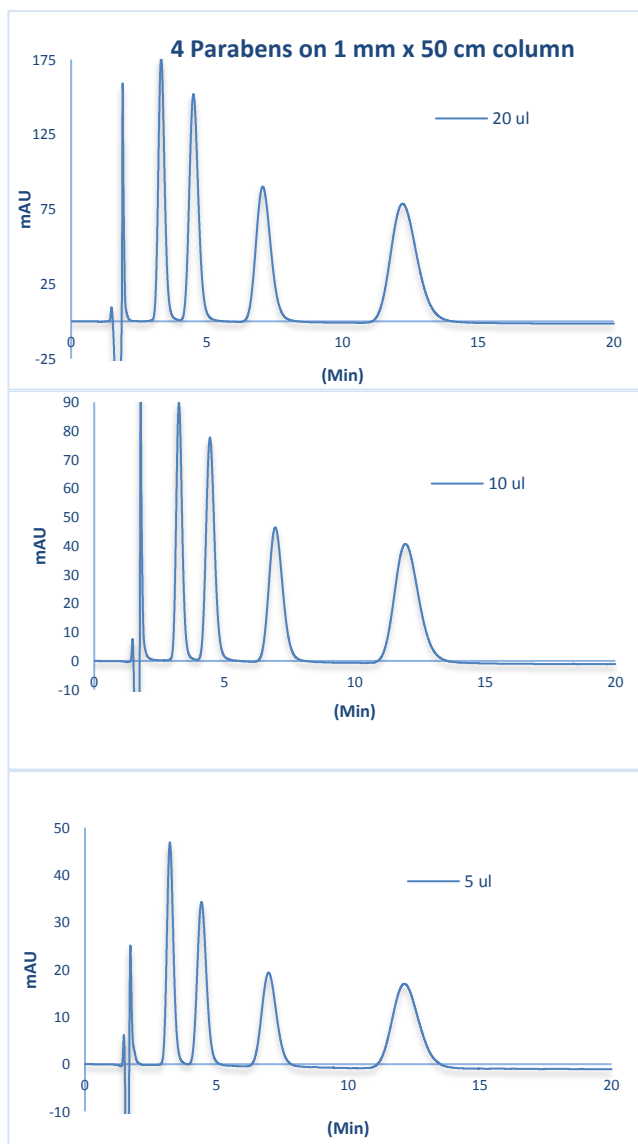


Table 1. Operating parameters.

| | |
|-------------------------|---|
| HPLC System. | Agilent 1290 with thermostatted column compartment and binary pump. |
| Columns | STYROS® 1R 1 mm X 50 cm (0.173 ml volume) |
| Mobile phase. | A: H2O, 0.1 % TFA B: 5% H2O in ACN, 0.1 % TFA |
| Flow rates | 0.2 ml/min (> 1,500 cm/hr of linear velocity on an empty column) |
| Isocratic | 40 % B for 20 min |
| Temperature | 30°C |
| Detection | 254 nm |
| Injection volume | 5, 10 and 20 µl |
| Pressure Drop | 260 bars at 0.2 ml/min system included. |
| Sample: | Certified diagnostic test 48270-U Supelco made of 4 parabens, methyl, ethyl, propyl and butyl parabens. |

The purpose of this Application Note is to make the responsible in charge, aware of the advances in science and technologies not only to address the very challenge we are still facing in the slow production of vaccines but also the adequate amount of it.

PURE.

That no longer needs subzero temperatures to prevent the Trypsin contaminant to spoil them.

The knowingly injection of Trypsin and other contaminants in people is a separate issue to face.



Coiled column of 1 mm ID x 50 cm length Simulated-Monolith™ STYROS® Polymeric.

