

**Imagine** being able to successfully separate chelating compounds with sensitivity and speed

**ProteCol™ HPLC Columns turn imagination into results**



## Solving the problem of separating chelating compounds, such as natural products, antibiotics and antifungals, with minimal preparation time

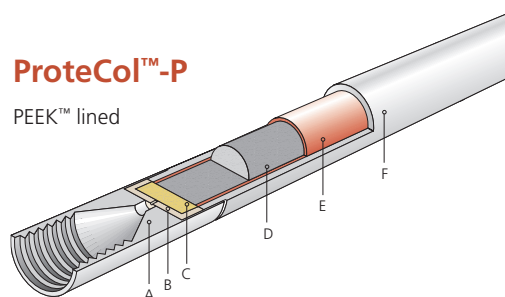
How do ProteCol™-P C18 HPLC Columns turn imagination into results?

ProteCol™ columns have a unique inert metal free flow path

- Ultra pure silica
- Fully end capped optimized C18 phases
- Inert PEEK™ lined column hardware with PEEK™ frits.

### ProteCol™-P

PEEK™ lined

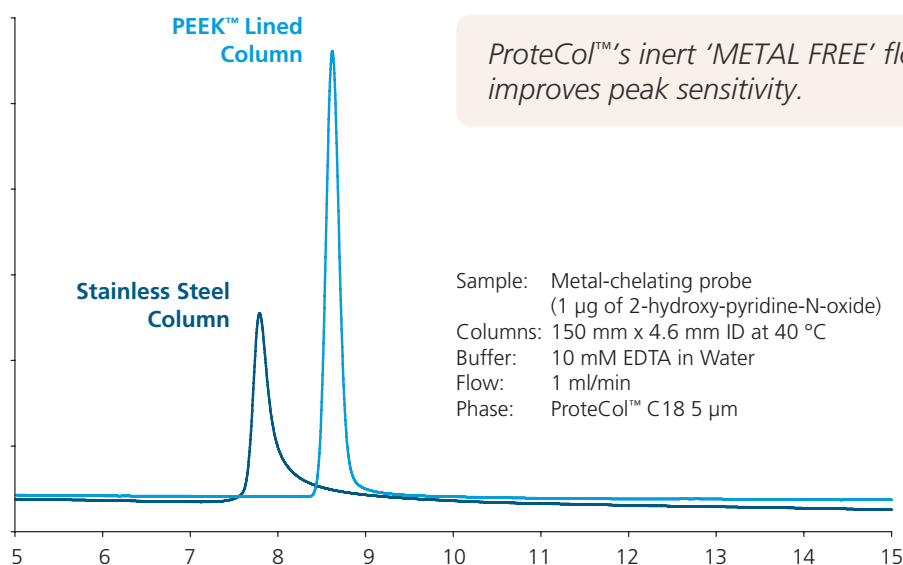


- |                      |                               |
|----------------------|-------------------------------|
| A Column end cap     | E PEEK™ lining                |
| B PEEK™ frit housing | F Stainless steel column body |
| C Porous PEEK™ frit  |                               |
| D Stationary phase   |                               |

What are the advantages of PEEK™ over stainless steel?

Feature	PEEK™-lined Stainless Steel Column	Generic Stainless Steel Column
Peak symmetry ( $A_s$ and $T_f$ ) for metal chelators	< 1.1	> 1.5
Peak height (sensitivity) for metal chelators	Excellent	Good to Poor
Column conditioning	Minimal	5 - 50 column volumes
Temperature stability	Excellent	Excellent
Solvent stability	Excellent	Excellent

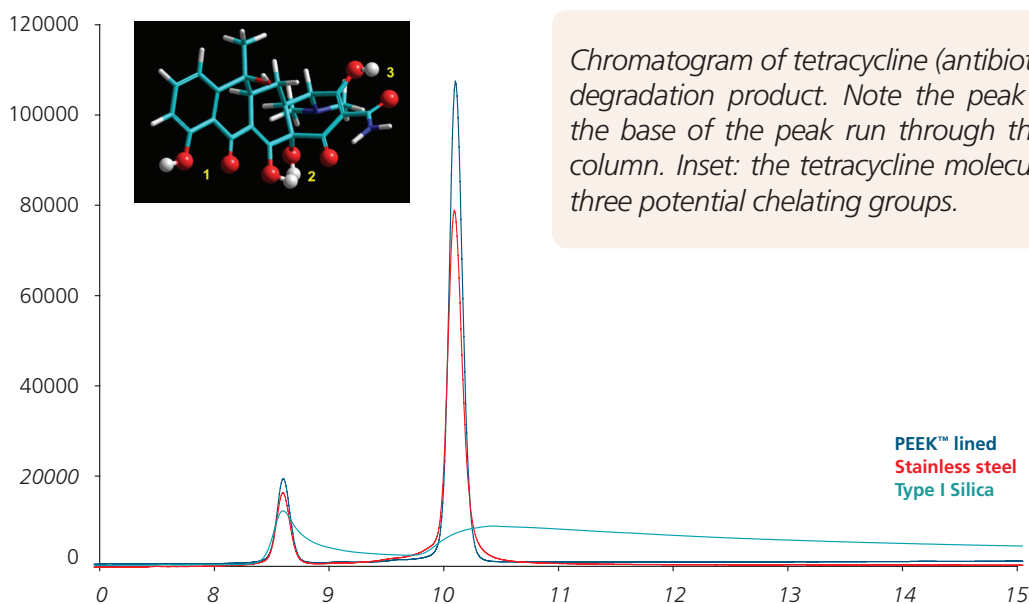
$A_s$  = Asymmetry factor;  $T_f$  = Peak Tailing factor



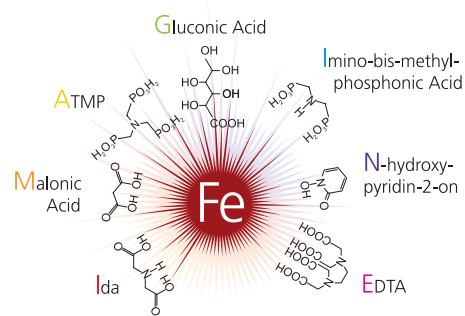
ProteCol™-P C18 columns turn imagination into results for chelating compounds such as natural products, delivering you these important benefits.

- Substantially reduced sample and column preparation time
- Improved peak shape giving you improved reproducibility and sensitivity
- Less artifacts due to reduced carry over
- Enables use of MS, ELSD and Corona CDA techniques

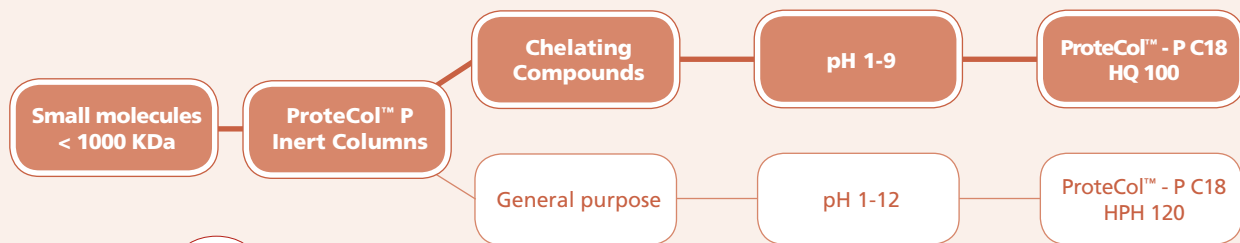
Improved peak sensitivity with ProteCol™-G C18 compared to stainless steel and silica columns



Imagine what Florey could have done with ProteCol™-P!



# ProteCol™ C18 HPLC Column Selection Guide



## ProteCol™ HPLC Column Specifications and Part Numbers

ProteCol™ Column	Stationary Phase	Pore Size (Å)	Particle Size (µm)	Pore Volume (ml)	Surface Area (m <sup>2</sup> /g)	Carbon Load (%)	Calculated Bonded Phase (µmol/m <sup>2</sup> )	ID Coverage (mm)	Length (mm)	Part Number
P C18 HQ105	C18 HQ	100	5	1.0 ± 0.1	440 ± 40	16.8	1.59	4.6	250	250100
P C18 HQ105	C18 HQ	100	5	1.0 ± 0.1	440 ± 40	16.8	1.59	4.6	150	250102
P C18 HQ105	C18 HQ	100	5	1.0 ± 0.1	440 ± 40	16.8	1.59	2.1	150	250107
P C18 HQ103	C18 HQ	100	3	1.0 ± 0.1	440 ± 40	17.1	1.62	2.1	150	250200
P C18 HQ103	C18 HQ	100	3	1.0 ± 0.1	440 ± 40	17.1	1.62	2.1	100	250202
P C18 HPH 125	C18 HPH	120	5	1.0 ± 0.1	300 ± 40	20.9	2.90	4.6	250	250110
P C18 HPH 125	C18 HPH	120	5	1.0 ± 0.1	300 ± 40	20.9	2.90	4.6	150	250112
P C18 HPH 125	C18 HPH	120	5	1.0 ± 0.1	300 ± 40	20.9	2.90	2.1	150	250117
<b>Guard and Trap Columns</b>										
P C18 HQ105 Guard	C18 HQ	100	5	1.0 ± 0.1	440 ± 40	6.8	1.59	2.1	10	250007
P C18 HQ105 Guard	C18 HQ	100	5	1.0 ± 0.1	440 ± 40	6.8	1.59	4.0	10	250009
P C18 HPH 125 Guard	C18 HPH	120	5	1.0 ± 0.1	300 ± 40	20.9	2.90	2.1	10	250013
P C18 HPH 125 Guard	C18 HPH	120	5	1.0 ± 0.1	300 ± 40	20.9	2.90	4.0	10	250015

### AUSTRALIA & PACIFIC REGION

SGE Analytical Science Pty Ltd  
 Toll Free: 1800 800 167  
 Tel: +61 (0) 3 9837 4200  
 Fax: +61 (0) 3 9874 5672  
 Email: support@sge.com

### CHINA

SGE Shanghai Representative Office  
 Tel: +86 21 6407 9382  
 Fax: +86 21 6407 9386  
 Email: china@sge.com

### MIDDLE EAST

SGE Gulf  
 Tel: +971 6 557 3341  
 Fax: +971 6 557 3541  
 Email: gulfsupport@sge.com

### EUROPE

SGE Europe Ltd  
 European Head Office  
 Toll Free: 00800 2790 8999  
 Toll Free Fax: 00800 2626 2609  
 Tel: +44 1908 568 844  
 Fax: +44 1908 566 790  
 Tel France: +33 1 69 29 80 90  
 Fax France: +33 1 69 29 09 25  
 Tel Germany: +49 (0) 6155 / 60746 0  
 Fax Germany: +49 (0) 6155 / 60746 50  
 Email: europe@sge.com

### INDIA

SGE Laboratory Accessories Pvt Ltd  
 Tel: +91 22 24715896  
 Fax: +91 22 24716592  
 Email: sgeindia@vsnl.com

### UNITED STATES OF AMERICA

SGE Incorporated  
 Toll Free: (800) 945 6154  
 Tel: +1 512 837 7190  
 Fax: +1 512 836 9159  
 Email: usa@sge.com

### JAPAN

SGE Japan Inc  
 Tel: +81 45 222 2885  
 Fax: +81 45 222 2887  
 Email: japan@sge.com

 **SGE Analytical Science**  
[www.sge.com](http://www.sge.com)