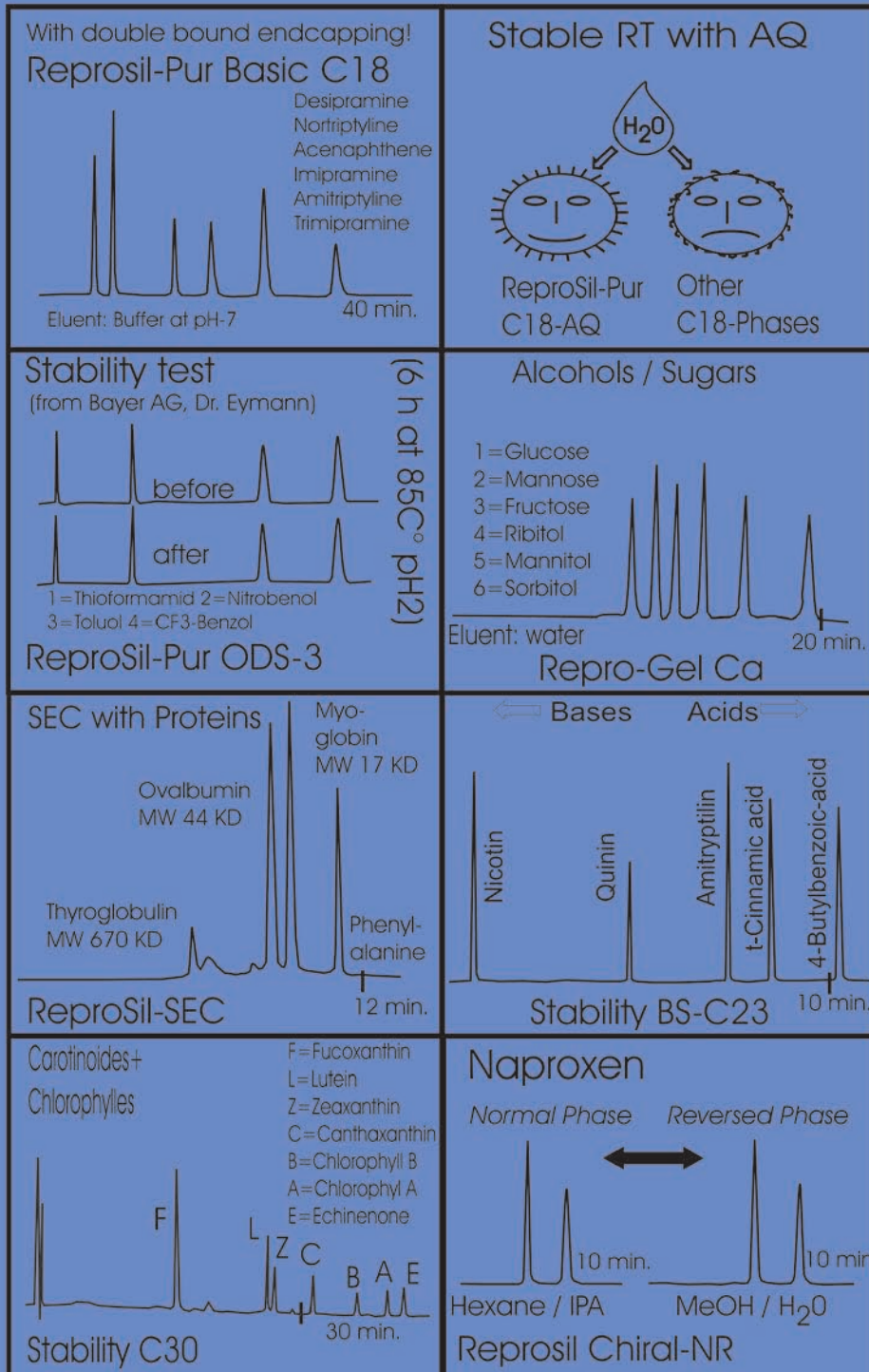
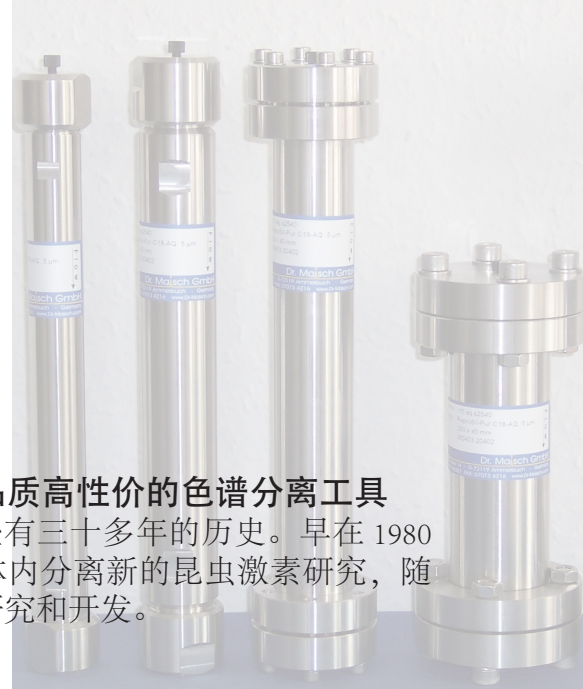


# Dr. Maisch-GmbH



High Performance LC

# Dr. Maisch GmbH 公司介绍



## Dr. Maisch GmbH 的目标:为广大的分析工作者提供高品质高性价比的色谱分离工具

Dr. Maisch 从事色谱柱研究已经有三十多年的历史。早在 1980 年 Dr. Maisch 开始从事从蝴蝶体内分离新的昆虫激素研究，随后在乌尔姆大学从事色谱柱的研究和开发。

- 1985 年** Dr. Maisch 作为德国默克公司的首席色谱柱专家一直工作到 1995 年
- 1995 年** Dr. Maisch GmbH High Performance LC 公司正式成立，位于德国南部靠近图宾根大学
- 1996 年** 我们推出了二个系列的色谱柱：  
Reposil-Pur 系列色谱柱采用的是超纯球形硅胶，键合相包含了正相和反相，粒径从 3 $\mu$ m 到 60 $\mu$ m，硅胶纯度搞到 99.999%。  
Gold Turbo 系列色谱柱也是采用超纯球形硅胶，粒径最小达到 1.5 $\mu$ m，可以在 10 分子内完成一个样品的分析。（德国专利号：296 09 766.7）
- 1998 年** 我们申请了新型的毛细管柱保护柱专利。这个保护柱可以应用于所有的液相毛细管柱，并且不需要额外的柱套和零死体积。保护柱的直径只有 1mm。（德国专利号：197 18 643.）
- 1999 年** 我们申请了一套 HPLC 梯度控制器专利。这个梯度控制器在世界上也是独一无二的。（德国专利号：298 12 576.5）
- 2000 年** 我们研发了 Stability 系列色谱柱，它独特的键合相有 C30，氨基，C23，C17 和 C13。Stability 色谱柱的键合相在疏水链的下端含有一个碱性空间，自身携带正电荷。（德国专利号：398 61765.1）
- 2001 年** 我们研发了 Equisil 系列色谱柱，可以替代美国 Thermo Hypersil 系列。
- 2002 年** 随着我们的客户群体越来越多，我们成立了色谱方法开发实验室，从而为我们的客户解决实际性的问题。
- 2003 年** 我们研发了 Reprospher 系列色谱柱，包含了 20 个不同的键合相。同样采用超纯球形硅胶，其五种金属离子含量都低于 10ppm。
- 2005 年** Reprospher 系列色谱柱继续丰富，粒径增加了 1.8 $\mu$ m，2 $\mu$ m 和 2.5 $\mu$ m。
- 2006 年** 我们研发了 Reprisil-Pur Basic 和 Reprosil Gold 系列的色谱柱，都采用独特的双齿封尾技术。独特的双齿封尾技术使得色谱柱更加稳定，PH 值使用范围为 1.5-10。
- 2007 年** 我们研发了 Reprosil Saphir-C18 系列的色谱柱，粒径从 1.8 $\mu$ m 到 10 $\mu$ m。同时，推出了具有竞争力的 Reprosil-Pur C18-AQ 色谱柱，可以使用纯水作为流动相。
- 2008 年** 我们申请了纳升色谱柱的保护柱专利。
- 2009 年** 我们研发了二个系列的手性柱：Reposil Chiral-OM 和 Reprosil Chiral-AM。
- 2010 年** 我们研发了弹簧式的制备柱（60-100mm）。
- 2012 年** 我们研发了弹簧式的直径 200mm 制备柱。
- 2013 年** 我们研发了一价和二价的离子色谱柱。如，多糖、多元醇和有机酸等专用色谱柱。

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## 德国迈克 (Dr.Maisch) 色谱柱系列

### Reposil-Pur 系列

多孔球形硅胶: 1.9 - 10  $\mu\text{m}$

孔径: 100, 120, 200, 300  $\text{\AA}$

**宽 PH 范围: 1-10**

表面积: 450, 300, 200, 100  $\text{m}^2/\text{g}$

硅胶纯度: > 99.999%

专业地为药学、生物大分子分离和分析设计, 非常高效的色谱柱。

适合于大多数样品的分析, 是 LC-MS 理想的色谱柱选择。

**完美的重复性!**

**订货信息:**

类型	% 碳载量	是否封尾	货号
<b>孔径 100A°</b>			
Reposil-Pur Basic C18, 1.9 $\mu\text{m}$	17 % C	双齿封尾	r119.b9.
Reposil-Pur Basic C18, 2.5 $\mu\text{m}$	17 % C	双齿封尾	r125.b9.
Reposil-Pur Basic-C18, 3 $\mu\text{m}$	17 % C	双齿封尾	r13.b9.
Reposil-Pur Basic-C18, 4 $\mu\text{m}$	17 % C	双齿封尾	r14.b9.
Reposil-Pur Basic-C18, 5 $\mu\text{m}$	17 % C	双齿封尾	r15.b9.
Reposil-Pur Basic-C18, 10 $\mu\text{m}$	17 % C	双齿封尾	r10.b9.
Reposil-Pur Basic-C18-HD, 3 $\mu\text{m}$	25 % C	双齿封尾	r13.b9h.
Reposil-Pur Basic-C18-HD, 5 $\mu\text{m}$	25 % C	双齿封尾	r15.b9h.
Reposil-Pur Basic-C18-HD, 10 $\mu\text{m}$	25 % C	双齿封尾	r10.b9h.
Reposil-Pur Basic C8, 1.9 $\mu\text{m}$	15 % C	双齿封尾	r119.b8.
Reposil-Pur Basic-C8, 3 $\mu\text{m}$	15 % C	双齿封尾	r13.b8.
Reposil-Pur Basic-C8, 5 $\mu\text{m}$	15 % C	双齿封尾	r15.b8.
Reposil-Pur Basic-C8, 10 $\mu\text{m}$	15 % C	双齿封尾	r10.b8.
Reposil-Pur Basic-C8-2, 3 $\mu\text{m}$	12 % C	双齿封尾	r13.b82.
Reposil-Pur Basic-C8-2, 5 $\mu\text{m}$	12 % C	双齿封尾	r15.b82.
<b>孔径 60A°</b>			
Reposil-Pur 60 Si, 3 $\mu\text{m}$			r03.04.
Reposil-Pur 60 Si, 5 $\mu\text{m}$			r05.04.
Reposil-Pur 60 ODS-3, 5 $\mu\text{m}$	18 % C	封尾	r05.93.
<b>孔径 120A°</b>			
Reposil-Pur 120 Si, 3 $\mu\text{m}$			r13.00.
Reposil-Pur 120 Si, 5 $\mu\text{m}$			r15.00.
Reposil-Pur 120 Si, 10 $\mu\text{m}$			r10.00.
Reposil-Pur 120 C1, 3 $\mu\text{m}$	4 % C	封尾	r13.1e.
Reposil-Pur 120 C1, 5 $\mu\text{m}$	4 % C	封尾	r15.1e.
Reposil-Pur 120 C4, 3 $\mu\text{m}$	7 % C	封尾	r13.4e.
Reposil-Pur 120 C4, 5 $\mu\text{m}$	7 % C	封尾	r15.4e.
Reposil-Pur 120 C4, 10 $\mu\text{m}$	7 % C	封尾	r10.4e.



Reposil-Pur 120 C4, 20 $\mu$ m	7 % C	封尾	r120.4e.
Reposil-Pur 120 C8, 3 $\mu$ m	9 % C	封尾	r13.8e.
Reposil-Pur 120 C8, 5 $\mu$ m	9 % C	封尾	r15.8e.
Reposil-Pur 120 C8, 10 $\mu$ m	9 % C	封尾	r10.8e.
Reposil-Pur 120 C8, 20 $\mu$ m	9 % C	封尾	r120.8e.
Reposil-Pur 120 C18-AQ, 1.9 $\mu$ m	15 % C	封尾	r119.aq
Reposil-Pur 120 C18-AQ, 2.4 $\mu$ m	15 % C	封尾	r124.aq
Reposil-Pur 120 C18-AQ, 3 $\mu$ m	15 % C	封尾	r13.aq.
Reposil-Pur 120 C18-AQ, 5 $\mu$ m	15 % C	封尾	r15.aq.
Reposil-Pur 120 C18-AQ, 7 $\mu$ m	15 % C	封尾	r17.aq.
Reposil-Pur 120 C18-AQ, 10 $\mu$ m	15 % C	封尾	r10.aq.
Reposil-Pur 120 C18-AQ, 15 $\mu$ m	15 % C	封尾	r115.aq.
Reposil-Pur 120 C18-AQ, 20 $\mu$ m	15 % C	封尾	r120.aq.
Reposil-Pur 120 ODS-3, 3 $\mu$ m	17 % C	封尾	r13.93.
Reposil-Pur 120 ODS-3, 5 $\mu$ m	17 % C	封尾	r15.93.
Reposil-Pur 120 ODS-3, 10 $\mu$ m	17 % C	封尾	r10.93.
Reposil-Pur 120 ODS-3, 20 $\mu$ m	17 % C	封尾	r120.93.
Reposil-Pur 120 RP18-NE, 3 $\mu$ m	14 % C	未封尾	r13.90.
Reposil-Pur 120 RP18-NE, 5 $\mu$ m	14 % C	未封尾	r15.90.
Reposil-Pur 120 Phenyl, 3 $\mu$ m	8 % C	封尾	r13.pe.
Reposil-Pur 120 Phenyl, 5 $\mu$ m	8 % C	封尾	r15.pe.
Reposil-Pur 120 Phenyl, 10 $\mu$ m	8 % C	封尾	r10.pe.
Reposil-Pur 120 CN, 3 $\mu$ m	7 % C	封尾	r13.ce.
Reposil-Pur 120 CN, 5 $\mu$ m	7 % C	封尾	r15.ce.
Reposil-Pur 120 CN, 10 $\mu$ m	7 % C	封尾	r10.ce.
Reposil-Pur 120 NH2, 3 $\mu$ m	4 % C		r13.a0.
Reposil-Pur 120 NH2, 5 $\mu$ m	4 % C		r15.a0.
Reposil-Pur 120 NH2, 10 $\mu$ m	4 % C		r10.a0.
Reposil-Pur 120 Diol, 3 $\mu$ m	7 % C		r13.d0.
Reposil-Pur 120 Diol, 5 $\mu$ m	7 % C		r15.d0.
Reposil-Pur 120 Diol, 10 $\mu$ m	7 % C		r10.d0.

### 孔径 200A° 大孔径键合相 (生物聚合物, 蛋白, 多肽)

Reposil-Pur 200 C18-AQ, 3 $\mu$ m	11 % C	封尾	r23.aq.
Reposil-Pur 200 C18-AQ, 5 $\mu$ m	11 % C	封尾	r25.aq.
Reposil-Pur 200 ODS-3, 3 $\mu$ m	12 % C	封尾	r23.93.
Reposil-Pur 200 ODS-3, 5 $\mu$ m	12 % C	封尾	r25.93.
Reposil-Pur 200 Diol, 5 $\mu$ m	5 % C		r25.d0.

### 孔径 300A°

Reposil-Pur 300 Si, 3 $\mu$ m			r33.00.
Reposil-Pur 300 Si, 5 $\mu$ m			r35.00.

Reposil-Pur 300 Si, 10 $\mu$ m			r30.00.
Reposil-Pur 300 Diol, 5 $\mu$ m	3.5 % C		r35.d0.
Reposil-Pur 300 C4, 3 $\mu$ m	2.5 % C	封尾	r33.4e.
Reposil-Pur 300 C4, 5 $\mu$ m	2.5 % C	封尾	r35.4e.
Reposil-Pur 300 C4, 10 $\mu$ m	2.5 % C	封尾	r30.4e.
Reposil-Pur 300 C8, 3 $\mu$ m	4 % C	封尾	r33.8e.
Reposil-Pur 300 C8, 5 $\mu$ m	4 % C	封尾	r35.8e.
Reposil-Pur 300 C8, 10 $\mu$ m	4 % C	封尾	r30.8e.
Reposil-Pur 300 ODS-3, 3 $\mu$ m	9 % C	封尾	r33.93.
Reposil-Pur 300 ODS-3, 5 $\mu$ m	9 % C	封尾	r35.93.
Reposil-Pur 300 ODS-3, 10 $\mu$ m	9 % C	封尾	r30.93.
Reposil-Pur 300 Phenyl, 3 $\mu$ m	3 % C	封尾	r33.pe
Reposil-Pur 300 Phenyl, 5 $\mu$ m	3 % C	封尾	r35.pe.

### 孔径 1000A°

Reposil-Pur 1000 ODS-3, 5 $\mu$ m		封尾	r65.93.
Prep. particles sizes:: 10, 15, 30, 50 $\mu$ m			需要定制

### Reposil-Gold 系列

多孔球形硅胶: 3, 5, 10  $\mu$  m

孔径: 120 A°, 200 A°, 300 A°

硅胶表面积: 300, 200, 100 m<sup>2</sup> /g

**宽 PH 范围: 1-10**

硅胶纯度: > 99.999%

LC-MS 理想的色谱柱。

专业地为药学、生物大分子分离和分析设计, 非常高效的色谱柱。

**专利的封尾技术: 双齿封尾技术**

**卓越的化学稳定性! 完美的重复性!**

**订货信息:**

类型	% 碳载量	是否封尾	货号
<b>孔径 120A°</b>			
Reposil-Gold 120 C18, 3 $\mu$ m	20 % C	双齿封尾	r13.9g
Reposil-Gold 120 C18, 4 $\mu$ m	20 % C	双齿封尾	r14.9g
Reposil-Gold 120 C18, 5 $\mu$ m	20 % C	双齿封尾	r15.9g
Reposil-Gold 120 C18, 10 $\mu$ m	20 % C	双齿封尾	r10.9g
Reposil-Gold 120 C8, 3 $\mu$ m	12 % C	双齿封尾	r13.8g
Reposil-Gold 120 C8, 4 $\mu$ m	12 % C	双齿封尾	r14.8g
Reposil-Gold 120 C8, 5 $\mu$ m	12 % C	双齿封尾	r15.8g
Reposil-Gold 120 C8, 10 $\mu$ m	12 % C	双齿封尾	r10.8g
Reposil-Gold 120 C8, 20 $\mu$ m	12 % C	双齿封尾	r120.8g
Reposil-Gold 120 C4, 3 $\mu$ m	8 % C	双齿封尾	r13.4g
Reposil-Gold 120 C4, 5 $\mu$ m	8 % C	双齿封尾	r15.4g
Reposil-Gold 120 C4, 10 $\mu$ m	8 % C	双齿封尾	r10.4g
Reposil-Gold 120 C4, 20 $\mu$ m	8 % C	双齿封尾	r120.4g

Reposil-Gold 120 C2, 5 $\mu$ m	4 % C	双齿封尾	r15.2g
Reposil-Gold 200 C18, 3 $\mu$ m	14 % C	双齿封尾	r23.9g
Reposil-Gold 200 C18, 5 $\mu$ m	14 % C	双齿封尾	r25.9g
Reposil-Gold 200 C18, 10 $\mu$ m	14 % C	双齿封尾	r20.9g
Reposil-Gold 200 C8, 5 $\mu$ m	8 % C	双齿封尾	r25.8g
Reposil-Gold 200 C8, 10 $\mu$ m	8 % C	双齿封尾	r20.8g
Reposil-Gold 200 C4, 5 $\mu$ m	5 % C	双齿封尾	r25.4g
Reposil-Gold 200 C4, 10 $\mu$ m	5 % C	双齿封尾	r20.4g
Reposil-Gold 300 C18, 3 $\mu$ m	8 % C	双齿封尾	r33.9g
Reposil-Gold 300 C18, 5 $\mu$ m	8 % C	双齿封尾	r35.9g
Reposil-Gold 300 C18, 10 $\mu$ m	8 % C	双齿封尾	r30.9g
Reposil-Gold 300 C8, 3 $\mu$ m	5 % C	双齿封尾	r33.8g
Reposil-Gold 300 C8, 5 $\mu$ m	5 % C	双齿封尾	r35.8g
Reposil-Gold 300 C8, 10 $\mu$ m	5 % C	双齿封尾	r30.8g
Reposil-Gold 300 C4, 3 $\mu$ m	3 % C	双齿封尾	r33.4g
Reposil-Gold 300 C4, 5 $\mu$ m	3 % C	双齿封尾	r35.4g
Reposil-Gold 300 C4, 10 $\mu$ m	3 % C	双齿封尾	r30.4g
Reposil-Gold 300 C2, 5 $\mu$ m	1 % C	双齿封尾	r35.2g

Prep. particles sizes:: 10, 15, 30, 50  $\mu$  m

## Reposil 80 系列

多孔球形硅胶: 3, 5, 10  $\mu$  m

孔径: 80 Å

表面积: 220 m<sup>2</sup> /g

PH 范围: 2-8

可以替代 waters Spherisorb!

订货信息:

类型	% 碳载量	是否封尾	货号
<b>孔径 80Å</b>			
Reposil 80 Si, 3 $\mu$ m			r03.00.
Reposil 80 Si, 5 $\mu$ m			r05.00.
Reposil 80 C1, 5 $\mu$ m	3 %C		r05.10.
Reposil 80 Hexyl, 5 $\mu$ m	6% C		r05.60.
Reposil 80 Phenyl, 3 $\mu$ m	6% C	部分封尾	r03.p0.
Reposil 80 Phenyl, 5 $\mu$ m	6% C	部分封尾	r05.p0.
Reposil 80 C8, 3 $\mu$ m	6% C	部分封尾	r03.8e.
Reposil 80 C8, 5 $\mu$ m	6% C	部分封尾	r05.8e.
Reposil 80 ODS-1, 3 $\mu$ m	7% C	部分封尾	r03.91.

Reprosil 80 ODS-1, 5 $\mu$ m	7% C	部分封尾	r05.91.
Reprosil 80 ODS-1, 10 $\mu$ m	7% C	部分封尾	r00.91.
Reprosil 80 ODS-2, 3 $\mu$ m	12% C	部分封尾	r03.92.
Reprosil 80 ODS-2, 5 $\mu$ m	12% C	部分封尾	r05.92.
Reprosil 80 ODS-2, 10 $\mu$ m	12% C	部分封尾	r00.92.
Reprosil 80 NH2, 3 $\mu$ m	2% C		r03.a0.
Reprosil 80 NH2, 5 $\mu$ m	2% C		r05.a0.
Reprosil 80 Diol, 5 $\mu$ m			r05.d0.
Reprosil 80 CN, 3 $\mu$ m	3.5 % C		r03.c0.
Reprosil 80 CN, 5 $\mu$ m	3.5 % C		r05.c0.
Reprosil 80 SAX, 5 $\mu$ m (strong anion exchanger)	4 % C		r05.sa.
Reprosil 80 SAX, 10 $\mu$ m (strong anion exchanger)	4 % C		r00.sa.
Reprosil 80 SAX-2, 5 $\mu$ m (strong anion exchanger, ultrapur)	4 % C	4 % C	r05.sa2.
Reprosil 80 SCX, 5 $\mu$ m (strong cation exchanger)	6 % C		r05.sc.
Reprosil 80 SCX, 10 $\mu$ m (strong cation exchanger)	6 % C		r00.sc.
Reprosil Polyamin, 3 $\mu$ m (for sugar separations)			r03.ap.
Reprosil Polyamin, 5 $\mu$ m (for sugar separations)			r05.ap.

### Reprosil 70, 100, 300 系列

多孔球形硅胶: 3, 5, 10  $\mu$  m

孔径: 70, 100, 300  $\text{Å}$

表面积: 500, 280, 100  $\text{m}^2/\text{g}$

孔容积: 0.9, 1.1, 1.1  $\text{ml/g}$

PH 范围: 2-8

纯度: Na: 50 ppm, Fe: 4 ppm, Pb: < 1ppm

非常适合于制备色谱柱。非常有竞争力的价格。高的样品回收率。更长的柱寿命。

订货信息:

类型	% 碳载量	是否封尾	货号
<b>孔径 70<math>\text{Å}</math></b>			
Reprosil 70 Si, 5 $\mu$ m			r05.06.
Reprosil 70 C18, 3 $\mu$ m	20 % C		r03.96.
Reprosil 70 C18, 5 $\mu$ m	20 % C		r05.96.
Reprosil 70 C8, 5 $\mu$ m	14 % C		r05.86.
Reprosil 70 C4, 5 $\mu$ m	10 % C		r05.56.
Reprosil 70 Phenyl, 5 $\mu$ m	16 % C		r05.p6.
Reprosil 70 CN, 5 $\mu$ m	10 % C		r05.c6.
Reprosil 70 Diol, 5 $\mu$ m	4 % C		r05.d6.
Reprosil 70 NH2, 5 $\mu$ m	5 % C		r05.a6.



## 孔径 100A°

Reposil 100 Si, 3 $\mu$ m			r13.06.
Reposil 100 Si, 5 $\mu$ m			r15.06.
Reposil 100 Si, 10 $\mu$ m			r10.06.
Reposil 100 Si, 15 $\mu$ m			r115.06.
Reposil 100 C4, 3 $\mu$ m	5 % C	封尾	r13.46.
Reposil 100 C4, 5 $\mu$ m	5 % C	封尾	r15.46.
Reposil 100 C4, 10 $\mu$ m	5 % C	封尾	r10.46.
Reposil 100 C8, 3 $\mu$ m	8 % C	封尾	r13.86.
Reposil 100 C8, 4 $\mu$ m	8 % C	封尾	r14.86.
Reposil 100 C8, 5 $\mu$ m	8 % C	封尾	r15.86.
Reposil 100 C8, 10 $\mu$ m	8 % C	封尾	r10.86.
Reposil 100 C8-AB, 5 $\mu$ m	12 % C	封尾	r15.8b
Reposil 100 C18, 3 $\mu$ m	15 % C	封尾	r13.96.
Reposil 100 C18, 4 $\mu$ m	15 % C	封尾	r14.96.
Reposil 100 C18, 5 $\mu$ m	15 % C	封尾	r15.96.
Reposil 100 C18, 7 $\mu$ m	15 % C	封尾	r17.96
Reposil 100 C18, 10 $\mu$ m	15 % C	封尾	r10.96.
Reposil 100 C18, 15 $\mu$ m	15 % C	封尾	r115.96.
Reposil 100 C18, 30 $\mu$ m	15 % C	封尾	r130.96.
Reposil 100 C18, 50 $\mu$ m	15 % C	封尾	r150.96.
Reposil Amid-C18 ABZ, 3 $\mu$ m (可以替代 Supelcosil ABZ) USP-L60			r23.ace.
Reposil Amid-C18 ABZ, 5 $\mu$ m (可以替代 Supelcosil ABZ) USP-L60			r25.ace.
Reposil C18-MP, 5 $\mu$ m (可以替代 MP-Gel ODS)		封尾	r15.9mp.
Reposil 100 C18-AB, 5 $\mu$ m	18 % C	封尾	r05.9b.
Reposil 100 ODS-A, 3 $\mu$ m	16 % C	封尾	r13.9a.
Reposil 100 ODS-A, 5 $\mu$ m	16 % C	封尾	r15.9a.
Reposil 100 ODS-AQ, 3 $\mu$ m	13 % C	pol Gr.+ 封尾	r13.9aq.
Reposil 100 ODS-AQ, 5 $\mu$ m	13 % C	pol Gr.+ 封尾	r15.9aq.
Reposil 100 Phenyl, 3 $\mu$ m	9 % C	封尾	r13.p6.
Reposil 100 Phenyl, 5 $\mu$ m	9 % C	封尾	r15.p6.
Reposil 100 Phenyl, 10 $\mu$ m	9 % C	封尾	r10.p6.
Reposil 100 CN, 3 $\mu$ m	2 % C		r13.c6.
Reposil 100 CN, 5 $\mu$ m	2 % C		r15.c6.
Reposil 100 CN, 10 $\mu$ m	2 % C		r10.c6.
Reposil 100 NH <sub>2</sub> , 3 $\mu$ m	3 % C		r13.a6.
Reposil 100 NH <sub>2</sub> , 5 $\mu$ m	3 % C		r15.a6.
Reposil 100 NH <sub>2</sub> , 10 $\mu$ m	3 % C		r10.a6.
Reposil 100 DNH, 3 $\mu$ m (Diamin)	5 %		r13.dnh.
Reposil 100 DNH, 5 $\mu$ m (Diamin)	5 %		r15.dnh.

Reprosil 100 Diol, 5 $\mu$ m	3 % C		r15.d6.
Reprosil 100 C30-m, 5 $\mu$ m (monomer)		封尾	st15.3m.
Reprosil DIBS-RP, 5 $\mu$ m (适合生物样品的直接分析)			r15.dibs.
Reprosil 100 CAT, 7 $\mu$ m (mono- + divalent Cations in 1 run)			r17.cat.

### Reprosil WP-300: 适合于多肽和蛋白

Reprosil 300 C4, 5 $\mu$ m	2.5 %C	封尾	r35.46.
Reprosil 300 C4, 10 $\mu$ m	2.5 %C	封尾	r30.46.
Reprosil 300 C8, 5 $\mu$ m	4 %C	封尾	r35.86.
Reprosil 300 C8, 10 $\mu$ m	4 %C	封尾	r30.86.
Reprosil 200 C18, 5 $\mu$ m	9 %C	封尾	r25.96.
Reprosil 300 C18, 5 $\mu$ m	6 %C	封尾	r35.96.
Reprosil 300 C18, 10 $\mu$ m	6 %C	封尾	r30.96.
Reprosil 300 DEAE, 5 $\mu$ m			r35.deae.

### Reprosil 100 C18-XBD 系列

多孔球形硅胶: 5, 10  $\mu$  m

孔径: 100  $\text{\AA}$

表面积: 300  $\text{m}^2/\text{g}$

孔容积: 0.9 ml/g

PH 范围: 1-10

**非常适合于制备色谱柱。非常有竞争力的价格。高的样品回收率。更长的柱寿命。**

XBD = eXtra Base-deactivated with 2 endcappings.

**订货信息:**

类型 货号	% 碳载量	是否封尾	
Reprosil 100 C18-XBD, 5 $\mu$ m	16 % C	双齿封尾	r15.9x.
Reprosil 100 C18-XBD, 10 $\mu$ m	16 % C	双齿封尾	r10.9x.

### Reprosil Saphir 系列

多孔球形硅胶: 1.8  $\mu$  m, 2.2  $\mu$  m, 3  $\mu$  m, 5  $\mu$  m, 10  $\mu$  m

孔径 / 表面积: 100  $\text{\AA}$  / 400  $\text{m}^2/\text{g}$  300  $\text{\AA}$  / 100  $\text{m}^2/\text{g}$

PH 范围: 2-8

超纯硅胶基质, 专门地为药物和生物大分子分离和分析设计, 非常高效的色谱柱。

纯度: Ca, Mg, Al, Ti, Fe: all < 1 ppm

**订货信息:**

类型 孔径 100 $\text{\AA}$	% 碳载量	是否封尾	货号
Reprosil Saphir 100 C18, 1.5 $\mu$ m	20 %C	封尾	ra115.9e.
Reprosil Saphir 100 C18, 1.8 $\mu$ m	20 %C	封尾	ra118.9e.
Reprosil Saphir 100 C18, 2.2 $\mu$ m	20 %C	封尾	ra122.9e.
Reprosil Saphir 100 C18, 3 $\mu$ m	20 %C	封尾	ra13.9e.
Reprosil Saphir 100 C18, 5 $\mu$ m	20 %C	封尾	ra15.9e.
Reprosil Saphir 100 C18, 10 $\mu$ m	20 %C	封尾	ra10.9e.

Reprosil Saphir 100 C8, 5 $\mu$ m	12 % C	封尾	ra15.8e.
Reprosil Saphir 100 C8, 10 $\mu$ m	12 % C	封尾	ra10.8e.
Reprosil Saphir 100 C4, 5 $\mu$ m	8 % C	封尾	ra15.4e.
Reprosil Saphir 100 C4, 10 $\mu$ m	8 % C	封尾	ra10.4e.
Reprosil 100 Saphir NH2, 5 $\mu$ m	4 % C	not 封尾	ra15.ao.

### Weak Cation exchanger (CM) ( 孔径 300A<sup>o</sup> , 适合于蛋白和酶的分 离 )

Reprosil Saphir 300 CM, 5 $\mu$ m	(Carboxymethyl, WCX)	ra35.cm
Reprosil Saphir 300 CM, 15 $\mu$ m	(Carboxymethyl, WCX)	ra315.cm

### Stong cation exchanger (SCX) : 100 A<sup>o</sup> + 300 A<sup>o</sup>

Reprosil Saphir 300 SCX, 5 $\mu$ m	(Sulfopropyl, SP)	ra35.scx
Reprosil Saphir 300 SCX, 15 $\mu$ m	(Sulfopropyl, SP)	ra315.scx
Reprosil Saphir 100 SCX, 3 $\mu$ m	(Sulfopropyl, SP)	ra13.scx
Reprosil Saphir 100 SCX, 5 $\mu$ m	(Sulfopropyl, SP)	ra15.scx
Reprosil Saphir 100 SCX, 10 $\mu$ m	(Sulfopropyl, SP)	ra10.scx

### Strong Anion Exchanger, (Organic acids: Carboxylic + Sulfonic acids, Pesticides, Herbicides, Pharmaceu tics, Nucleotides)

Reprosil Saphir 100 SAX, 5 $\mu$ m	(Strong Anion eXchanger)	ra15.sax
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(pH range: 2-7, Citrate- or phosphate buffers (+ org. modifier), Example for Eluent:0.1 M KH<sub>2</sub>PO<sub>4</sub>, pH 3)

## Reprospher 系列

多孔球形硅胶: 1.8, 3, 5, 10  $\mu$  m

表面积: 350 m<sup>2</sup> /g

PH 范围: 2-8, 其中双齿封尾的 PH 范围: 1-10

硅胶纯度: 99.999%

极佳的分 离效果, LC-MS 理想的色谱柱。

重金属残留: Ca, Mg, AL, Fe, Zr, Ti: all < 10 ppm

专门地为药物和生物大分子分离和分析设计。

孔径: 100 A<sup>o</sup>

### 订货信息:

类型	% 碳载量	是否封尾	货号
Reprospher 100 C18, 1.8 $\mu$ m	16 % C	封尾	rs118.9e.
Reprospher 100 C18, 2 $\mu$ m	16 % C	封尾	rs12.9e.
Reprospher 100 C18, 2.5 $\mu$ m	16 % C	封尾	rs125.9e.
Reprospher 100 C18, 3 $\mu$ m	16 % C	封尾	rs13.9e.
Reprospher 100 C18, 4 $\mu$ m	16 % C	封尾	rs14.9e.
Reprospher 100 C18, 5 $\mu$ m	16 % C	封尾	rs15.9e.
Reprospher 100 C18, 10 $\mu$ m	16 % C	封尾	rs10.9e.
Reprospher 100 C18-DE, 1.8 $\mu$ m	16 % C	双齿封尾	rs118.9de.
Reprospher 100 C18-DE, 2 $\mu$ m	16 % C	双齿封尾	rs12.9de.
Reprospher 100 C18-DE, 2.5 $\mu$ m	16 % C	双齿封尾	rs125.9de.
Reprospher 100 C18-DE, 3 $\mu$ m	16 % C	双齿封尾	rs13.9de.
Reprospher 100 C18-DE, 5 $\mu$ m	16 % C	双齿封尾	rs15.9de.
Reprospher 100 C18-DE, 7 $\mu$ m	16 % C	双齿封尾	rs17.9de.
Reprospher 100 C18-DE, 10 $\mu$ m	16 % C	双齿封尾	rs10.9de.

Repospher 100 C18-Aqua, 1.8 $\mu$ m	12 % C	pol.Gr.+ 封尾	rs118.9aq.
Repospher 100 C18-Aqua, 2 $\mu$ m	12 % C	pol.Gr.+ 封尾	rs12.9aq.
Repospher 100 C18-Aqua, 2.5 $\mu$ m	12 % C	pol.Gr.+ 封尾	rs125.9aq.
Repospher 100 C18-Aqua, 3 $\mu$ m	12 % C	pol.Gr.+ 封尾	rs13.9aq.
Repospher 100 C18-Aqua, 5 $\mu$ m	12 % C	pol.Gr.+ 封尾	rs15.9aq.
Repospher 100 C18-Aqua, 10 $\mu$ m	12 % C	pol.Gr.+ 封尾	rs10.9aq.
Repospher 100 C18-Aqua, 30 $\mu$ m	12 % C	pol.Gr.+ 封尾	rs130.9aq.
Repospher 100 C18-Aqua-DE, 3 $\mu$ m	12 % C	pol.Gr.+ 双齿封尾	rs13.9aqd.
Repospher 100 C18-NE, 1.8 $\mu$ m	15 % C	不封尾	rs118.90.
Repospher 100 C18-NE, 5 $\mu$ m	15 % C	不封尾	rs15.90 3
Repospher 100 C18-Phenyl, 5 $\mu$ m (C18+Phenyl)		封尾	rs15.9ph
Repospher 100 C18-Phenyl, 10 $\mu$ m (C18+Phenyl)		封尾	rs10.9ph
Repospher 100 C18-WCX, 5 $\mu$ m (C18+ Weak Anion exch., for Peptides)			rs15.9ac
Repospher 100 C18-WCX, 10 $\mu$ m (C18+ Weak Anion exch., for Peptides)			rs10.9ac
Repospher 100 C18-TDE, 3 $\mu$ m	20 % C	polymer-C18-de	rs13.9tde
Repospher 100 C18-TDE, 5 $\mu$ m	20 % C	polymer-C18- 双齿封尾	rs15.9tde
Repospher 100 C18-TDE, 10 $\mu$ m	20 % C	polymer-C18- 双齿封尾	rs10.9tde
Repospher 100 C18-TN, 5 $\mu$ m	17 % C	polymer-C18 未封尾	rs15.9tn
Repospher 100 Phenyl, 1.8 $\mu$ m	9 % C	双齿封尾	rs118.pde.
Repospher 100 Phenyl, 2 $\mu$ m	9 % C	双齿封尾	rs12.pde.
Repospher 100 Phenyl, 2.5 $\mu$ m	9 % C	双齿封尾	rs125.pde.
Repospher 100 Phenyl, 3 $\mu$ m	9 % C	双齿封尾	rs13.pde.
Repospher 100 Phenyl, 5 $\mu$ m	9 % C	双齿封尾	rs15.pde.
Repospher 100 Phenyl, 10 $\mu$ m	9 % C	双齿封尾	rs10.pde.
Repospher 100 Phenyl-Hexyl	13 % C		rs13.ph.
Repospher 100 Phenyl-Hexyl, 5 $\mu$ m	13 % C		rs15.ph.
Repospher 100 Phenyl-Hexyl, 10 $\mu$ m (for prep.)	14 % C		rs10.ph.
Repospher 100 Phenyl-Hexyl-e, 5 $\mu$ m	13 % C	封尾	rs15.phe.
Repospher 100 C6-TDE, 5 $\mu$ m	8 % C	trifunct.- 封尾	rs15.6tde.
Repospher 100 C4-Aqua, 5 $\mu$ m	6 % C	pol.Gr.+ 封尾	rs15.4aq.
Repospher 100 C4-Aqua, 10 $\mu$ m	6 % C	pol.Gr.+ 封尾	rs10.4aq.
Repospher 100 C4-DE, 5 $\mu$ m	7 % C	双齿封尾	rs15.4de.
Repospher 100 CN, 1.8 $\mu$ m	7 % C		rs.118.C0.
Repospher 100 CN, 2 $\mu$ m	7 % C		rs12.C0.
Repospher 100 CN, 2.5 $\mu$ m	7 % C		rs125.C0.
Repospher 100 CN, 3 $\mu$ m	7 % C		rs.13.C0.
Repospher 100 CN, 5 $\mu$ m	7 % C		rs.15.C0.
Repospher 100 CN-DE, 5 $\mu$ m	7 % C	双齿封尾	rs15.cde.
Repospher 100 Diol-DE, 5 $\mu$ m	7 % C	双齿封尾	rs15.dde.
Repospher 100 NH2, 1.8 $\mu$ m	4 % C		rs118.ade.
Repospher 100 NH2, 2 $\mu$ m	4 % C		rs12.ade.
Repospher 100 NH2, 3 $\mu$ m	4 % C		rs13.ade.



Reprospher 100 NH <sub>2</sub> , 5 μ m	4 %C		rs15.ade.
Reprospher 100 NH <sub>2</sub> , 10 μ m	4 %C		rs10.ade.
Reprospher 100 PEI, 3 μ m (Polyethylenimine-Phase)			rs13.pei.
Reprospher 100 PEI, 5 μ m (Polyethylenimine-Phase)			rs15.pei.
Reprospher 100 SAX, 5 μ m (Strong Anion eXchanger)			rs15.sax.
Reprospher 100 Si, 1.8 μ m			rs118.00.
Reprospher 100 Si, 2 μ m			rs12.00.
Reprospher 100 Si, 2.5 μ m			rs125.00.
Reprospher 100 Si, 3 μ m			rs13.00.
Reprospher 100 Si, 5 μ m			rs15.00.
Reprospher 100 Si, 10 μ m			rs10.00.
Reprospher HILIC-P, 3 μ m	HILIC for Peptides		rs13.HCP.
Reprospher HILIC-P, 5 μ m	HILIC for Peptides		rs15.HCP.
Reprospher HILIC-P, 10 μ m	HILIC for Peptides		rs10.HCP.
Reprospher HILIC-A, 3 μ m	HILIC for Acids		rs13.HCA.
Reprospher HILIC-A, 5 μ m	HILIC for Acids		rs15.HCA.
Reprospher HILIC-A, 10 μ m	HILIC for Acids		rs10.HCA.
Reprospher Acidosil-S, 5 μ m	SO <sub>3</sub> H-Silica		rs15.sh.
Reprospher Acidosil-S, 10 μ m	SO <sub>3</sub> H-Silica		rs10.sh.
Reprospher Acidosil-C, 5 μ m	COOH-Silica		rs15.ch.
Reprospher Acidosil-C, 5 μ m	COOH-Silica		rs10.ch.

### 用于多肽和蛋白分离的大孔径键合相

孔径: 200 Å ° 300 Å ° Pores

#### 订货信息:

类型	% 碳载量	是否封尾	货号
Reprospher 200 C18-TN, 5 μ m	11 % C	未封尾	rs25.9tn.
Reprospher 200 C18-TN, 7 μ m	11 % C	未封尾	rs27.9tn.
Reprospher 200 C18-TN, 10 μ m	11 % C	未封尾	rs20.9tn.
Reprospher 200 C18-DE, 2.5 μ m	10 % C	双齿封尾	rs225.9de.
Reprospher 200 C18-DE, 3 μ m	10 % C	双齿封尾	rs23.9de.
Reprospher 200 C18-Aqua, 2.5 μ m	5% C	pol.Gr.+ 封尾	rs225.9aq
Reprospher 200 C18-Aqua, 3 μ m	5% C	pol.Gr.+ 封尾	rs23.9aq .
Reprospher 200 C18-Aqua, 5 μ m	5% C	pol.Gr.+ 封尾	rs25.9aq .
Reprospher 300 C4, 1.8 μ m	2.5% C	封尾	rs318.4e.
Reprospher 300 C4, 2 μ m	2.5% C	封尾	rs32.4e.
Reprospher 300 C4-DE, 2.5 μ m	3% C	双齿封尾	rs35.4de.
Reprospher 300 C4-DE, 3 μ m	3% C	双齿封尾	rs33.4de.
Reprospher 300 C4-DE, 5 μ m	3% C	双齿封尾	rs35.4de.

Repospher 300 C8, 1.8 $\mu$ m	4% C	封尾	rs32.8e.
Repospher 300 C8, 2 $\mu$ m	4% C	封尾	rs32.8e.
Repospher 300 C8, 2 $\mu$ m	4% C	封尾	rs32.8e.
Repospher 300 C8-TN, 5 $\mu$ m	5% C	未封尾	rs35.8tn.
Repospher 300 C18, 1.8 $\mu$ m	7% C	封尾	rs32.9e.
Repospher 300 C18, 2 $\mu$ m	7% C	封尾	rs32.9e.
Repospher 300 C18-DE, 2.5 $\mu$ m	7% C	双齿封尾	rs325.9de.
Repospher 300 C18-DE, 3 $\mu$ m	7% C	双齿封尾	rs33.9de.
Repospher 300 C18-DE, 5 $\mu$ m	7% C	双齿封尾	rs35.9de.
Repospher 300 C18-Aqua, 5 $\mu$ m	4% C	pol.Gr.+ 封尾	rs35.9aq .
Repospher 300 C18, 5 $\mu$ m	76% C	封尾	rs35.9e.
Repospher 300 C18-TN, 5 $\mu$ m	10% C	polymer-C18, 未封尾	rs35.9tn.
Repospher 300 C18-TN, 30 $\mu$ m	10% C	polymer-C18, 未封尾	rs330.9tn.
Repospher 300 Phenyl-DE, 3 $\mu$ m	5% C	双齿封尾	rs33.pde.

### Reposil Gold-XBD 系列

多孔球形硅胶: 1.8  $\mu$  m / 3  $\mu$  m / 5  $\mu$  m / 10  $\mu$  m

孔径: 100 Å

表面积: 350 m<sup>2</sup> /g

PH 范围: 2-8

硅胶纯度: 99.999%

LC-MS 理想的色谱柱!

订货信息:

类型	% 碳载量	是否封尾	货号
Reposil Gold 100 C18-XBD, 1.8 $\mu$ m	16.5 % C	超纯硅胶碱性去活	G118.9x.
Reposil Gold 100 C18-XBD, 2.0 $\mu$ m	16.5 % C	超纯硅胶碱性去活	G12.9x.
Reposil Gold 100 C18-XBD, 3 $\mu$ m	16.5 % C	超纯硅胶碱性去活	G13.9x.
Reposil Gold 100 C18-XBD, 5 $\mu$ m	16.5 % C	超纯硅胶碱性去活	G15.9x.
Reposil Gold 100 C18-XBD, 10 $\mu$ m	16.5 % C	超纯硅胶碱性去活	G10.9x 5.
Reposil Gold 100 C8-XBD, 1.8 $\mu$ m	10.5 % C	超纯硅胶碱性去活	G118.8x.
Reposil Gold 100 C8-XBD, 2.0 $\mu$ m	10.5 % C	超纯硅胶碱性去活	G12.8x.
Reposil Gold 100 C8-XBD, 3 $\mu$ m	10.5 % C	超纯硅胶碱性去活	G13.8x.
Reposil Gold 100 C8-XBD, 5 $\mu$ m	10.5 % C	超纯硅胶碱性去活	G15.8x.
Reposil Gold 100 C8-XBD, 10 $\mu$ m	10.5 % C	超纯硅胶碱性去活	G10.8x.

### Equisil 系列

多孔球形硅胶: 5  $\mu$  m

孔径: 120 Å

孔体积: 0.65 ml / g

比表面积: 180 m<sup>2</sup> /g

可以替代 Hypersil / Supelasil / Pinnacle

## 订货信息:

类型	% 碳载量	是否封尾	货号
<b>可以代替 Hypersil I / Supelosil / Pinnacle!</b>			
Equisil Si, 5 $\mu$ m			e25.00.
Equisil ODS, 3 $\mu$ m	10 % C	封尾	e23.9e.
Equisil ODS, 5 $\mu$ m	10 % C	封尾	e25.9e.
Equisil ODS, 10 $\mu$ m 1	10 % C	封尾	e20.9e.
Equisil MOS, 3 $\mu$ m	6.5 % C	未封尾	e23.80.
Equisil MOS, 5 $\mu$ m	6.5 % C	未封尾	e25.80.
Equisil MOS, 10 $\mu$ m	6.5 % C	未封尾	e20.80.
Equisil MOS-2, 3 $\mu$ m	6.5 % C	封尾	e23.8e.
Equisil SAS, 5 $\mu$ m C1- phase	3 % C		e25.10.
Equisil APS, 3 $\mu$ m	(NH <sub>2</sub> -Phase)		e23.a0.
Equisil APS, 5 $\mu$ m	(NH <sub>2</sub> -Phase)		e25.a0.
Equisil CPS, 5 $\mu$ m	(CN-Phase)		e25.c0.
Equisil CPS-2, 3 $\mu$ m	(CN-Phase)	封尾	e23.ce.

## 可以替代 Hypersil-BDS , Supelcosil-DB and Pinnacle DB:

Equisil BDS C18, 3 $\mu$ m	11 % C	封尾	e23.9b.
Equisil BDS C18, 5 $\mu$ m	11 % C	封尾	e25.9b.
Equisil BDS C8, 3 $\mu$ m	7 % C	封尾	e23.8b.
Equisil BDS C8, 5 $\mu$ m	7 % C	封尾	e25.8b.
Equisil BDS Phenyl, 5 $\mu$ m	5% C	封尾	e25.pb.

## 可以替代 Hypersil Gold:

Equisil Gold C18, 3 $\mu$ m		封尾	e23.9g
Equisil Gold C18, 5 $\mu$ m		封尾	e25.9g
Equisil Gold C18, 10 $\mu$ m		封尾	e20.9g
Equisil Gold C8, 3 $\mu$ m		封尾	e23.8g
Equisil Gold C8, 5 $\mu$ m		封尾	e25.8g
Equisil Gold C8, 10 $\mu$ m		封尾	e20.8g

## Reprobond 系列

多孔球形硅胶: 10  $\mu$  m

孔径: 120 Å

比表面积: 300 m<sup>2</sup>/g

PH 范围: 2-8

可替代  $\mu$  Bondapak! 非常有竞争力的价格!

订货信息:

类型	是否封尾	货号
Reprobond C18, 10 $\mu$ m	封尾	rb20.9e.
Reprobond Phenyl, 10 $\mu$ m	封尾	rb20.pe.
Reprobond NH <sub>2</sub> , 10 $\mu$ m		rb20.a0.

## ReproKrom 系列

多孔硅胶, 孔径 100 Å

PH 范围: 2-8

可以替代 Kromasil 色谱柱.

订货信息:

类型	是否封尾	货号
ReproKrom Si, 5 μm		rk15.00.
ReproKrom Si, 10 μm		rk10.00.
ReproKrom C18, 3 μm	封尾	rk13.9e.
ReproKrom C18, 5 μm	封尾	rk15.9e.
ReproKrom C18, 10 μm	封尾	rk10.9e.
ReproKrom C8, 5 μm	封尾	rk15.8e.
ReproKrom C8, 10 μm	封尾	rk10.8e.

## Stability 系列

多孔球形硅胶: 5, 10 μm

孔径: 100, 300 Å

比表面积: 350, 100 m<sup>2</sup>/g

PH 范围: 2-8

非常规的键合相!

订货信息:

类型	是否封尾	货号
Stability 100 C30, 3 μm	(polymer) 封尾	st13.30.
Stability 100 C30, 5 μm	(polymer) 封尾	st15.30.
Stability 100 C30-NE, 5 μm	(polymer) 未封尾	st15.3p.
Stability 100 C30-m, 5 μm	(monomer) 封尾	st15.3m.
Stability 100 BS-C13, 5 μm	(with basic Spacer) 封尾	st15.13.
Stability 100 BS-C17, 3 μm	(with basic Spacer) 封尾	st13.17.
Stability 100 BS-C17, 5 μm	(with basic Spacer) 封尾	st15.17.
Stability 100 BS-C17, 10 μm	(with basic Spacer) 封尾	st10.17.
Stability 100 BS-C23, 5 μm	(with basic Spacer) 封尾	st15.23.
Stability 120 BS-C23, 5 μm	(with basic Spacer) 未封尾	st25.23.
Stability 120 BS-C23, 3 μm	(with basic Spacer) 未封尾	st23.23.
Stability 120 BS-C23-e, 5 μm	(with basic Spacer) 封尾	st25.23e.
Stability 300 BS-C23, 5 μm	(with basic Spacer) 未封尾	st35.23.
Stability 100 Amid-C25, 5 μm	(with Amid-Group) 封尾	st15.a25.
Stability 100 Amid-C18, 3 μm	(mit Amid-Gruppe) 封尾	st13.a18.
Stability 100 Amid-C18, 5 μm	(with Amid-Group) 封尾	st15.a18.
Stability 100 Amid-C16, 3 μm	(mit Amid-Gruppe) 封尾	st13.a16.
Stability 100 Amid-C16, 5 μm	(with Amid-Group) 封尾	st15.a16.
Stability 120 Amid-C12, 5 μm	(with Amid-Group) 未封尾	st25.a12.
Stability 120 Amid-C12, 3 μm	(with Amid-Group) 未封尾	st23.a12.



Stability ABZ-Amid-C18, 3 $\mu$ m ( 可以替代 Supelcosil ABZ)	封尾	st23.eps.
Stability ABZ-Amid-C18, 5 $\mu$ m ( 可以替代 Supelcosil ABZ)	封尾	st25.eps.
Stability Polyamine, 3 $\mu$ m (for sugars)	polymer	st33.pa.
Stability Polyamine, 5 $\mu$ m (for sugars)	polymer	st35.pa.
Stability 100 Alumina, 5 $\mu$ m		st15.al.

### Gold-Turbo 系列

球形硅胶适合应用于快速色谱柱: 1.5  $\mu$  m 粒径。

孔径: 80  $\text{Å}$  / 100  $\text{Å}$  / 120  $\text{Å}$

订货信息:

类型	% 碳载量	是否封尾	货号
Gold-Turbo 100 Si, 1.5 $\mu$ m			g12.00.
Gold-Turbo 100 ODS, 1.5 $\mu$ m	11 %C	未封尾	g12.90.
Gold-Turbo 80 ODS-3, 1.5 $\mu$ m	12 %C	封尾	g02.93.
Gold-Turbo 120 BS-C23, 1.5 $\mu$ m		未封尾 (with basic Spacer)	g22.23.
Gold-Turbo Amid-C12, 1.5 $\mu$ m		封尾 (with Amid-Group)	g22.a12.
Gold-Turbo ODS-4, 1.5 $\mu$ m		封尾 (ultrapure)	g22.94.
Gold-Turbo ODS-MS, 1.5 $\mu$ m (for LC-MS))		封尾	g22.9ms.
Gold-Turbo ODS-H, 1.5 $\mu$ m	20 % C	封尾	g22.9h.
Gold-Turbo Fluosil, 1.5 $\mu$ m		封尾 (Alkylfluoro Phase)	g22.fe.
Gold-Turbo 100 ODS-H, 1.5 $\mu$ m	(C18, 20 % C)	封尾	gt115.9h.

### Not porous Phases:

Gold-Turbo MS-C18, 1.5 $\mu$ m	封尾	g02.9e.
Gold-Turbo MS-C14, 1.5 $\mu$ m	封尾	g02.50.
Gold-Turbo MS-H (C6), 1.5 $\mu$ m	封尾	g02.h0.

### Reprosil - Fluosil 系列

多孔球形 硅胶 : 2.2  $\mu$  m, 3  $\mu$  m and 5  $\mu$  m

订货信息:

系列	封尾	货号
Reprosil Fluosil C8, 3 $\mu$ m (C8F13H4)	封尾	fl13.8e.
Reprosil Fluosil C8, 5 $\mu$ m (C8F13H4)	封尾	fl15.8e.
Reprosil Fluosil 60 PFP, 3 $\mu$ m (Pentafluorophenyl)	封尾	fl03.pfp.
Reprosil Fluosil C8-NE, 5 $\mu$ (C8F13H4) nicht	封尾	fl15.80.
Reprosil Fluosil 60 PFP, 5 $\mu$ m (Pentafluorophenyl)	封尾	fl05.pfp.
Reprosil Fluosil 120 PFP, 2.2 $\mu$ m (Pentafluorophenyl-USP-L43) .	封尾	fl122.pfp.
Reprosil Fluosil 100 PFP, 3 $\mu$ m (Pentafluorophenyl-USP-L43)	封尾	fl13.pfp.
Reprosil Fluosil 100 PFP, 5 $\mu$ m (Pentafluorophenyl-USP-L43)	封尾	fl15.pfp.
Reprosil Fluosil 100 PFP, 10 $\mu$ m (Pentafluorophenyl-USP-L43)	封尾	fl10.pfp.
Reprosil Fluosil 120E, 5 $\mu$ m, (Tridecafluoro-Dimethyl-Heptyl-Silan)	封尾	fl15.13.

## ReproShell 系列

硅胶球为实心核壳

粒径: 2.6  $\mu\text{m}$

碳载量: 5 %

PH 范围: 2 - 10

是否封尾: 是

订货信息:

类型	货号
ReproShell C18, 2.6 $\mu\text{m}$ , 150 x 4.6 mm	cs26.9e.s1546
ReproShell C18, 2.6 $\mu\text{m}$ , 100 x 4.6 mm	cs26.9e.s1046
ReproShell C18, 2.6 $\mu\text{m}$ , 50 x 4.6 mm	cs26.9e.s0546
ReproShell C18, 2.6 $\mu\text{m}$ , 150 x 4 mm	cs26.9e.s1504
ReproShell C18, 2.6 $\mu\text{m}$ , 100 x 4 mm	cs26.9e.s1004
ReproShell C18, 2.6 $\mu\text{m}$ , 50 x 4 mm	cs26.9e.s0504
ReproShell C18, 2.6 $\mu\text{m}$ , 150 x 3 mm	cs26.9e.s1503
ReproShell C18, 2.6 $\mu\text{m}$ , 100 x 3 mm	cs26.9e.s1003
ReproShell C18, 2.6 $\mu\text{m}$ , 50 x 3 mm	cs26.9e.s0503
ReproShell C18, 2.6 $\mu\text{m}$ , 150 x 2 mm	cs26.9e.s1502
ReproShell C18, 2.6 $\mu\text{m}$ , 100 x 2 mm	cs26.9e.s1002
ReproShell C18, 2.6 $\mu\text{m}$ , 50 x 2 mm	cs26.9e.s0502

## Reposil-Chiral 系列

Reposil Chiral-NR( 固定刷型键合相共价键键合 )

正相或反相流动相体系均可使用的手性分离

适合拆分手性中心连氧的芳香类成分

订货信息:

粒径	规格	货号
5 $\mu\text{m}$	50 x 4.6 mm	r15.nr.s0546
5 $\mu\text{m}$	150 x 4.6 mm	r15.nr.s1546
5 $\mu\text{m}$	100 x 4.6 mm	r15.nr.s1046
8 $\mu\text{m}$	250 x 4.6 mm	r18.nr.s2546
8 $\mu\text{m}$	150 x 4.6 mm	r18.nr.s1546
8 $\mu\text{m}$	100 x 4.6 mm	r18.nr.s1046
8 $\mu\text{m}$	250 x 8 mm	r18.nr.s2508
8 $\mu\text{m}$	250 x 10 mm	r18.nr.s2510
8 $\mu\text{m}$	250 x 20 mm	r18.nr.s2520
12 $\mu\text{m}$	250 x 4.6 mm	r112.nr.s2546
12 $\mu\text{m}$	100 x 4.6 mm	r112.nr.s1046
12 $\mu\text{m}$	250 x 8 mm	r112.nr.s2508
12 $\mu\text{m}$	250 x 10 mm	r112.nr.s2510
12 $\mu\text{m}$	250 x 20 mm	r112.nr.s2520
15 $\mu\text{m}$	250 x 4.6 mm	r115.nr.s2546
15 $\mu\text{m}$	100 x 4.6 mm	r115.nr.s1046
15 $\mu\text{m}$	250 x 8 mm	r115.nr.s2508
15 $\mu\text{m}$	250 x 10 mm	r115.nr.s2510
15 $\mu\text{m}$	250 x 20 mm	r115.nr.s2520

## Reprosil Chiral-NR-R 系列

正相或反相流动相体系均可使用的手性分离  
适合拆分手性中心连氧的芳香类成分

### 订货信息:

粒径	规格	货号
8 $\mu\text{m}$	250 x 4.6 mm	r18.nrr.s2546
8 $\mu\text{m}$	150 x 4.6 mm	r18.nrr.s1546
8 $\mu\text{m}$	100 x 4.6 mm	r18.nrr.s1046
8 $\mu\text{m}$	250 x 8 mm	r18.nrr.s2508
8 $\mu\text{m}$	250 x 10 mm	r18.nrr.s2510
8 $\mu\text{m}$	250 x 20 mm	r18.nrr.s2520
12 $\mu\text{m}$	250 x 4.6 mm	r112.nrr.s2546
12 $\mu\text{m}$	150 x 4.6 mm	r112.nrr.s1546
12 $\mu\text{m}$	100 x 4.6 mm	r112.nrr.s1046
12 $\mu\text{m}$	250 x 8 mm	r112.nrr.s2508
12 $\mu\text{m}$	250 x 10 mm	r112.nrr.s2510
12 $\mu\text{m}$	250 x 20 mm	r112.nrr.s2520

## Reprosil Chiral-OM

纤维素氨基甲酸酯键合相

粒径: 3  $\mu\text{m}$

可以代替 Daicel OD-3 (USP-L40, Cellulose tris-3,5-dimethylphenylcarbamate mod. Silica)

### 订货信息:

规格	货号
250 x 4.6 mm	r63.om.s2546
150 x 4.6 mm	r63.om.s1546
125 x 4.6 mm	r63.om.s12546
100 x 4.6 mm	r63.om.s1046
50 x 4.6 mm	r63.om.s0546
33 x 4.6 mm	r63.om.s03346

## Reprosil Chiral-OM-R

纤维素氨基甲酸酯键合相

粒径: 3  $\mu\text{m}$

可以代替 Daicel OD-3R (USP-L40, Cellulose tris-3,5-dimethylphenylcarbamate mod. Silica)

### 订货信息:

规格	货号
250 x 4.6 mm	r63.omr.s2546
150 x 4.6 mm	r63.omr.s1546
125 x 4.6 mm	r63.omr.s12546
100 x 4.6 mm	r63.omr.s1046
50 x 4.6 mm	r63.omr.s0546
33 x 4.6 mm	r63.omr.s03346

## Reprosil Chiral-OM

粒径: 5  $\mu\text{m}$

可以代替 Daicel OD-H, (USP-L40, Cellulose

tris-3,5-dimethylphenylcarbamate mod. Silica)

### 订货信息:

规格	货号
250 x 4.6 mm	r65.om.s2546
150 x 4.6 mm	r65.om.s1546
100 x 4.6 mm	r65.om.s1046
250 x 10 mm	r65.om.s2510
250 x 20mm	r65.om.s2520

## Reprosil Chiral-OM-R

粒径: 5  $\mu\text{m}$

可以代替 Daicel OD-RH (USP-L40, Cellulose tris-3,5-dimethylphenylcarbamate mod. Silica)

### 订货信息:

规格	货号
250 x 4.6 mm	r65.omr.s2546
150 x 4.6 mm	r65.omr.s1546
100 x 4.6 mm	r65.omr.s1046
250 x 10 mm	r65.omr.s2510
250 x 20 mm	r65.omr.s2520

## Reprosil Chiral-OM

粒径: 10  $\mu\text{m}$

可以代替 Daicel OD-H (USP-L40, Cellulose tris-3,5-dimethylphenylcarbamate mod. Silica)

### 订货信息:

规格	货号
250 x 4.6 mm	r60.om.s2546
150 x 4.6 mm	r60.om.s1546
100 x 4.6 mm	r60.om.s1046
250 x 10 mm	r60.om.s2510
250 x 20 mm	r60.om.s2520

## Reprosil Chiral-OM

粒径: 20  $\mu\text{m}$

可以代替 Daicel OD (USP-L40, Cellulose tris-3,5-dimethylphenylcarbamate mod. Silica)

订货信息:

规格	货号
250 x 4.6 mm	r620.om.s2546
150 x 4.6 mm	r620.om.s1546
100 x 4.6 mm	r620.om.s1046
250 x 10 mm	r620.om.s2510
250 x 20 mm	r620.om.s2520

## Reprosil Chiral-AMS (Amylose Tris (S)-A-Methylbenzyl-Carbamate-Phase, for NP- and RP-Mode)

粒径: 3  $\mu\text{m}$

可以代替 Daicel AS-3 和 Daicel AS-3R

订货信息:

规格	货号
<b>正相体系</b>	
250 x 4.6 mm	r63.AMS.s2546
150 x 4.6 mm	r63.AMS.s1546
125 x 4.6 mm	r63.AMS.s12546
100 x 4.6 mm	r63.AMS.s1046
50 x 4.6 mm	r63.AMS.s0546
33 x 4.6 mm	r63.AMS.s03346

### 反相体系

250 x 4.6 mm	r63.AMSR.s2546
150 x 4.6 mm	r63.AMSR.s1546
125 x 4.6 mm	r63.AMSR.s12546
100 x 4.6 mm	r63.AMSR.s1046
50 x 4.6 mm	r63.AMSR.s0546
33 x 4.6 mm	r63.AMSR.s03346

粒径: 5  $\mu\text{m}$

可以代替 Daicel AS-H 和 Daicel AS-RH

订货信息:

规格	货号
<b>正相体系</b>	
250 x 4.6 mm	r65.AMS.s2546
150 x 4.6 mm	r65.AMS.s1546
100 x 4.6 mm	r65.AMS.1046
250 x 10 mm	r65.AMS.s2510
250 x 20 mm	r65.AMS.s2520

## 反相体系

250 x 4.6 mm	r65.AMSR.s2546
150 x 4.6 mm	r65.AMSR.s1546
100 x 4.6 mm	r65.AMSR.s1046
250 x 10 mm	r65.AMSR.s2510
250 x 20 mm	r65.AMSR.s2520

粒径: 10  $\mu\text{m}$

可以代替 Daicel AS

订货信息:

规格	货号
250 x 4.6 mm	r60.AMS.s2546
150 x 4.6 mm	r60.AMS.s1546
100 x 4.6 mm	r60.AMS.s1046
250 x 10 mm	r60.AMS.s2510
250 x 20 mm	r60.AMS.s2520

## Reprosil Chiral-AM

直链淀粉的氨基甲酸盐键合相

粒径: 3  $\mu\text{m}$

可以代替 Daicel AD-3 (USP-L51, Amylose tris-3,5-dimethylphenylcarbamate mod. Silica)

订货信息:

规格	货号
250 x 4.6 mm	r63.am.s2546
150 x 4.6 mm	r63.am.s1546
125 x 4.6 mm	r63.am.s12546
100 x 4.6 mm	r63.am.s1046
50 x 4.6 mm	r63.am.s0546
33 x 4.6 mm	r63.am.s03346

## Reprosil Chiral-AM-R

直链淀粉的氨基甲酸盐键合相

粒径: 3  $\mu\text{m}$

可以代替 Daicel AD-3R(USP-L51, Amylose tris-3,5-dimethylphenylcarbamate mod. Silica)

订货信息:

规格	货号
250 x 4.6 mm	r63.amr.s2546
150 x 4.6 mm	r63.amr.s1546
125 x 4.6 mm	r63.amr.s12546
100 x 4.6 mm	r63.amr.s1046
50 x 4.6 mm	r63.amr.s0546
33 x 4.6 mm	r63.amr.s03346



### Reprosil Chiral-AM

粒径: 5  $\mu$  m

可以代替 Daicel AD-H (USP-L51, Amylose tris-3,5-dimethylphenylcarbamate mod. Silica)

订货信息:

规格	货号
250 x 4.6 mm	r65.am..s2546
150 x 4.6 mm	r65.am..s1546
100 x 4.6 mm	r65.am..s1046
250 x 10 mm	r65.am..s2510
250 x 20 mm	r65.am..s2520

### Reprosil Chiral-AM-R

粒径: 5  $\mu$  m

可以代替 Daicel AD-RH (USP-L51, Amylose tris-3,5-dimethylphenylcarbamate mod. Silica)

订货信息:

规格	货号
250 x 4.6 mm	r65.amr.s2546
150 x 4.6 mm	r65.amr.s1546
100 x 4.6 mm	r65.amr.s1046
250 x 10 mm	r65.amr.s2510
250 x 20 mm	r65.amr.s2520

### Reprosil Chiral-AM

粒径: 10  $\mu$  m

可以代替 Daicel AD (USP-L51, Amylose tris-3,5-dimethylphenylcarbamate mod. Silica)

订货信息:

规格	货号
250 x 4.6 mm	r60.am..s2546
150 x 4.6 mm	r60.am..s1546
100 x 4.6 mm	r60.am..s1046
250 x 10 mm	r60.am..s2510
250 x 20 mm	r60.am..s2520

### Reprosil Chiral-AM-R

粒径: 10  $\mu$  m

可以代替 Daicel AD-R (USP-L51, Amylose tris-3,5-dimethylphenylcarbamate mod. Silica)

订货信息:

规格	货号
250 x 4.6 mm	r60.amr.s2546
150 x 4.6 mm	r60.amr.s1546
100 x 4.6 mm	r60.amr.s1046
250 x 10 mm	r60.amr.s2510
250 x 20 mm	r60.amr.s2520

### Reprosil Chiral-AM

粒径: 20  $\mu$  m

可以代替 Daicel AD (USP-L51, Amylose tris-3,5-dimethylphenylcarbamate mod. Silica)

订货信息:

规格	货号
250 x 4.6 mm	r620.am.s2546
150 x 4.6 mm	r620.am.s1546
100 x 4.6 mm	r620.am.s1046
250 x 10 mm	r620.am.s2510
250 x 20 mm	r620.am.s2520

### Reprosil Chiral-CM (Phenyl-Carbamate-Phase)

粒径: 5  $\mu$  m

可以代替 Daicel OC-H (Tris (Phenylcarbamate)-Cellulose mod. Silica)

订货信息:

规格	货号
250 x 4.6 mm	r65.cm.s2546
150 x 4.6 mm	r65.cm.s1546
100 x 4.6 mm	r65.cm.s1046
250 x 10 mm	r65.cm.s2510

粒径: 3  $\mu$  m

可以代替 Daicel OJ-3

订货信息:

规格	货号
250 x 4.6 mm	r63.jm.s2546
150 x 4.6 mm	r63.jm.s1546
100 x 4.6 mm	r63.jm.s1046

粒径: 5  $\mu$  m

可以代替 Daicel OJ-H

订货信息:

规格	货号
250 x 4.6 mm	r65.jm.s2546
150 x 4.6 mm	r65.jm.s1546
100 x 4.6 mm	r65.jm.s1046
250 x 10 mm	r65.jm.s2510

粒径: 10  $\mu$  m

可以代替 Daicel OJ

订货信息:

规格	货号
250 x 4.6 mm	r60.jm.s2546
150 x 4.6 mm	r60.jm.s1546
100 x 4.6 mm	r60.jm.s1046
250 x 10 mm	r60.jm.s2510

## Reprosil Chiral-ZM

纤维素键合相

可以正相或反相流动相体系均可使用

粒径: 5  $\mu$  m

可以代替 Daicel OZ-H

**订货信息:**

规格	货号
250 x 4.6 mm	r65.zm.s2546
150 x 4.6 mm	r65.zm.s1546
100 x 4.6 mm	r65.zm.s1046
250 x 10 mm	r65.zm.s2510
250 x 20 mm	r65.zm.s2520

粒径: 3  $\mu$  m

可以代替 Daicel OZ-3

**订货信息:**

规格	货号
250 x 4.6 mm	r63.zm.s2546
150 x 4.6 mm	r63.zm.s1546
125 x 4.6 mm	r63.zm.s12546
100 x 4.6 mm	r63.zm.s1046
50 x 4.6 mm	r63.zm.s0546
33 x 4.6 mm	r63.zm.s03346

## Reprosil Chiral-ZA

直链淀粉键合相

可以正相或反相流动相体系均可使用

可以代替 Epitomize 1K

**订货信息:**

粒径	规格	货号
5 $\mu$ m	250 x 4.6 mm	r65.za.s2546
5 $\mu$ m	150 x 4.6 mm	r65.za.s1546
5 $\mu$ m	100 x 4.6 mm	r65.za.s1046
5 $\mu$ m	250 x 10 mm	r65.za.s2510
3 $\mu$ m	250 x 4.6 mm	r63.za.s2546
3 $\mu$ m	150 x 4.6 mm	r63.za.s1546
3 $\mu$ m	125 x 4.6 mm	r63.za.s12546
3 $\mu$ m	100 x 4.6 mm	r63.za.s1046
3 $\mu$ m	50 x 4.6 mm	r63.za.s0546
3 $\mu$ m	33 x 4.6 mm	r63.za.s03346

## Reprosil Chiral-YM

直链淀粉键合相

可以正相或反相流动相体系均可使用

粒径: 5  $\mu$  m

可以代替 Daicel AY-H

**订货信息:**

规格	货号
250 x 4.6 mm	r65.ym.s2546
150 x 4.6 mm	r65.ym.s1546
100 x 4.6 mm	r65.ym.s1046
250 x 10 mm	r65.ym.s2510
250 x 20 mm	r65.ym.s2510

粒径: 3  $\mu$  m

可以代替 Daicel AY-3

**订货信息:**

规格	货号
250 x 4.6 mm	r63.ym.s2546
150 x 4.6 mm	r63.ym.s1546
125 x 4.6 mm	r63.ym.s12546
100 x 4.6 mm	r63.ym.s1046
50 x 4.6 mm	r63.ym.s0546
33 x 4.6 mm	r63.ym.s03346

## Reprosil Chiral-BM

纤维素 - 苯甲酰基键合相

可以正相或反相流动相体系均可使用

粒径: 5  $\mu$  m

可以代替 Daicel OB-H

**订货信息:**

规格	货号
250 x 4.6 mm	r65.bm.s2546
150 x 4.6 mm	r65.bm.s1546
100 x 4.6 mm	r65.bm.s1046
250 x 10 mm	r65.bm.s2510

粒径: 10  $\mu$  m

可以代替 Daicel OB

**订货信息:**

规格	货号
250 x 4.6 mm	r60.bm.s2546
150 x 4.6 mm	r60.bm.s1546
100 x 4.6 mm	r60.bm.s1046
250 x 10 mm	r60.bm.s2510

## Reprosil -AGP

手性 AGP - Protein 键合相的硅胶 (USP-L41)

孔径: 300  $\text{\AA}$

粒径: 5  $\mu$  m

可以代替 Daicel OB-H

**订货信息:**

规格	货号
100 x 4 mm	r35.agp.s1004
100 x 2 mm	r35.agp.s1002
150 x 2mm	r35.agp.s1502
50 x 2 mm	r35.agp.s0502
保护柱柱芯 5 x 2 mm; 2 个	r35.agp.v0002
直接式柱套	91.00

## Reprosil-HSA

手性 AGP - Protein 键合相的硅胶 (USP-L41)

孔径: 300  $\text{\AA}$

粒径: 5  $\mu$  m

**订货信息:**

规格	货号
100 x 2 mm	r35.hsa.s1002
150 x 2 mm	r35.hsa.s1502
50 x 2 mm	r35.hsa.s0502
保护柱柱芯 : 5x2 mm; 2 个	r35.hsa.v0002
直接式柱套	91.00

## 其他手性键合相

### 订货信息:

系列	粒径	规格	货号	备注
Nucleosil Chiral-2	5 μm	250 x 4.0 mm	n15.dpg.s2504	
Reprosil Chiral-PS	8 μm	250 x 4.0 mm	r18.ps.s2504	可以使用正相或反相流动相体系, (芳香族化合物的手性碳连有硫或磷的, 例如: 亚砷, 氧化膦, 膦酸酯, Thiophosphin 氧化物, 次膦氧化物, 膦硼烷)
Reprosil Chiral-OH,	8 μm	250 x 4.0 mm	r18.oh.s2504	可以使用正相或反相流动相体系, (手性中心连有芳香醇类成分)
Reprosil Chiral-AA	8 μm	250 x 4.0 mm	r18.aa.s2504	可以正相或反相流动相体系均可使用, (适合于所有的氨基酸)
Reprosil Chiral-TAG	8 μm	250 x 4.0 mm	r18.tag.s2504	可以使用正相或反相流动相体系, (适合于替考拉宁, 氨基醇, N- 阻断氨基酸, α- 羟基酸, 酰亚胺, 氨基酸类, USP-L63)
Reprosil Chiral-TG	5 μm	250 x 4.0 mm	r15.tg.s2504	可以反相流动相体系使用, 用于 FMOC-and Dansyl- 氨基酸拆分
Reprosil Chiral-CA	5 μm	250 x 4.0 mm	r15.ca.s2504	可以正相流动相体系使用, 用于含有羧酸类化合物拆分
Reprosil Chiral-CA	8 μm	250 x 4.0 mm	r18.ca.s2504	可以正相流动相体系使用, 用于含有羧酸类化合物拆分
Reprosil Chiral-Beta-CD,	5 μm	250 x 4.0 mm	r15.bcd.s2504	USP-L45 (Dansyl- 氨基酸, 巴比妥类, 磺胺类药物普萘洛尔, 前列腺素类)
Reprosil Chiral-Beta-CD	4 μm	150 x 4.0 mm	r14.bcd.s1504	USP-L45
Reprosil Chiral-Gamma-CD	4 μm	150 x 4.0 mm	r14.gcd.s2504	
Reprosil Chiral-D-PhenylGlycin	5 μm	250x4.0 mm	r15.DPG.s2504	USP-L36 刷状类型的固定相 可以代替 Nucleosil Chiral-2, 流动相: Heptane / IPA / TFA 适合于除草剂 + 药物分子 (醇, 碳水化合物, 酸, 酯, 亚砷类成分)
		250 x 10 mm	r15.DPG.s2510	
		250 x 20 mm	r15.DPG.s2520	
Reprosil Chiral-D-PhenylGlycin	3 μm	150x4 mm	r13.DPG.s2504	USP-L36, N-(3,5-Dinitrobenzoyl)-D-Phenylglycin. 刷状类型的固定相 流动相: Heptane / IPA / TFA 适合于除草剂 + 药物分子 (醇, 碳水化合物, 酸, 酯, 亚砷类成分)
Reprosil Chiral-L-PhenylGlycin	5 μm	250x4 mm	r15.LPG.s2504	USP-L36, N-(3,5-Dinitrobenzoyl)-L-Phenylglycin. 刷状类型的固定相 流动相: Heptane / IPA / TFA, 可以代替 Nucleosil Chiral-3, 适合于除草剂 + 药物分子 (醇, 碳水化合物, 酸, 酯, 亚砷类成分)
Reprosil Chiral-l-Prolin	5 μm	250x4 mm	r15.pr.s2504	适合于氨基酸类, 丁二酰亚胺, 巴比妥酸盐, 亚砷类成分
Reprosil L-Hydroxy-Prolin	5 μm	250x4mm	r15.hp.s2504	可以代替 Nucleosil Chiral-1, USP-L32 流动相: 2-10 mM 硫酸铜, 20-60°C (适合于 DL- 扁桃酸, DL- 乳酸, DL- 天冬酰胺; DL- 丝氨酸, DL- 苯丙氨酸, DL- 苏氨酸, DL- 脯氨酸, DL- 组氨酸, DL- 缬氨酸, DL- 酪氨酸, DL- 色氨酸),

## Reprosil Mixed-Mode 系列

### R 多孔球形硅胶

孔径: 100 Å

表面积: 300 m<sup>2</sup> /g

孔容积: 0.9 ml/g

### 订货信息:

系列	粒径	键合相	货号
Reprosil Amid-C16	5 μm	Amid - C16	r15.a16 7.
Reprosil Amino-C18	5 μm	C18- with NH <sub>2</sub> -Groups	r15.18a 7.
Reprosil Cyano-C18	5 μm	C18-with CN-groups	r15.c9 7.
Reprosil Phenyl-C18	5 μm	C18-with Phenyl- groups	r15.p9 7.
Reprosil C18-Acid	5 μm	C18-with Acid- groups	r15.9ac 7.

## 水溶性凝胶排阻色谱柱

### Reprosil 50 SEC

用于多肽的分离

分子量范围: 500 - 10 000 D

(可以代替 Synchropak GPC-Peptides)

### 订货信息:

规格	货号
300 x 4.6 mm	r05.sec.s3046
300 x 8 mm	r05.sec.s3008
Guard: 23 x 8 mm	r05.sec.s0308

### Reprosil 200 SEC

用于蛋白质的分离

分子量范围: 10 000 - 500 000 D

(可以代替 G3000 SWXL)

### 订货信息:

规格	货号
300 x 4.6 mm	r25.sec.s3046
300 x 8 mm	r25.sec.s3008
Guard: 23 x 8 mm	r25.sec.s0308

## Reprosil 200 SEC-2

用于蛋白质的分离

分子量范围: 10 000 - 500 000 D

(可以代替 G3000 SWXL)

### 订货信息:

规格	货号
300 x 4.6 mm	r25.sec2.s3046
300 x 8 mm	r25.sec2.s3008
Guard: 23 x 8 mm	r25.sec2.s0308

## Reprosil 300 SEC

用于蛋白质的分离

分子量范围: 10 000 - 1 000 000 D

(可以代替 G3000 SWXL)

### 订货信息:

规格	货号
300 x 4.6 mm	r35.sec.s3046
300 x 8 mm	r35.sec.s3008
Guard: 23 x 8 mm	r35.sec.s0308

## Reprosil 4000 SEC

用于蛋白质的分离

分子量范围: 20 000 - 5 000 000 D

(可以代替 G4000 SWXL)

### 订货信息:

规格	货号
300 x 4.6 mm	r45.sec.s3046
300 x 8 mm	r45.sec.s3008
Guard: 23 x 8 mm	r45.sec.s0308

## Repromer OH 系列

### 水溶性凝胶排阻色谱柱

聚甲基丙烯酸甲酯聚合物基质 (USP-L37 / USP-L38)

可以代替: HEMA-Bio (Tessek), OHpack (Shodex), PL-Aquagel-OH (Agilent), Polysep P3000/4000/5000 (Phenomenex), Suprema (PSS), TSK-G2500/3000/4000/5000 PW, Ultrahydrogel (Waters).

流速: 1 ml/min, PH 范围: 2-10, 流动相: 水 (含有缓冲盐): 甲醇 / 乙腈

柱温: 10 - 80 °C, 保存条件 0.05 % NaN<sub>3</sub>, 避免柱子保存液干

适合于中性和阴离子聚合物 (PEO, PEG, 普鲁兰多糖, 聚丙烯酰胺, 透明质酸, 聚丙烯酸, 肝素, Pektin, 聚乙烯醇等)

### 订货信息:

系列	分子量范围	规格	货号
Repromer OH-3000	< 20 000 D	300 x 8 mm	rm00.OH3.s3008
		250 x 8 mm	rm00.OH3.s2508
		30 x 8 mm	rm00.OH3.s0308
Repromer OH-4000	2 000 - 80 000 D	300 x 8 mm	rm10.OH4.s3008
		250 x 8 mm	rm10.OH4.s2508
		30 x 8 mm	rm10.OH4.s0308
Repromer OH-5000	8 000 - 300 000 D	300 x 8 mm	rm30.OH5.s3008
		250 x 8 mm	rm30.OH5.s2508
		30 x 8 mm	rm30.OH5.s0308
Repromer OH-6000	20 000 - 3 Mio. D	300 x 8 mm	rm60.OH6.s3008
		250 x 8 mm	rm60.OH6.s2508
		30 x 8 mm	rm60.OH6.s0308

### 油溶性凝胶排阻柱 Repro Gel GPC

主要的规格: 300 x 8 mm (or 600 x 8 mm) iD.

柱子保存溶剂是 THF

### 产品信息:

系列	分子量范围	货号
Repro-Gel GPC, 5 μm, 50 Å	< 1 000	rg5.050.
Repro-Gel GPC, 5 μm, 100 Å	> 3000	rg5.100.
Repro-Gel GPC, 5 μm, 500 Å	> 20 000	rg5.500.
Repro-Gel GPC, 5 μm, 1000 Å	1 000 - 40 000	rg5.103.
Repro-Gel GPC, 5 μm, 10 000 Å	4 000 - 500 000	rg5.104.
Repro-Gel GPC, 5 μm, 100 000 Å	10 000 - 2 000 000	rg5.105.
Repro-Gel GPC, 5 μm, 1 000 000 Å	200 000 - 10 000 000	rg5.106.
Repro-Gel GPC, 5 μm, linear	1 000 - 1 000 000	rg5.lin.

GPC3 μm 粒径请电话咨询, 需要定制!

## Repromer + Reprisil Carbohydrates 系列

用于碳水化合物分离

### 1.) Spherical Polymer Phases with Polystyrene-divinylbenzene (PSDVB) Matrix:

基于苯乙烯 - 二乙烯基苯 (PSDVB) 基质的球形聚合物

用于糖、醇和有机酸分离 (Polymers eluate in front of monomers!)

(可以替代: HC-75 (Waters), PL-HiPlex (Polymer Labs), Rezex (Phenomenex), Aminex 87 (Bio-Rad), Chrompack Org. Acid / Carbohydrates (Varian), Nucleogel-Sugar (MN), Supelcogel (Supelco), Carbosep (Shodex), Polyspher (Merck), Metacarb (Metachem).

订货信息:

系列	粒径	规格	货号	流动相
Repro-Gel H,	9 $\mu$ m	250 x 8 mm	su9.h0.s2508	9 mM Sulfuric acid
		300 x 8 mm	su9.h0.s3008	
		300 x 4.6 mm	su9.h0.s3046	
Repro-Gel Ca	9 $\mu$ m	250 x 8 mm	su9.ca.s2508	Water at 80 C <sup>°</sup>
		300 x 8 mm	su9.ca.s3008	
		300 x 4.6 mm	su9.ca.s3046	
Repro-Gel Na	9 $\mu$ m	250 x 8 mm	su9.na.s2508	Water at 80 C <sup>°</sup>
		300 x 8 mm	su9.ca.s3008	
		300 x 4.6 mm	su9.ca.s3046	
Repro-Gel Na	9 $\mu$ m	250 x 8 mm	su9.na.s2508	Water at 80 C <sup>°</sup>
		300 x 8 mm	su9.na.s3008	
		300 x 4.6 mm	su9.na.s3046	
Repro-Gel K	9 $\mu$ m	250 x 8 mm	su9.k0.s2508	Water at 80 C <sup>°</sup>
		300 x 8 mm	su9.k0.s3008	
		300 x 4.6 mm	su9.k0.s3046	
Repro-Gel Pb	9 $\mu$ m	250 x 8 mm	su9.pb.s2508	Water at 80 C <sup>°</sup>
		300 x 8 mm	su9.pb.s3008	
		300 x 4.6 mm	su9.pb.s3046	

保护柱: 20 x 8 mm

备注:

分析柱规格: 250 x 4 mm

保护柱柱芯: 5 个 /pk: 10 x 4 mm, 柱套: 货号 81.10

### 2.) Repromer RCX-30: (可以替代: Metrosep Carb-1 and CarboPak PA1)

基于聚苯乙烯 / 二乙烯基苯的聚合物的阴离子交换柱。

用于单糖、寡糖、多糖和糖醇的分离。

流动相: NaOH and Na-Acetate.

订货信息:

粒径	规格	货号
7 $\mu$ m	250 x 4 mm	rm37.rcx.s2504

### 3.) 用于糖分离的基于硅胶基质的特殊氨基键合相的氨基柱

(Monomers eluate in front of Polymers!)

订货信息:

粒径	规格	货号
5 $\mu$ m	250 x 4.6 mm	r15.ch.s25xx.s2546

(流动相: ACN / Wasser (70/30), 检测器: RI)

## Repromer 系列 离子交换柱和反相柱

具有苯乙烯与二乙烯苯基质的聚合物基质 (PSDVB).

PH 范围: 1 - 14

适用于生物分子 (多肽和蛋白) 和其他小的碱性成分化合物。

键合相是反相和离子混合的。

可以替代 PLRP-S 的 Polymer Lab 和 Hamilton。

### 订货信息:

系列	粒径	孔径	货号
Repromer 100 RPS	5 $\mu$ m	100 A <sup>o</sup> Pores	RM15.rps
Repromer 100 RPS	8 $\mu$ m	100 A <sup>o</sup> Pores	RM18.rps
Repromer 100 RPS	10 $\mu$ m	100 A <sup>o</sup> Pores	RM10.rps
Repromer 300 RPS	5 $\mu$ m	300 A <sup>o</sup> Pores	RM35.rps
Repromer 300 RPS	8 $\mu$ m	300 A <sup>o</sup> Pores	RM38.rps
Repromer 300 RPS	10 $\mu$ m	300 A <sup>o</sup> Pores	RM30.rps
Repromer 1000 RPS	8 $\mu$ m	1000 A <sup>o</sup> Pores	RM68.rps
Repromer 1000 RPS	10 $\mu$ m	1000 A <sup>o</sup> Pores	RM60.rps

### 离子交换柱, 孔径 100 A<sup>o</sup>, 适合于小分子化合物

#### 订货信息:

系列	粒径	货号	备注
Repromer AXS	7 $\mu$ m	RM17.axs	( 阴离子交换柱, 具有很强抑制性 )
Repromer AX	5 $\mu$ m	RM15.ax	( 阴离子交换柱 )
Repromer AX	10 $\mu$ m	RM10.ax	( 阴离子交换柱 )
Repromer SCX	10 $\mu$ m	RM10.scx	( 阳离子交换柱 )
Repromer CAT	7 $\mu$ m	RM17.cat.	( 阳离子交换柱, 流动相: 2 mM 硫酸铜 )

### 离子交换柱, 孔径 1000 A<sup>o</sup>, 用于多肽和蛋白分离 ( 可以替代 Vydac 300 VHP)

#### 订货信息:

系列	粒径	货号	备注
Repromer 1000 AX	10 $\mu$ m	RM60.ax	阴离子交换柱

### 用于糖和糖醇类成分分离在高 PH 条件下 ( 可以代替 Metrosep Carb-1 and CarboPak PA1)

#### 订货信息:

系列	粒径	货号	备注
Repromer 30 RCX	7 $\mu$ m	RM37.rcx	(300 A <sup>o</sup> Pores for complex mixtures)
Repromer 10 RCX	7 $\mu$ m	RM17.rcx	(100 A <sup>o</sup> Pores, sugars up to DP7)

## Reprosil-DIBS + ADS 系列

用于直接分析血清 / 血浆样品的分析

### 订货信息:

系列	粒径
Reprosil DIBS-C18, 20 $\mu$ m ( DIBS.90....)	C18-Diol 保护柱, 用于除去蛋白质类成分。除去蛋白质, 用于药物分析。 柱子规格 20 mm (长) 货号 :dibs.90.s020x 柱芯 20 mm (长) 货号 :dibs.90.v020x 柱子规格 10 mm (长) 货号 :dibs.90.s010x 柱芯 10 mm (长) 货号 :dibs.90.v010x
Reprosil DIBS-C8, 20 $\mu$ m ( DIBS.80....)	C8-Diol 保护柱, 用于除去蛋白质类成分。除去蛋白质, 用于药物分析。 柱子规格 20 mm (长) 货号 :dibs.80.s020x 柱芯 20 mm (长) 货号 :dibs.80.v020x 柱子规格 10 mm (长) 货号 :dibs.80.s010x 柱芯 10 mm (长) 货号 :dibs.80.v010x



Reprosil DIBS-C4, 20 μ m (DIBS.40....)

C4-Diol 保护柱, 用于除去蛋白质类成分。除去蛋白质, 用于药物分析。

柱子规格 20 mm (长) 货号 :dibs.40.s020x

柱芯 20 mm (长) 货号 :dibs.40.v020x

柱子规格 10 mm (长) 货号 :dibs.40.s010x

柱芯 10 mm (长) 货号 :dibs.40.v010x

Reprosil-DIBS-RP, 10 μ m (Dibs10.rp..)

保留时间和 C4-Dibs 键合相类似。除去蛋白质, 用于药物分析。

柱子规格 20 mm (长) 货号 :dibs.40.s020x

柱芯 20 mm (长) 货号 :dibs.40.v020x

柱子规格 10 mm (长) 货号 :dibs.40.s010x

柱芯 10 mm (长) 货号 :dibs.40.v010x

Reprosil DIBS-RP, 5 μ m / 10 μ m

分析柱 (150 x 4 mm)

(货号 :dibs5.rp for 5 μ m 或 dibs10.rp for 10 μ m)

### 德国迈克 (Dr.Maisch) 色谱柱规格和货号

#### 4.6 mm iD

Column-dimension	Part-No.
13x4.6 mm	.s0146
20x4.6 mm	.s0246
30x4.6 mm	.s0346
33x4.6 mm	.s0446
50x4.6 mm	.s0546
60x4.6 mm	.s0646
75x4.6 mm	.s0746
100x4.6 mm	.s1046
125x4.6 mm	.s1246
150x4.6 mm	.s1546
200x4.6 mm	.s2046
250x4.6 mm	.s2546
300x4.6 mm	.s3046

#### 3.0 or 4.0 mm iD

Column-dimension	Part-No.
13x3 (4) mm	.s0103 (4)
20x3 (4) mm	.s0203 (4)
30x3 (4) mm	.s0303 (4)
33x3 (4) mm	.s0403 (4)
50x3 (4) mm	.s0503 (4)
60x3 (4) mm	.s0603 (4)
75x3 (4) mm	.s0703 (4)
100x3 (4) mm	.s1003 (4)
125x3 (4) mm	.s1203 (4)
150x3 (4) mm	.s1503 (4)
250x3 (4) mm	.s2003 (4)
300x3 (4) mm	.s2503 (4)

## (Guards) (Guard-holders)

Column-dimension	Part-No.	direct	indirect (stand-alone)
5 x 4 (3) mm	.v0004 (3)	81.00	82.00
10 x 4 (3) mm	.v0104 (3)	81.10	82.10
20 x 4 (3) mm	.v0204 (3)	81.12	82.12

## 2.0 mm iD

Column-dimension	Part-No.
20x2.0 mm	.s0202
30x2.0 mm	.s0302
40x2.0 mm	.s0402
50x2.0 mm	.s0502
60x2.0 mm	.s0602
75x2.0 mm	.s0702
100x2.0 mm	.s1002
125x2.0 mm	.s1202
150x2.0 mm	.s1502
200x2.0 mm	.s2002
250x2.0 mm	.s2502
300x2.0 mm	.s2002

## (Guards) (Guard-holders)

Column-dimension	Part-No.	direct	indirect (stand-alone)
5 x 2.0 mm	.v0002	91.00	92.00
10 x 2.0 mm	.v0102	91.10	92.10
20 x 2.0 mm	.v0202		92.20

## preparative columns 8 – 200 mm iD

### 5 $\mu$ m or 7 $\mu$ m

250 x 8 mm	150 x 8 mm	125 x 8 mm
100 x 8 mm	50 x 8 mm	30 x 8 mm
250 x 10 mm	150 x 10 mm	100 x 10 mm
50 x 10 mm	30 x 10 mm	
250 x 16 mm	150 x 16 mm	30 x 16 mm
250 x 20 mm	150 x 20 mm	125 x 20 mm
100 x 20 mm	50 x 20 mm	30 x 20 mm
250 x 25 mm	150 x 25 mm	50 x 25 mm
250 x 30 mm	150 x 30 mm	50 x 30 mm
250 x 40 mm	150 x 40 mm	50 x 40 mm
250 x 50 mm	150 x 50 mm	50 x 50 mm

### 10 $\mu$ m

250 x 8 mm	150 x 8 mm	30 x 8 mm
250 x 10 mm	150 x 10 mm	30 x 10 mm
250 x 16 mm	150 x 16 mm	30 x 16 mm
250 x 20 mm	150 x 20 mm	30 x 20 mm
250 x 25 mm	150 x 25 mm	50 x 25 mm
250 x 30 mm	150 x 30 mm	50 x 30 mm
250 x 40 mm	150 x 40 mm	50 x 40 mm
250 x 50 mm	150 x 50 mm	50 x 50 mm

# Reprosil-Pur Basic-C18

Reprosil-Pur Basic-C18 is a new phase with an outstanding performance and stability:

Typical features are:

1.) Octadecyl monolayer phase bonded to spherical silica particles  
-with pore size of 100 Å,  
-a surface area of 450 m<sup>2</sup>/g and  
-a pore volume of 1.1 ml/g.

2.) Impurities:

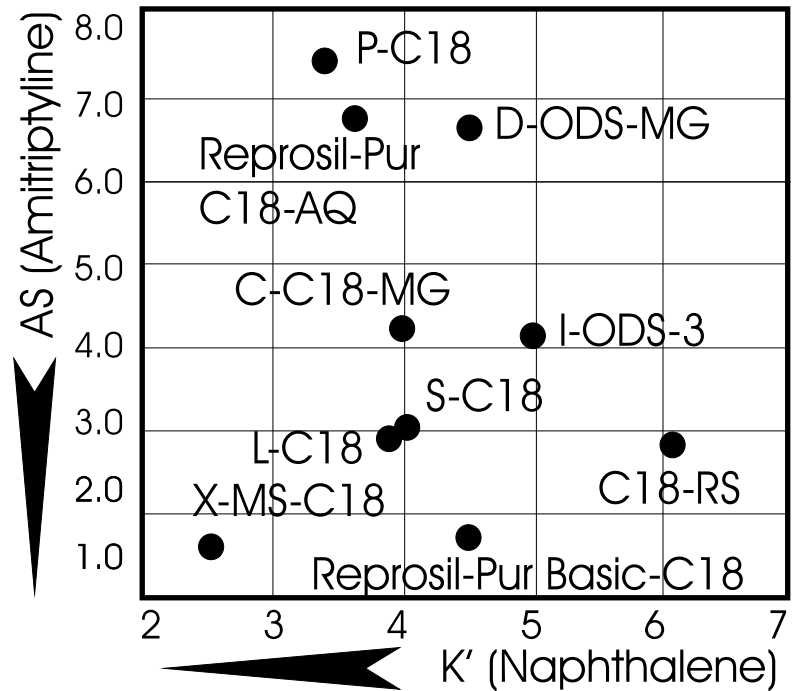
AL < 1 ppm,  
Fe < 1 ppm,  
Ti < 1 ppm,  
Zr < 1 ppm

3.) *Double bound endcapping*

4.) pH -stability from 1.5 to 10,  
because of the unique stable  
endcapping

5.) Perfect peak symmetry even with  
strong bases

## Comparison of different C18 Phases



Eluents:

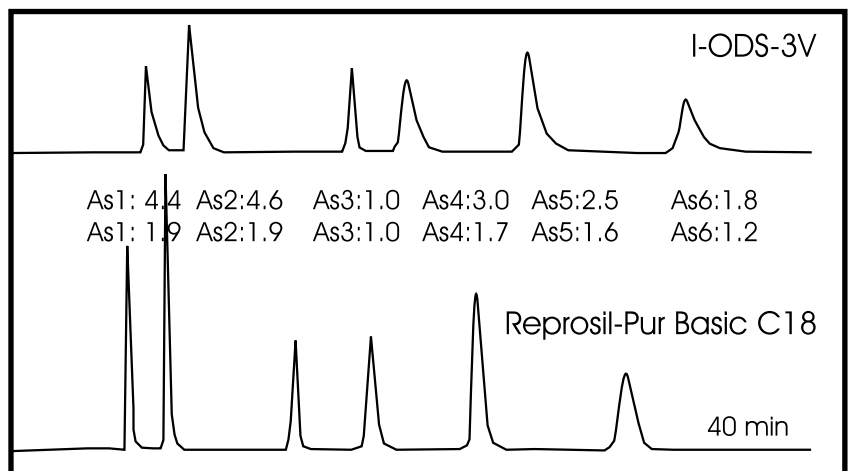
Naphthalene: MeOH / H<sub>2</sub>O ( 70 / 30)

Amitriptyline: MeOH / 20 mM K<sub>2</sub>HPO<sub>4</sub> pH7 (65 /35)

## Comparison of I-ODS-3V und Reprosil-Pur Basic-C18

Sample of basic compounds:

- 1.) Desipramine
- 2.) Nortriptyline
- 3.) Acenaphthene (I.S.)
- 4.) Imipramine
- 5.) Amitriptyline
- 6.) Trimipramine



Column Size: 150 x 4.6 mm

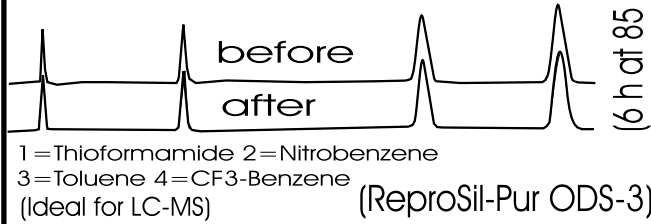
Eluent: MeOH / 20 mM K<sub>2</sub>HPO<sub>4</sub> / KH<sub>2</sub>PO<sub>4</sub>, Buffer-pH7 (70/30)

Flow rate: 1.2 ml / min.

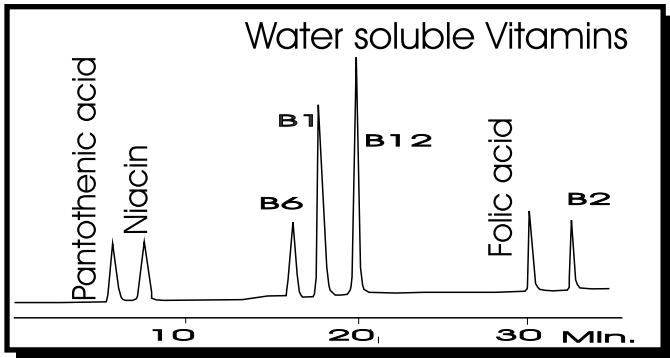
# ReproSil-Pur ODS-3

## Stability test

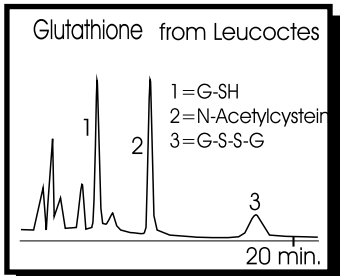
Courtesy of Bayer AG, Dr. Eymann



Stability test of Bayer-AG.  
Good columns tolerate this drastic treatment.

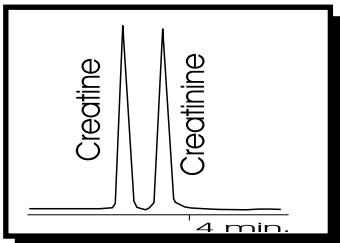


Column: ReproSil-Pur ODS-3, 5  $\mu$ m (250 x 4.6mm)  
Eluent: A: 20 mM KH<sub>2</sub>PO<sub>4</sub> pH-6,6  
B: 20 mM KH<sub>2</sub>PO<sub>4</sub> pH-6,6 / ACN (80/20)  
Gradient: 0-5 min.: 0 % B; 5 - 25 min.: 0 - 75 % B;  
25-30 min. 75-100 % B; 30-35 min.: 100 % B;  
Flow rate: 1 ml/min., Detection: 254 nm



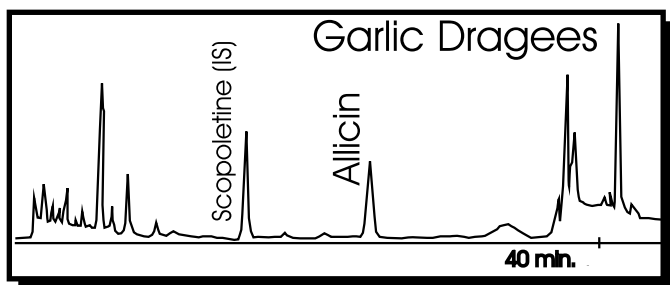
## Glutathione

ReproSil-Pur ODS-3,  
5  $\mu$ m, (250 x 4.6mm)  
Eluent:  
10mM Na<sub>2</sub>PO<sub>4</sub> pH=2,7  
+ 50  $\mu$ M Na-Octylsulfate,  
2% ACN, Flow rate: 1 ml/min.

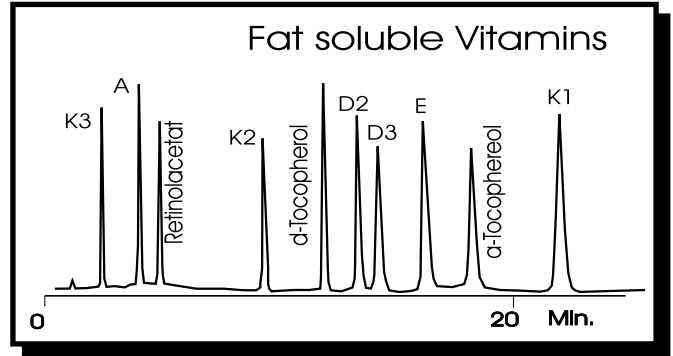


## Creatine/Creatinine

ReproSil-Pur ODS-3,  
5  $\mu$ m (150 x 4 mm)  
Eluent: 1 mM Tert-Butyl-NH<sub>4</sub>Cl  
in H<sub>2</sub>O Flow rate: 0,8 ml/min.  
Detection: 235 nm

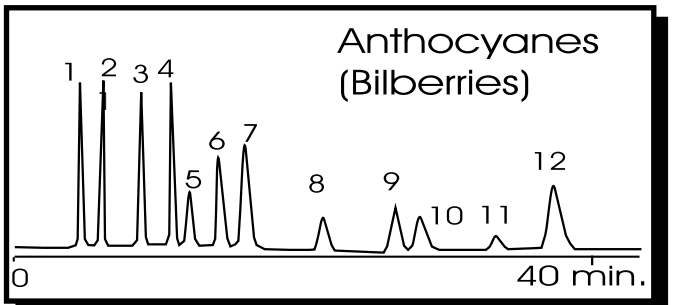


ReproSil-Pur ODS-3, 5  $\mu$ m, (250 x 4 mm)  
Gradient: A=H<sub>2</sub>O pH2 (H<sub>3</sub>PO<sub>4</sub>) / MeOH (70/30), B=MeOH,  
Flow rate: 0,8 ml/min, Detection: 254 nm

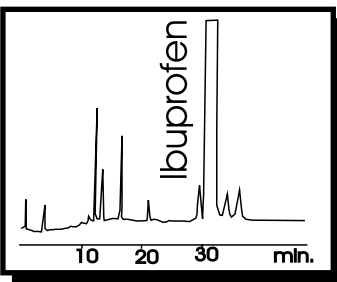


ReproSil-Pur ODS-3, 5  $\mu$ m (150 x 4.6 mm)

Eluent: 100% ACN  
Flow rate: 1 ml/min. Detection: 280 nm  
Sample: Fa. Dr. Ehrenstorfer, Augsburg, Germany

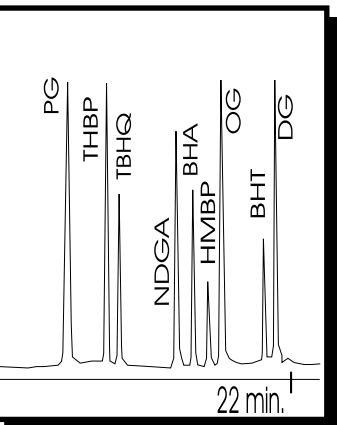


Column: ReproSil-Pur ODS-3, 5  $\mu$ m (250x4.6mm)  
Eluent: H<sub>2</sub>O/CH<sub>3</sub>CN/HCOOH (81:9:10)  
Detection: 546 nm, Flow rate: 1 ml/min., Sample:  
1=Delphinidin-3-galactoside, 2=Delphinidin-3-glucoside,  
3=Delphinidin-3-rutinoside, 4=Cyanidin-3-glucoside,  
5=Cyanidin-3-galactoside, 6=Cyanidin-3-arabinside,  
7=Petunidin-3-glucoside, 8=Peonidin-3-galactoside,  
9=Peonidin-3-glucoside, 10=Malvidin-3-galactoside,  
11=Peonidin-3-arabinside, 12=Malvidin-3-glucoside



## Ibuprofen Purity control

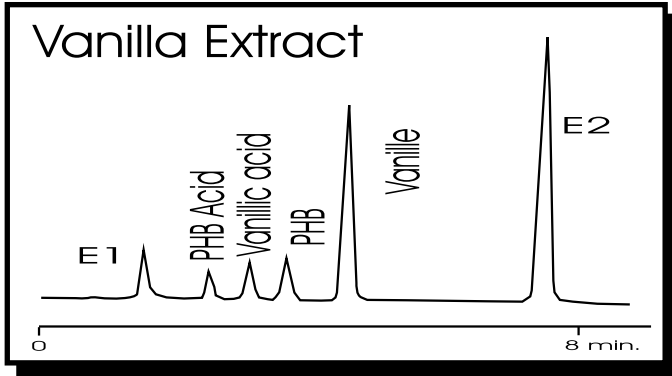
ReproSil-Pur 120 ODS-3, 5  $\mu$ m  
(150 x 2 mm)  
Eluent: A=H<sub>2</sub>O B=ACN  
Gradient: in 10 min. linear  
from 15% to 34% B,  
then isocratic up to 45 min.  
Flow rate: 0,6 ml/min. Detection:  
254 nm



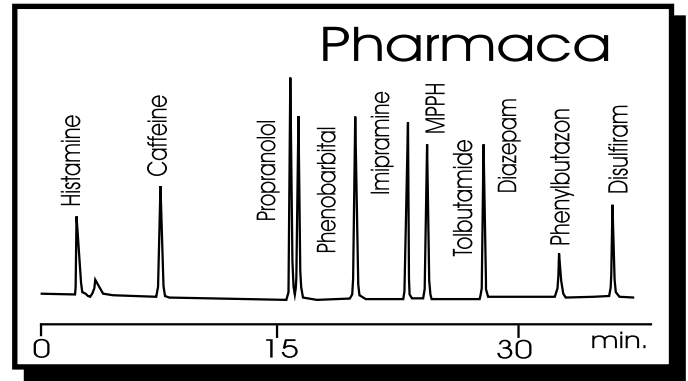
## Antioxidants (from butter)

ReproSil-Pur ODS-3, 5  $\mu$ m  
(250 x 3 mm)  
Eluent: A=Acetic Acid 5%  
B=MeOH/ACN (1:1).  
Gradient: from 40% B to  
90% B in 10 min., then isocratic  
for  
12 min. Flow rate: 0,5 ml/min.,  
Detection: 280 nm, Injection: 10  $\mu$ l,  
Temperature: RT

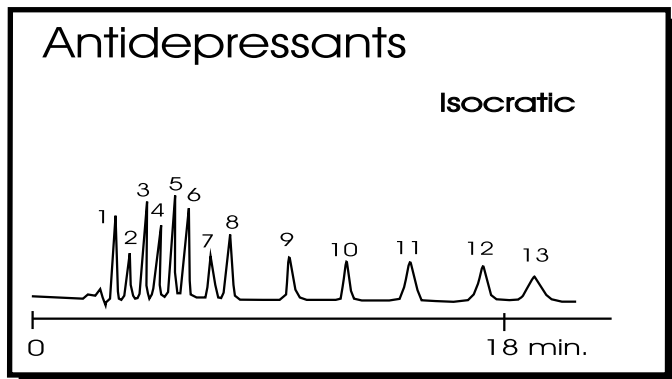
# ReproSil-Pur ODS-3



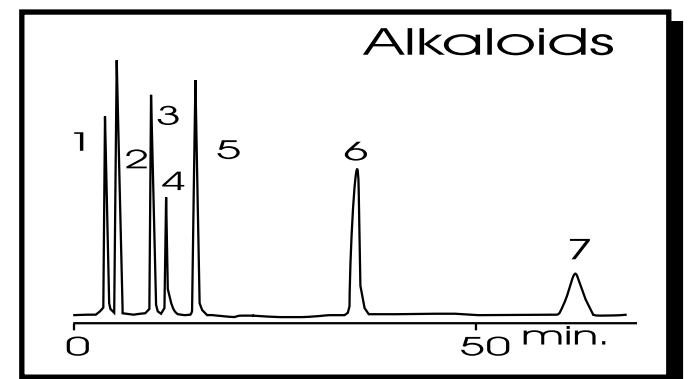
Column: ReproSil-Pur ODS-3, 3  $\mu$ m  
53 x 3 mm, Flow rate: 0,5 ml/min.  
Detection: 254 nm, Injection: 3  $\mu$ l  
Gradient: A=ACN, B= Water  
in 15 min.: from 10% A to 30% B



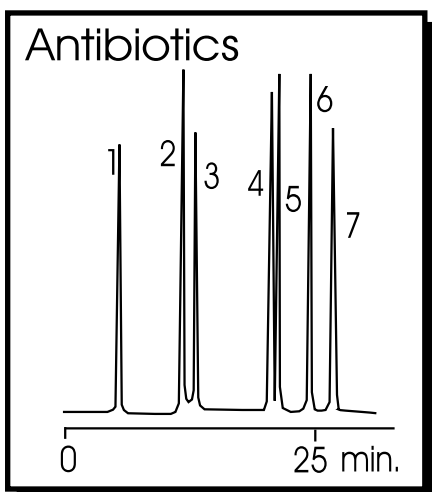
Column:  
ReproSil-Pur ODS-3, 5  $\mu$ m (250 x 4.6mm)  
Eluent:  
A: 2.5 l water+ 25 ml TEAP (Fluka) pH=3.2  
B: ACN / A (70/30, V/V)  
Flow rate: 1 ml/min. Temperature: 40 C°  
Lin. Gradient: 20 % - 100% B in 30 min.



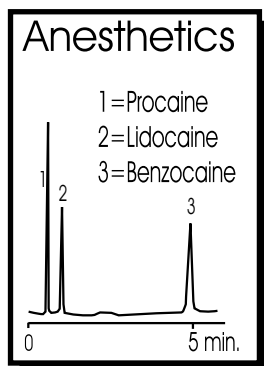
Column:  
ReproSil-Pur ODS-3, 5  $\mu$ m (250 x 4.6 mm)  
Flow rate: 1 ml/min. Temperature: 45 C°  
Sample:  
1 = Desmethylvenlafaxine 2 = Desmethylmirtazepine  
3 = Milnacipram 4 = Venlafaxine 5 = Mirtazapine 6 = IS  
7 = Desmethylcitalopram 8 = Citalopram 9 = Paroxetine  
10 = Fluvoxamine 11 = Norfluoxetine 12 = Fluoxetine  
13 = Sertraline



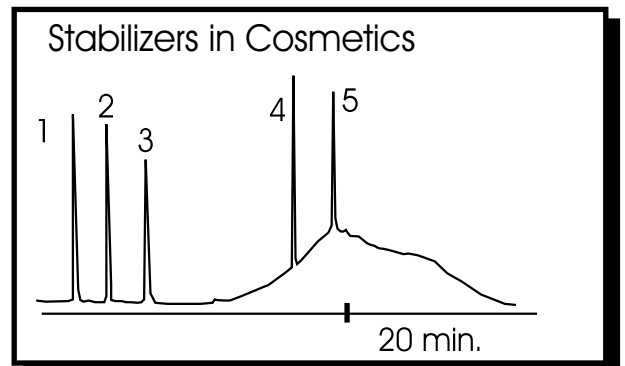
Column: ReproSil-Pur ODS-3, 5  $\mu$ m  
(125 x 4 mm), Flow rate: 0,5 ml/min.  
Eluent:  
A: 20 mM K-Hydrogensulfate / ACN (82/18)  
B: 20 mM K-Dihydrogensulfate / ACN (60/40)  
Gradient: 0-100% in 30 mins., then at 100%  
Sample: 1 = Scopolamine 2 = Atropine Sulfate  
3 = Quinine 4 = Sparteine Sulfate 5 = Cinchonine  
6 = Papaverine 7 = Narcotine



ReproSil-Pur ODS-3, 3  $\mu$ m (125 x 4 mm)  
Eluent A: 50 mM Ammoniumphosphat /  
ACN (9/1) B: 50 mM Ammoniumphosphate /  
ACN (1/1) Gradient: in 25 min. to 55 % B,  
then isocratic  
Sample: 1 = Ampicillin, 2 = Oxytetracycline  
3 = Tetracycline, 4 = Chloramphenicol,  
5 = Oxolinic Acid, 6 = Doxorubicine,  
7 = Nalidixic Acid



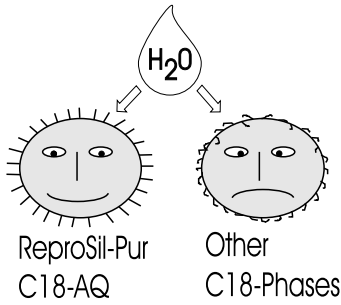
ReproSil-Pur ODS-3,  
3  $\mu$ m, (53 x 4 mm),  
Eluent:  
Triethylammonium-  
acetate (=,05%,  
pH=4) / ACN (80/20)  
Flow rate: 1 ml/min.



ReproSil-Pur ODS-3, 5  $\mu$ m (150 x 4.6 mm)  
Eluent: Gradient A: Water B: MeOH  
8 min.: at 50 % MeOH, then in 8 min.  
onto 90% MeOH and 6 min. at 90% MeOH  
Flow: 0,8 ml/min. Detection: 217 nm  
Sample:  
1.) Hydrochinon 2.) Hydrochinonmethylether  
3.) Ethoxyphenat 4.) 4-Benzyloxyphenol  
5.) Phenothiazinum

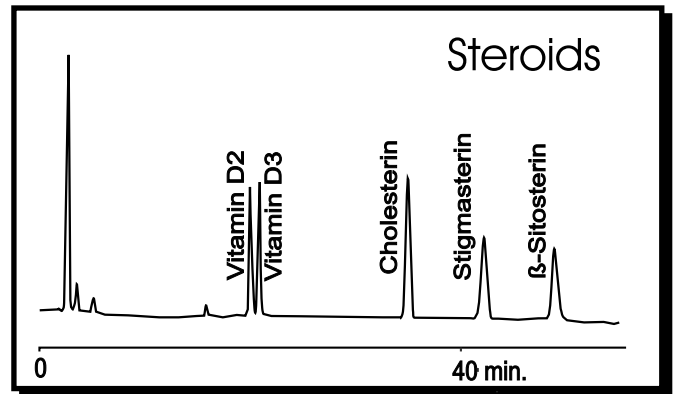
# ReproSil-Pur C18-AQ

## Stable RT with AQ



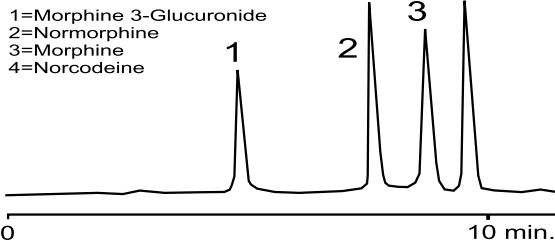
Stable RTs  
due to  
special  
endcapping!

Stable RTs with just  
pure water as eluent!

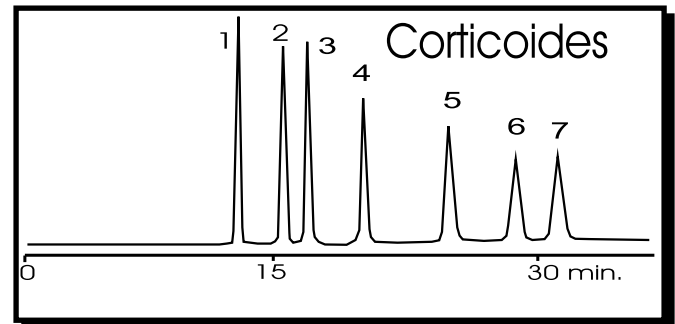


ReproSil-Pur C18-AQ, 5  $\mu$ m (250x4 mm)  
Eluent: MeOH/H<sub>2</sub>O (99/1) / ACN (90/10)  
Flow rate: 1.5 ml/min. Detection: 214 nm

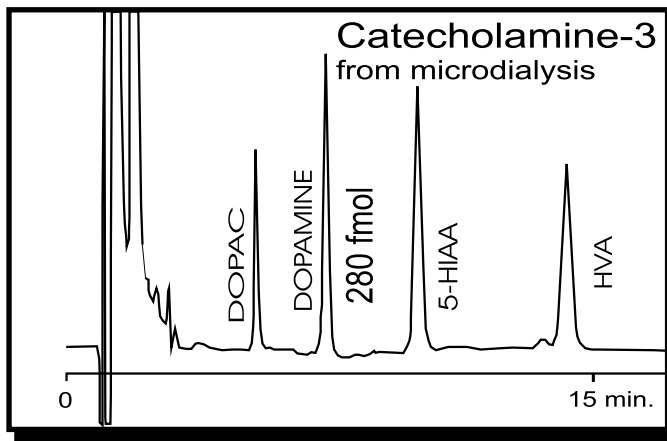
## Morphine + Derivates



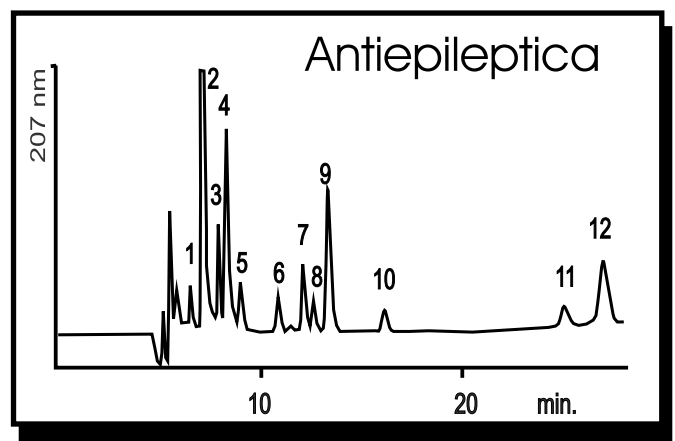
Column: ReproSil-Pur C18-AQ, 5  $\mu$ m (250x3mm)  
Eluent: 20 mM KH<sub>2</sub>PO<sub>4</sub> (pH3) / ACN (95/5)  
Det.: Fluorimetr., Flow rate: 0,4 ml/min



Column: ReproSil-Pur C18-AQ, 5  $\mu$ m (250 x 4.6 mm)  
Eluent: Tetrahydrofuran / MeOH / Water (25:3:72)  
Det.: 247 nm, Temp.: 20 C°, Flow rate: 1 ml/min.  
Sample: 1=Prednison, 2=Prednisolon, 3=Cortisol, 4=Flucortisol  
5=Methylprednisolon, 6=Triamcicolon (Volon), 7=Dexamethason



Column: ReproSil-Pur C18-AQ, 5  $\mu$ m (150x4 mm)  
Eluent: 1000 ml Water: Na-Acetate-Trihydrate 7.465gr.  
Na<sub>2</sub>-EDTA 3.7 mg + Octanesulfonic acid sodium salt  
monohydrate 108,3 mg+ 110 ml MeOH, pH=4.1 with  
100% Acetic acid. Flow rate: 1 ml/min.  
Detection: electrochemical



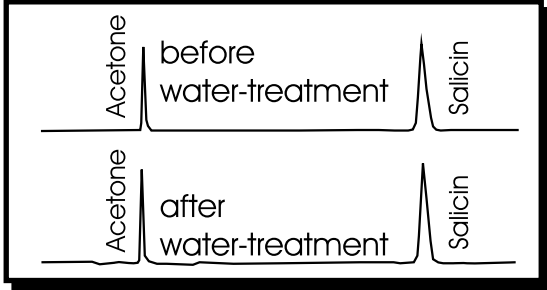
With integrated sample injection:  
Guard: ReproSil DIBS, 12  $\mu$ m (13x4 mm)  
Column: ReproSil-Pur C18-AQ, 5  $\mu$ m (250x3 mm)  
Probe: 40  $\mu$ m, Pump A: 0,2 M K<sub>2</sub>PO<sub>4</sub> + 1%MeOH  
Pump B: 50 mM KH<sub>2</sub>PO<sub>4</sub> / MeOH/ACN  
(300/125/75)  
Sample (serum): with added metabolites:  
1=PEMA (5,2 ng/ml), 2=Ethosuximide (153,8 ng/ml),  
3=Primidone (6,4 ng/ml), 4=Lamotrigine (10,4ng/ml),  
5=Carbamazepindiol (1,6 ng/ml), 6=10-OH-Carba-  
mazepine, 7=Phenobarbital (6,8 ng/ml), 8=Desmethyl-  
mesuximide (2,6 ng/ml), 9=Carbamazepinepoxide  
(9,8 ng/ml), 10=Oxycarbamazepine, 11=Phenytoine  
(3,9 ng/ml), 12=Carbamazepine (10,2 ng/ml)



# ReproSil-Pur C18-AQ

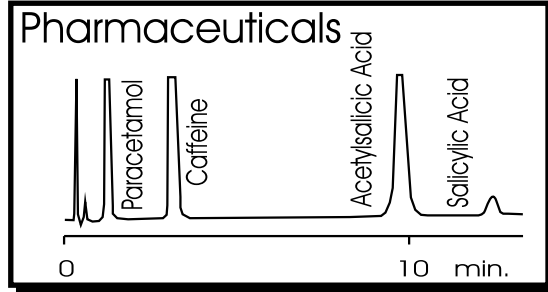
## Proof for the Stability of C18-Phase:

### Treatment with water



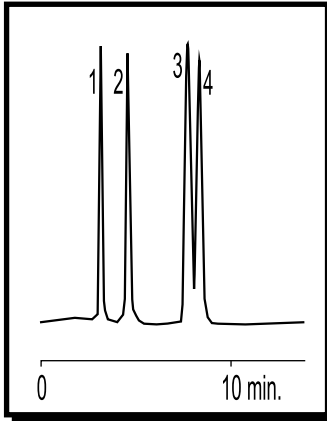
Test Eluent: MeOH/H<sub>2</sub>O (10/90)  
 Equilibration time: 20 min.; Treatment with pure H<sub>2</sub>O, to be left over night.  
 Stable RTs even with high water content.

### Stable RTs for more than 1000 Injections

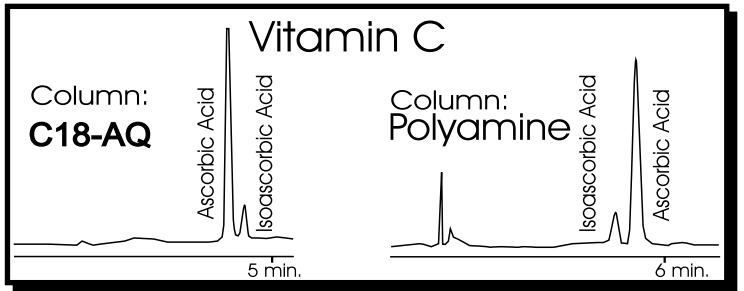


Courtesy of Dr. Rentschler GmbH

Column: ReproSil-Pur C18-AQ, 5 μm (125 x 4mm)  
 Eluent: ACN / MeOH / Acetic acid / Water (40/80/51/900)  
 Flow rate: 1.5 ml/min. Detection: 275 nm Temperature: 30 C°  
 Injection: 10 μl



Native Amino Acids  
 Column: ReproSil-Pur C18-AQ, 5 μm (150 x 4.6 mm)  
 Eluent: H<sub>2</sub>O  
 Temperature: 40 C°  
 Flow rate: 0,6 ml/min.  
 Detection: RI  
 1=Alanine  
 2=Valine  
 3=Isoleucine  
 4=Leucine

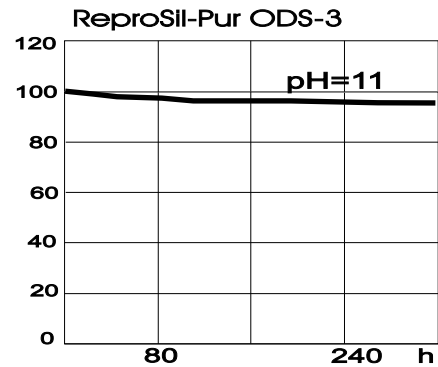
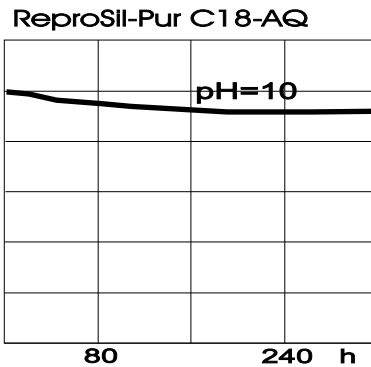
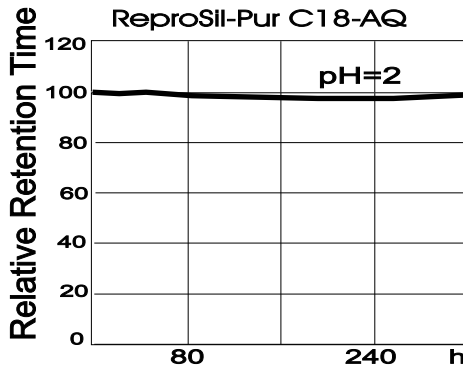


ReproSil-Pur C18-AQ, 5 μm, (250x4 mm)  
 Eluent: 0,25 %ige Phosphoric acid, Flow: 1ml/min.,  
 Tem.:30C°, Injection: 20 μl, Det.: 214 nm  
 Stability Polyamine, 5 μm (250 x 4 mm)  
 Eluent: 50 mM Ammoniumdihydrogenphosphate / ACN (35/65)  
 Flow rate: 1,5 ml/min. Temp.:30C°, Injection: 20 μl, Det.: 214 nm

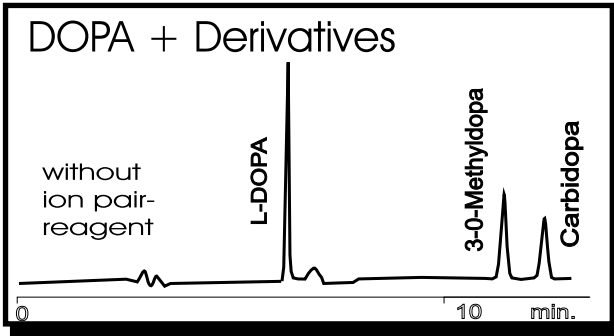
## pH-Stability : 1 to 10

Modified silicas are most stable between pH 2 - 7.

The rule is: The longer the carbon-chain, the more stable the phases.

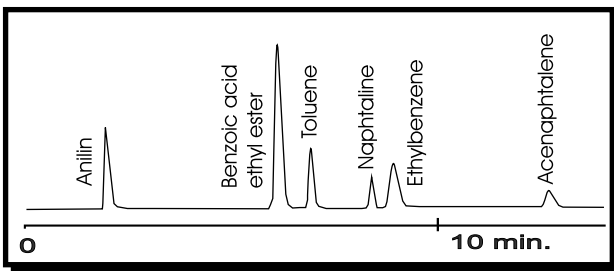
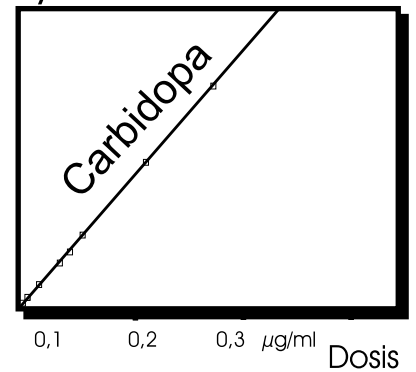
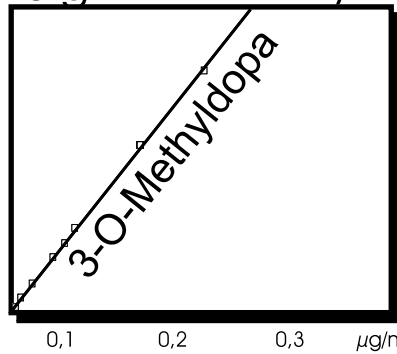
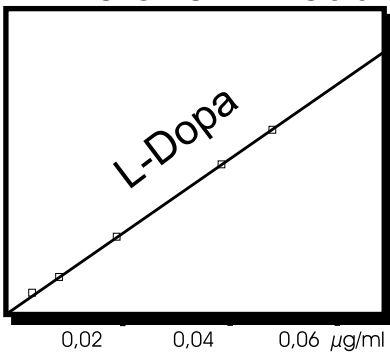


# ReproSil-Pur C18-AQ

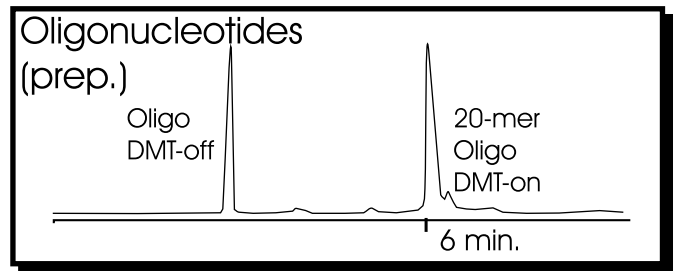


Column:  
 ReproSil-Pur C18-AQ, 3  $\mu$ m  
 (150x4 mm)  
 Eluent: 50 mM NaH<sub>2</sub>PO<sub>4</sub>  
 (pH 2.4) / MeOH (90/10)  
 Flow rate: 0,7 ml/min.  
 Detection: Electrochemical.

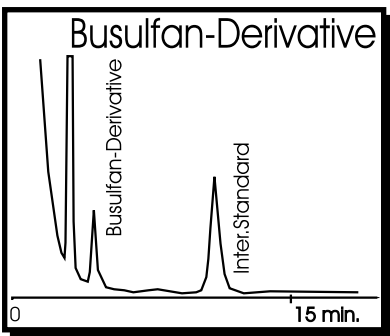
## Relation: Dosis-Peak-Height: Linearity of Analysis:



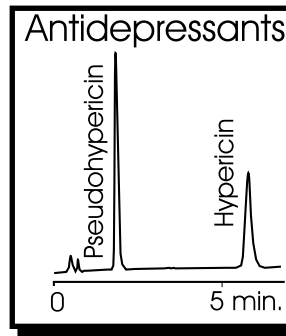
Column: ReproSil-Pur C18-AQ, 5  $\mu$ m  
 (250x4 mm) Eluent: ACN / 1% Phosphoric acid (65/35)  
 Flow rate: 1 ml/min., Detection: 254 nm



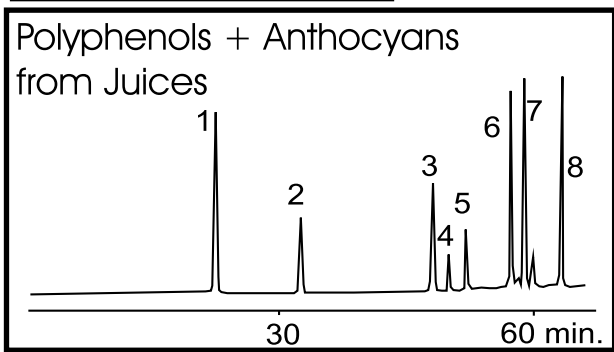
Column: ReproSil-Pur C18-AQ, 5  $\mu$ m  
 (100 x 8 mm) + Guard (30x8mm)  
 Eluent: 0,1 M TEAA / ACN Gradient: Start: 15/85  
 in 13 min. to 30/70



ReproSil-Pur C18-AQ,  
 3  $\mu$ m (40x3 mm)  
 Eluent: 36% MeOH / H<sub>2</sub>O  
 (20/80)  
 Flow: 0,8 ml/min.  
 Det.: 280 nm  
 Courtesy of Prof. Jacob,  
 Uni Klinikum Großhadern

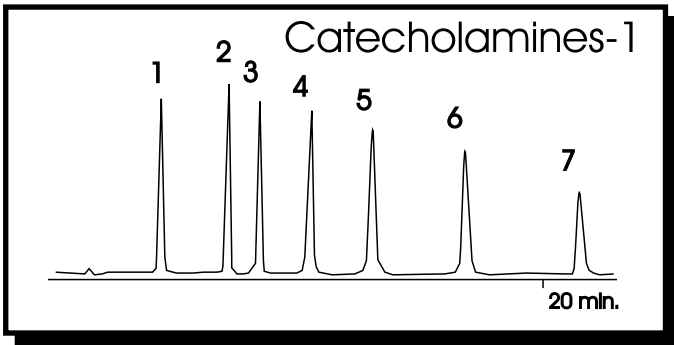


Column:  
 ReproSil-Pur C18-AQ,  
 5  $\mu$ m, (125x4 mm)  
 Eluent: 100g NaH<sub>2</sub>PO<sub>4</sub>/H<sub>3</sub>PO<sub>4</sub>  
 Buffer, pH=2,1 + 306 g MeOH +  
 85 g Ethylacetate  
 Flow rate: 1,7 ml/min.  
 Detection: 590 nm



Column: ReproSil-Pur C18-AQ, 10  $\mu$ m (250x4,6mm)  
 Eluent: A: H<sub>2</sub>O/85% o-Phosphoric acid (99,5/0,5)  
 B: ACN / H<sub>2</sub>O / 85% o-Phosphoric acid (50/49,5/0,5)  
 Gradient: 0-5 min. 0% B; 5-45 min.- 0-25%B; 45-65 min.  
 25-80%B; 65-70 min. 80-100 %B  
 Flow rate :1 ml/min. Temp.: 25 C°, Det.: 280 nm and 525nm,  
 Sample: 1=Gallic Acid, 2=Protocatechinic Acid  
 3=Chlorogenic Acid, 4=Delphinidin-3-rutinoside  
 5=Cyanidin-3-rutinoside, 6=p-Cumaric Acid  
 7=Ferulic Acid, 8=Phloridzin

# ReproSil-Pur C18-AQ



Column: ReproSil-Pur C18-AQ, 5  $\mu$ m (150 x 4 mm)

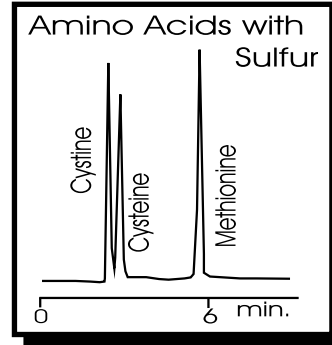
Sample:

1=Noradrenaline, 2=3,4-Dihydroxyphenyl acetic Acid,  
3=3,4-Dihydroxyphenylalanine, 4=Dopamine, 5=Epinephrine,  
6=Homovanillic acid, 7=3-O-Methyldopa

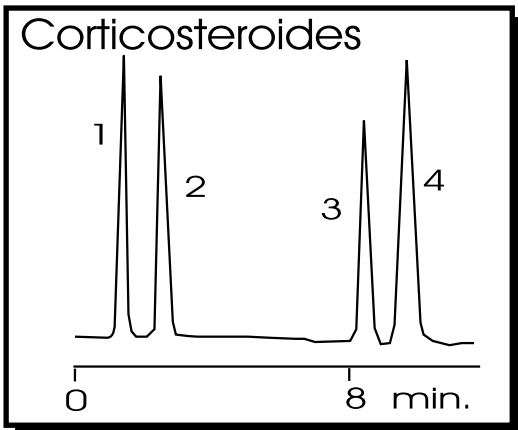
Eluent:

6,9g NaH<sub>2</sub>PO<sub>4</sub> + 37 mg EDTA + 150 mg Na-Octansulfonate  
+ 60 ml ACN + 5 ml THF auf 1000 ml H<sub>2</sub>O

Temperature: Ambient, Detection: Electrochemical



Column:  
ReproSil-Pur C18-AQ,  
5  $\mu$ m  
250 x 4.6 mm,  
Eluent: Water  
Flow rate: 1 ml/min.  
Detection: 210 nm



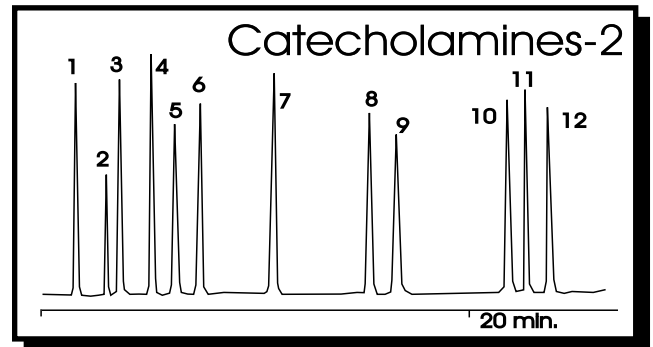
Column: ReproSil-Pur C18-AQ, 5  $\mu$ m

125 x 4 mm, Eluent: H<sub>2</sub>O/ MeOH (4/6)

Flow rate: 0,8 ml/min.

1=Cortisone 2=Hydrocortisone

3=Corticosterone, 4=Cortisone Acetate



Column:

ReproSil-Pur C18-AQ, 5  $\mu$ m (250 x 4 mm)

1=Noradrenaline, 2=Adrenaline, 3=D/L-3,  
4-Dihydroxymandelic Acid, 4=3,4-Dihydroxy-  
phenylalanine, 5=Dopamine, 6=Tyrosine,  
7=D/L-Methoxy-4-Hydroxymandelic Acid,  
8=Phenylalanine, 9=4-Hydroxy-3-Methoxyphenyl-  
glycol, 10=5-Hydroxyindole-3-acetic Acid,  
11=Vanillic Acid, 12=Homovanillic Acid

Eluent:

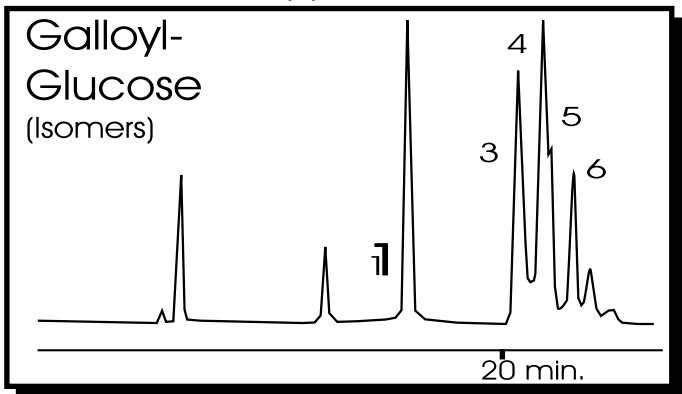
A=100 mM Na-Phosphate, pH=3.0 B=ACN,

Gradient: 20 min. 1% B, then 15 min. 15% B

Detection: 210 nm, Injection: 50 - 200  $\mu$ l/ml

# ReproSil-Pur RP18-NE

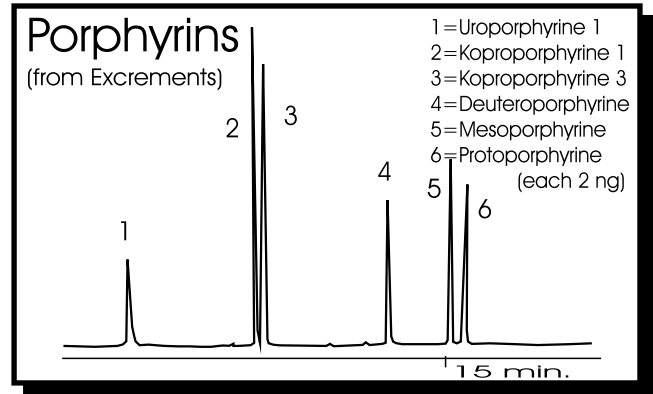
NE= not endcapped!



Column: ReproSil-Pur RP18-NE, 5  $\mu$ m (250x4 mm),

Flow rate: 0,7 ml/min., Detection: 280 nm

Eluent: A=0.05 % H<sub>3</sub>PO<sub>4</sub> B: ACN, Gradient



Column: ReproSil-Pur RP18-NE, 5  $\mu$ m (125x4mm),

Flow rate: 1ml/min. Detection: 405/630nm Fluorimetr.

Eluent: A=10mm KHPO<sub>4</sub>, pH5.4 B=5mM Tetrabutyl-  
ammoniumphosphate pH-7.3 in MeOH, Gradient

# Peptides and Proteins

## Peptide from $\beta$ -Myosin

(More than 100 peptides)

(Endoproteinase-Lys-C Digest)

Column: ReproSil-Pur 120 C18-AQ,

3  $\mu$ m (100 x 1 mm iD) Eluent: A= H<sub>2</sub>O B=ACN

Gradient: 0,5 % increase/min. Flow rate: 20  $\mu$ l/min.,

Detection: 220 nm

## Peptides from BSA-Digest

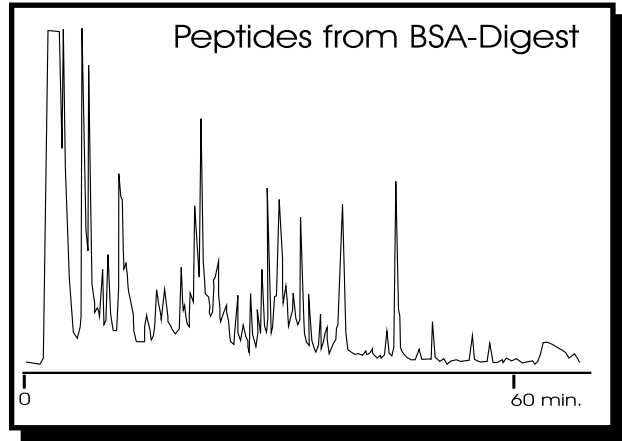
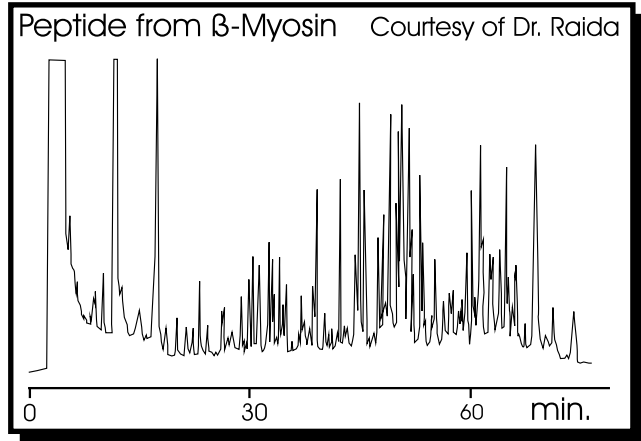
(Trypt. Digest)

Column: Stability BS C23, 5  $\mu$ m (100 x 1 mm iD)

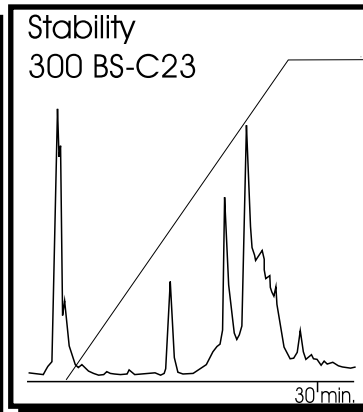
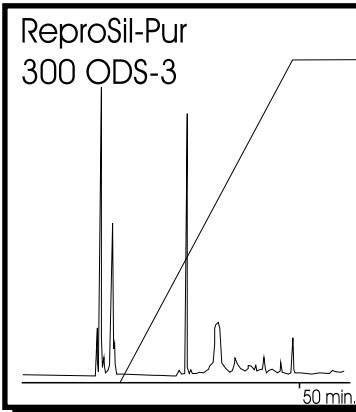
Eluent: A= 0,06% TFA B=0,05 % TFA in ACN

Gradient: 1% B - 60% B in 120 min. then 5 min. to

95 % B, Flow rate: 20  $\mu$ l/min., Detection: 215 nm



## Mixture of Proteins from endothelial. Cell Culture



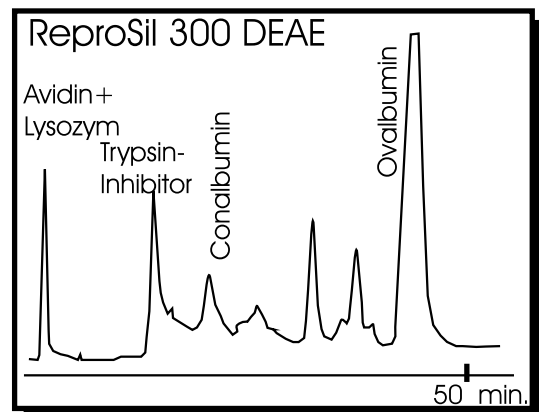
Eluent: Gradient 5% ACN / 0,1 % TFA to 95 % ACN / 0,1 % TFA

ReproSil-Pur 300 ODS-3 5  $\mu$ m, 250 x 4 .6mm

Flow rate: 1 ml/min.

Stability 300 BS-C23, 5  $\mu$ m 125 x 3 mm,

Flow rate: 0,4 ml/min.



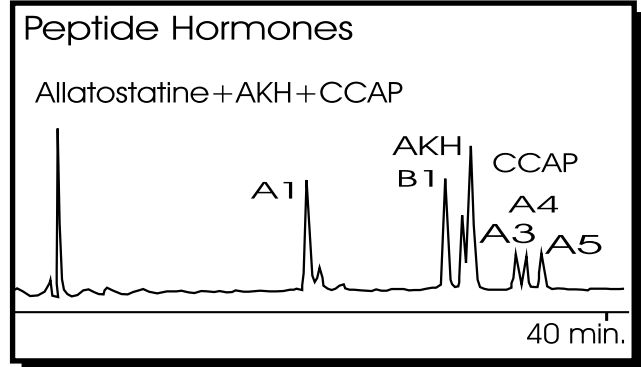
ReproSil 300 DEAE, 5  $\mu$ m (250 x 4.6 mm)

Eluent:

A=50mM TrisHCl pH7.5 B=A+0,5 M NaCl

0-30% B in 30 min., Flow rate: 1 ml/ min.

Det.: 220 nm, Sample: Fresh egg white.



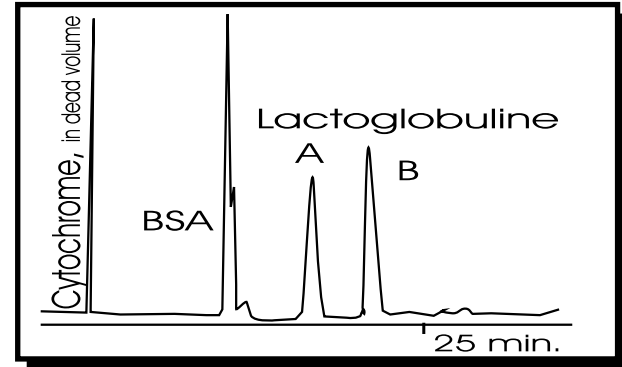
Column: ReproSil-Pur 300 ODS-3, 5  $\mu$ m

(250x3 mm) Eluent: A: 0,115% TFA in Water B: 0,1%

TFA in ACN Gradient: 0- 40 min., 15% - 27% B

(0,3% / min.) Flow rate: 0,4 ml/min.,

Detection: 214 nm



Column: Stability Polyamine, 5  $\mu$ m

(53 x 4.6 mm) Eluent: A=20 mM TRIS-pH7,

B=1M NH<sub>4</sub>OAc-pH7 Gradient: 0 - 100% B in 20 min.

Detection: 280 nm, Flow rate: 1 ml/min.

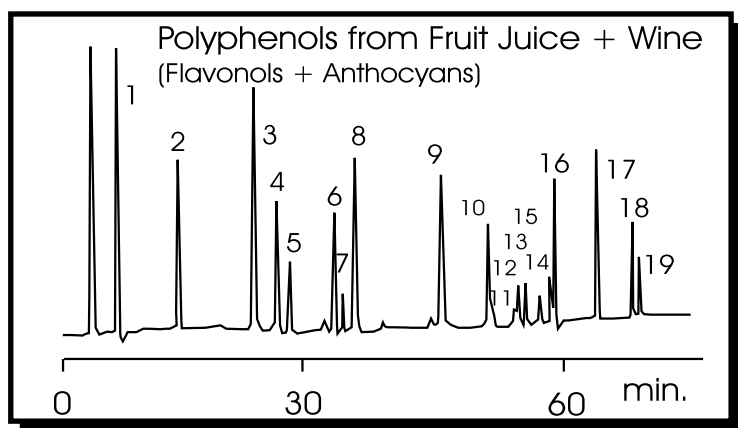
# Fluofix + Fluosil

Fluofix is a fluorocarbonaceous, silane-bonded silica-gel phase for HPLC modified with: "Tridecafluoro-(4,4-Dimethyl heptyl)" silane.

- Advantages of Fluofix:
- 1.) Group separation of mixtures of basic and acidic compounds
  - 2.) Precise separation of geometric isomers
  - 3.) Separation of fluorinated or chlorinated compounds
  - 4.) More stable than C4 or C8 phases



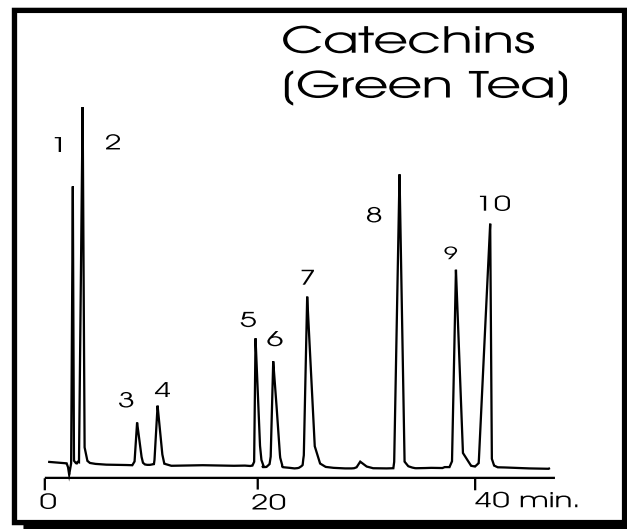
Eluent: MeOH/H<sub>2</sub>O (65/35)  
Flow rate: 1 ml/min.  
Dimension: 150 x 4.6 mm  
Temperature: 40 C°  
Detection: 254 nm



Column: Fluofix 120E, 5 μm (250 x 4.6mm)  
Flow rate: 1 ml/min.

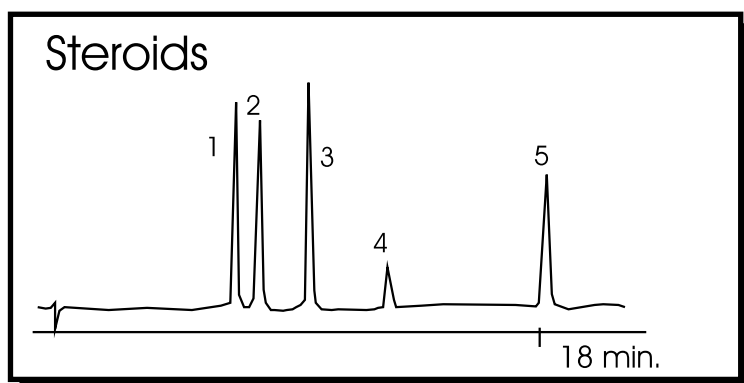
Gradient: A: water / 85% o-Phosphoric acid (99,5 / 0,5, v/v)  
B: ACN / Water / 85% o-Phosphoric acid (50/49,9/0,5)  
0-5 min.: 0% B, 5-45 min.: to 25% B, 45-64 min.: to 80 % B,  
65-70 min.: to 100% B, until 84,9 min. 100% B.

Sample: 1=Gallic Acid, 2=Protocatechinic Acid, 3=Tyrosol,  
4=(+)Catechine, 5=Procyanidin B2, 6=Coffee Acid,  
7=Chlorogenic Acid, 8=(-)Epicatechine, 9=p-Cumaric Acid,  
10=Ferulic Acid, 11=Quercetin-3-galactoside, 12=Quercetin-3-rutinoside,  
13=Quercetin-3-glucoside, 14=Quercetin-3-arabinoside, 15=Phloridzin, 16=tr-Resveratrol, 17=Quercetin,  
18=Kaempherol, 19=Phloretin



Column: Stability Fluosil, 5 μm  
250 x 2 mm, Flow rate: 0.3 ml/min.

Temperature: 25 C°, Injection: 10 μm  
Eluent: A: 0,1 % H<sub>3</sub>Po<sub>4</sub> (85%)/ 49,9 % water / MeCN (v/v/v), B: 0,1 % H<sub>3</sub>Po<sub>4</sub> (85%) in water  
Sample: 1=Pyrogallol, 2=Gallic Acid, 3=EGC  
4=Catechine, 5=Theobromine, 6=Epicatechine  
7= Epigallocatechingallate, 8=Caffeine,  
9=Epicatechingallate, 10=p-OH-Bs-methylester (IS)



Column: Stability Fluosil 3 μm,  
100 x 2 mm

Eluent: A: Water (0,05% TFA)  
B: ACN (0,04% TFA)

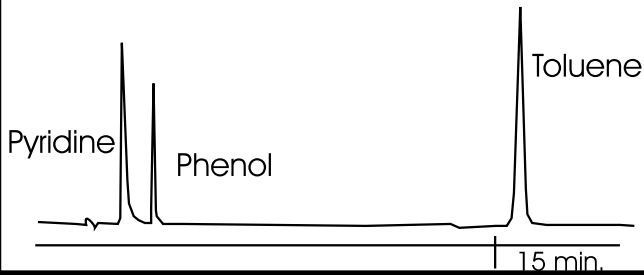
Gradient:

Sample:

- 1.) Prednisone
- 2.) Prednisolone
- 3.) Deltaxenol
- 4.) Hydrocortisone acetate
- 5.) Deltacortinene acetate

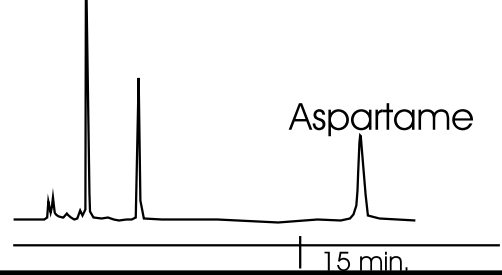
# ReproSil 100 C18

## Selectivity: Pyridine, Pyridine and Toluene



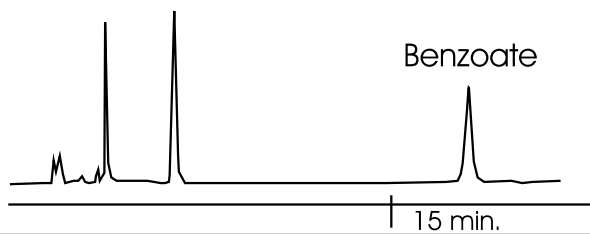
ReproSil 100 C18, 5  $\mu$ m, 250 x 4 mm  
 Eluent: 25 mM NaPO<sub>4</sub> / 50 % ACN  
 Flow: 1 ml/min. Det. UV 254 nm

## Aspartame in Sweets



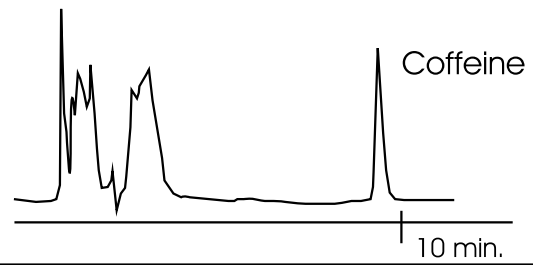
ReproSil 100 C18, 5  $\mu$ m, 250 x 4 mm  
 Eluent: Water / MeOH / phosphoric acid (40:59,5:0.5)  
 Flow: 0.8 ml/min. Det.:203 nm

## Preservative in Ketchup



ReproSil 100 C18, 5  $\mu$ m, 250 x 4 mm  
 Eluent: MeOH / Acetate buffer 40:60  
 Flow: 1 ml/min. Det.:UV 230 nm Temp.:35 C°  
 Sample: 10  $\mu$ l Ketchup extract

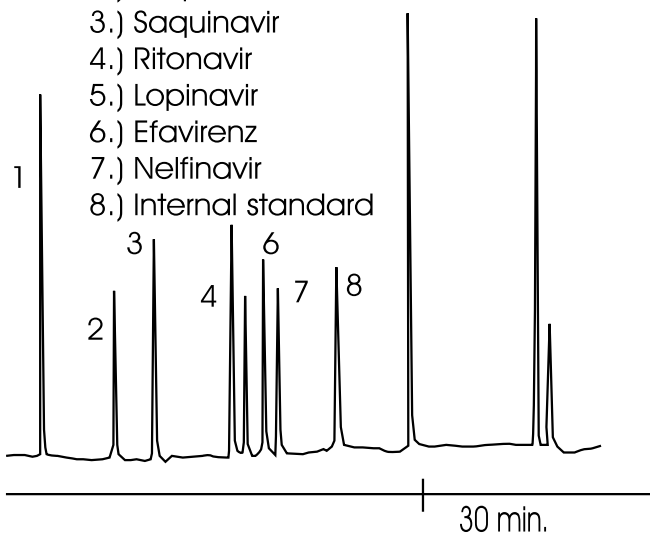
## Caffeine in Coffee



ReproSil 100 C18, 5  $\mu$ m, 250 x 4 mm  
 Eluent: MeOH / Acetate buffer 32:68  
 Flow: 0.8 ml/min. Det.:270 nm Temp.:35 C°  
 Sample: 10  $\mu$ l coffee extract

## HIV - Inhibitors

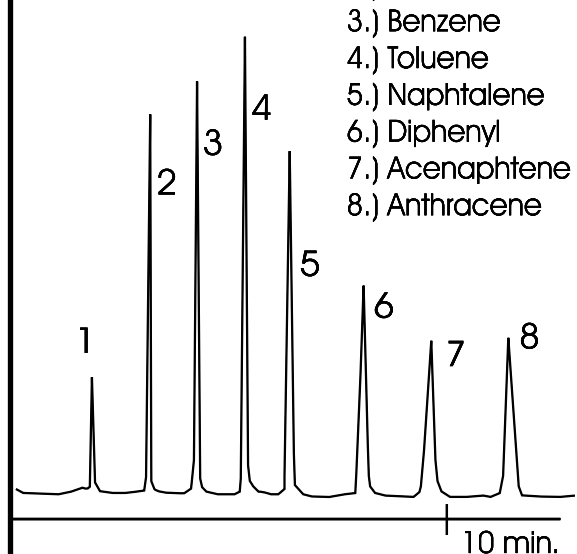
- 1.) Indinavir
- 2.) Amprenavir
- 3.) Saquinavir
- 4.) Ritonavir
- 5.) Lopinavir
- 6.) Efavirenz
- 7.) Nelfinavir
- 8.) Internal standard



ReproSil (Stability)100 C18, 5  $\mu$ m, 250 x 4.6 mm  
 Eluent: 50 mM Phosphate buffer pH=5.65 / ACN  
 Gradient: from 36 % to 64 % ACN in 25 min.  
 then 19 min. at 80% ACN.

## Aromatic compounds

- 1.) Thiourea
- 2.) Acetophenone
- 3.) Benzene
- 4.) Toluene
- 5.) Naphtalene
- 6.) Diphenyl
- 7.) Acenaphtene
- 8.) Anthracene



ReproSil 100 C18, 5  $\mu$ m, 250 x 4 mm  
 Eluent: ACN / water 70:30  
 Flow: 1 ml/min. Det. UV 254 nm

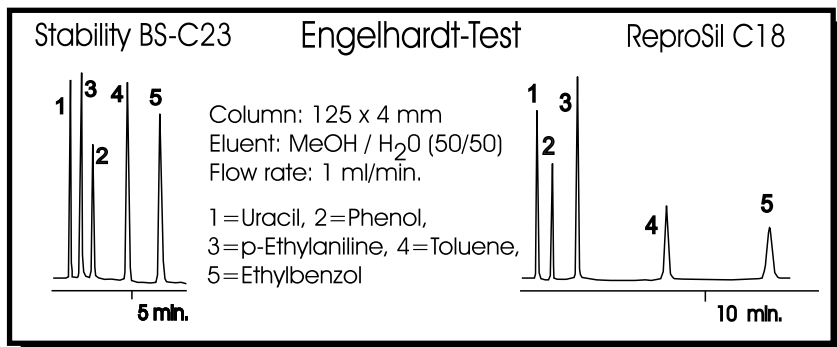


# Stability BS-C23 (BS-C17, BS-C13)

BS-C23: A unique RP-phase with positive charge under a C18 C-chain.

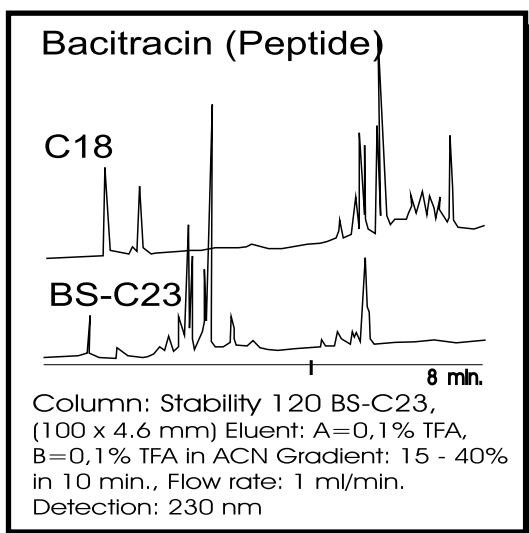
BS-C17: A unique RP-phase with positive charge under a C12 C-chain.

BS-C13: A unique RP-phase with positive charge under a C-8 C-chain.

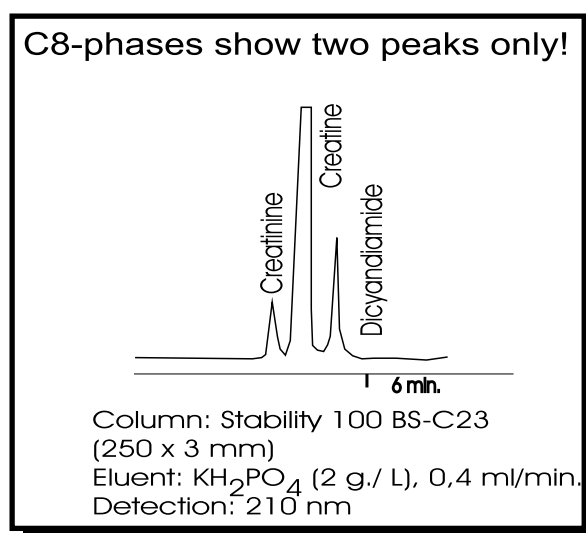


Comparison of different Selectivities

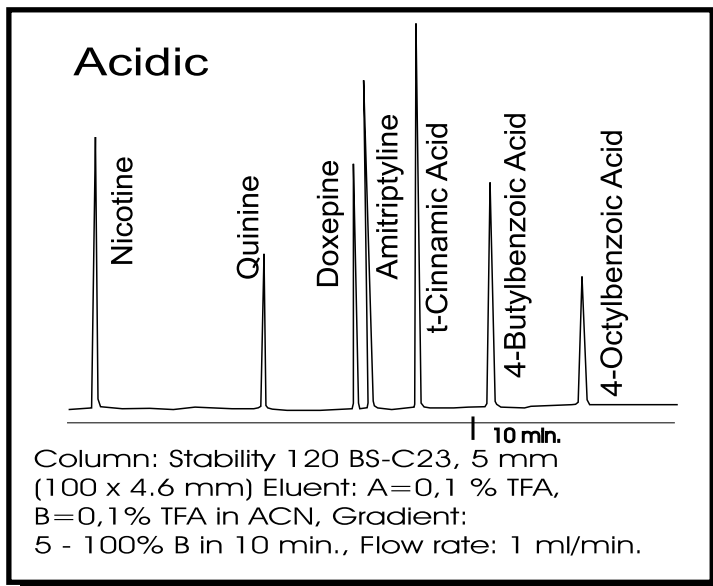
Different Selectivity!



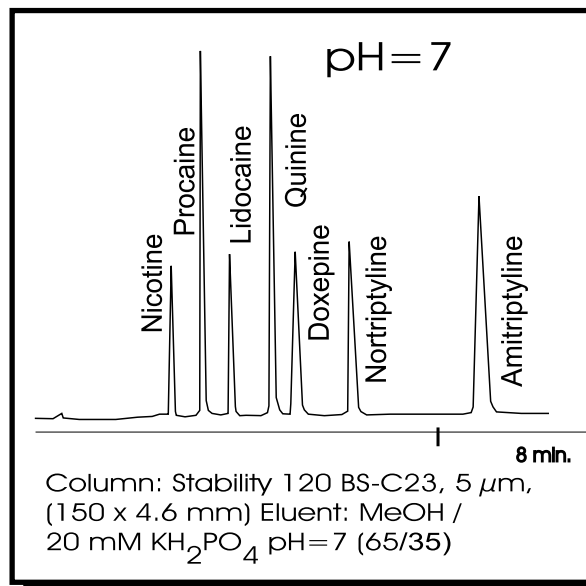
C8-phases show two peaks only!



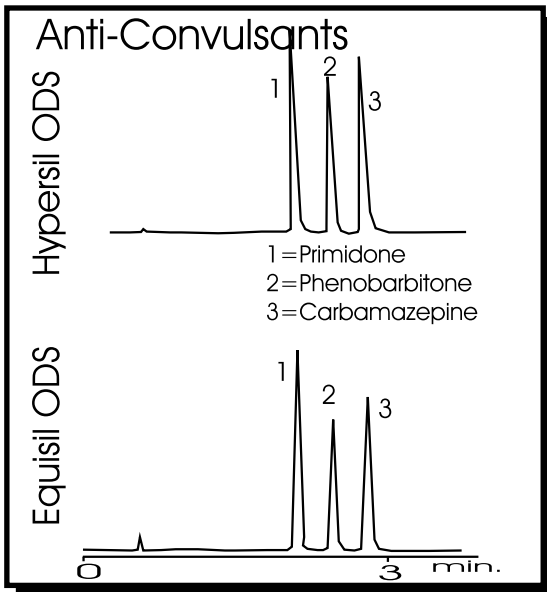
Acidic



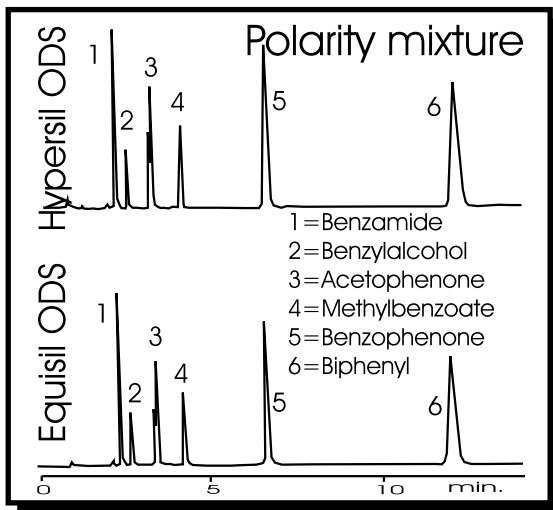
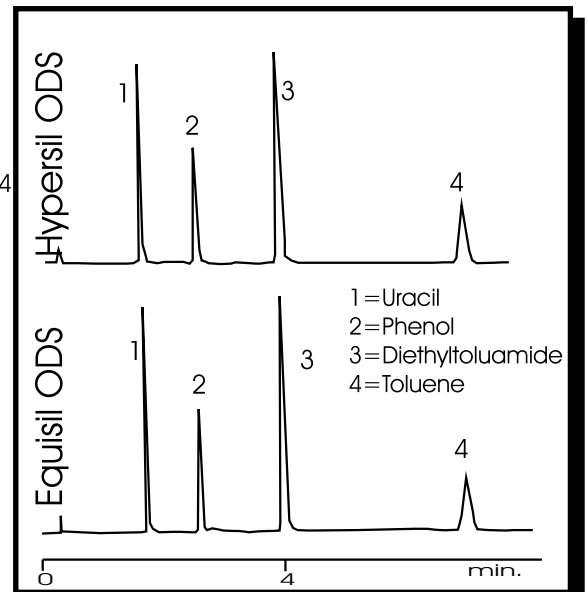
pH=7



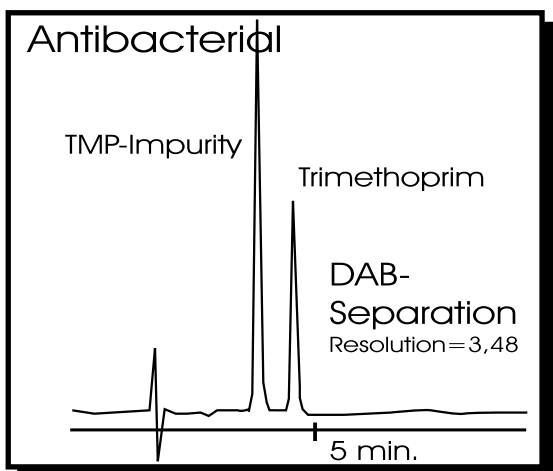
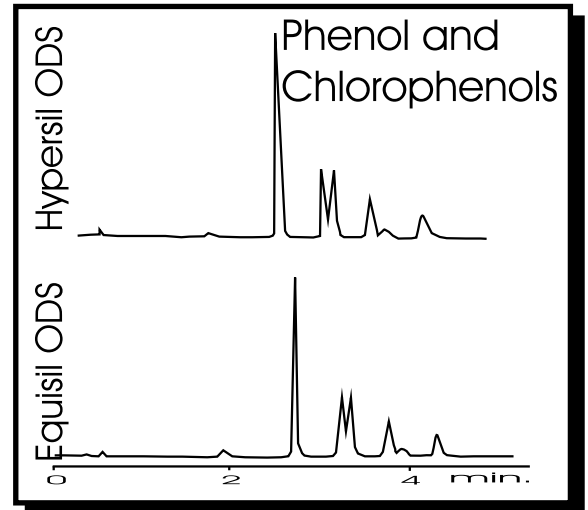
# Equisil, an alternative for Hypersil



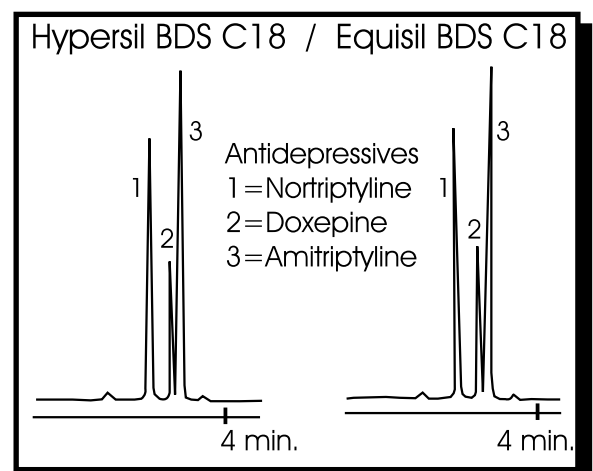
Columns:  
150 x 4.6 mm  
Eluent:  
MeCN / 50 mM KH<sub>2</sub>PO<sub>4</sub>  
50/50, pH3,  
Flow rate:1 ml/min



Columns:  
150 x 4.6 mm  
Eluent:  
MeCN / 50 mM  
KH<sub>2</sub>PO<sub>4</sub>  
50/50, pH3,  
Flow rate:1 ml/min



Column:  
Equisil BDS C18, 5  $\mu$ m, 250 x 4 mm,  
Eluent:30% MeOH / NaClO<sub>4</sub> (1.4 g/l)  
pH=3.6, adjust. With phosphoric acid  
Flow rate:1.3 ml/min.



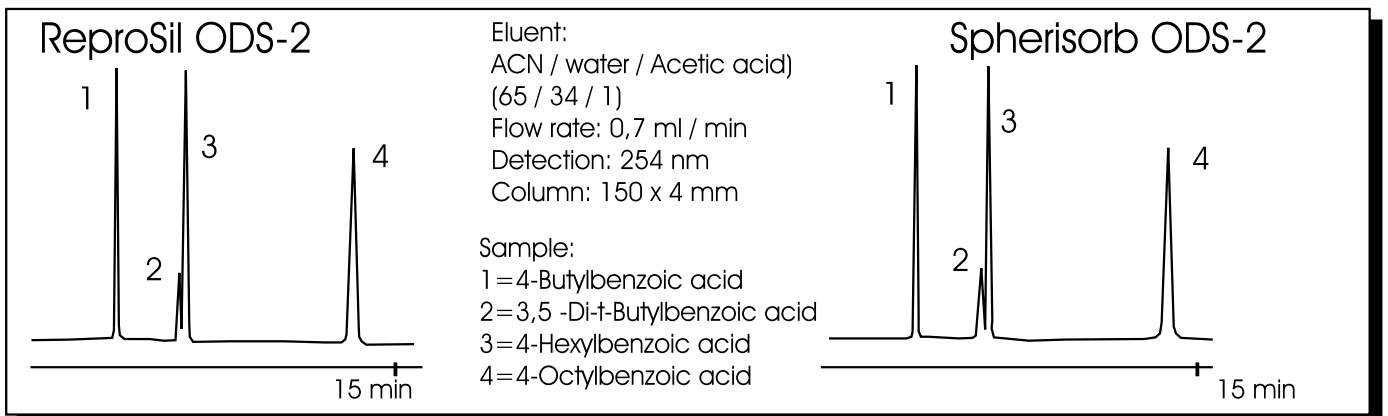
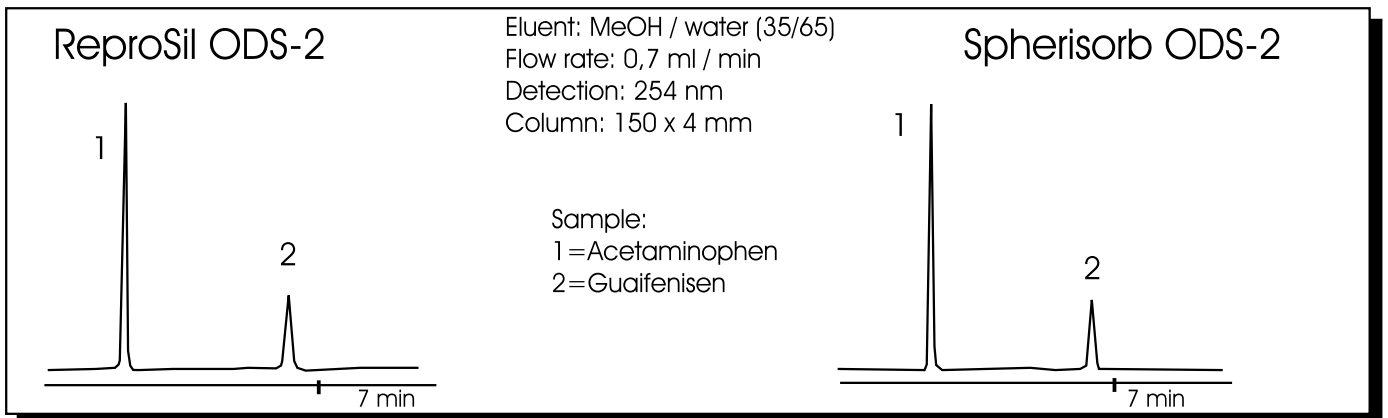
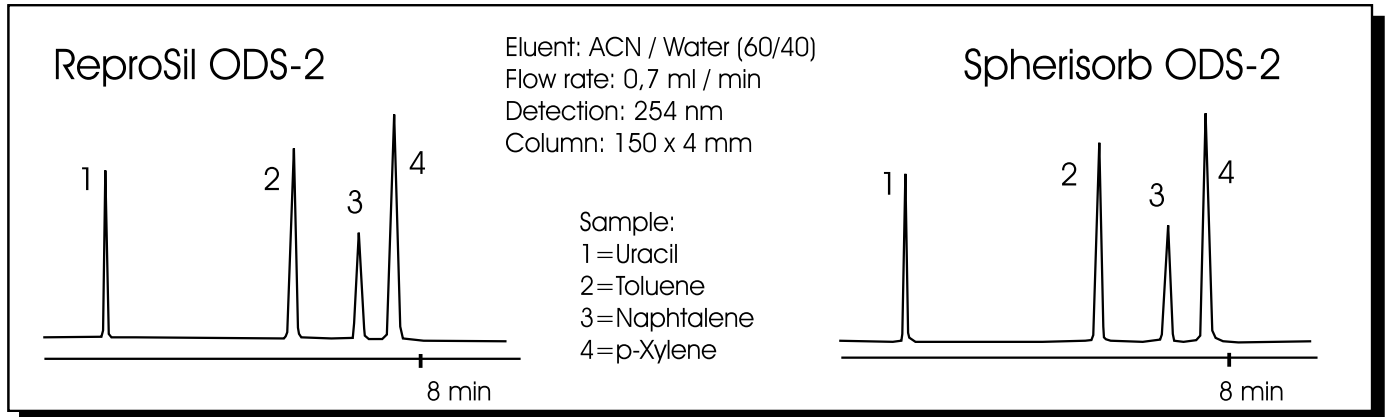
Eluent: 50% ACN / 50% 50 mM KH<sub>2</sub>PO<sub>4</sub>,  
pH=3, Flow: 1 ml/min.  
Column-dimension: 150 x 4.6 mm,  
Particle size: 5  $\mu$ m

# ReproSil ODS-2, an alternative for Spherisorb ODS-2

ReproSil (80) ODS-2 has the same chemical and physical parameters as Spherisorb ODS-2:  
 Pore size: 80 Å, surface area: 220 m<sup>2</sup>/gr., Carbon loading: 12 %

As shown in the chromatograms:

ReproSil ODS-2 offers a convenient alternative for Spherisorb ODS-2.



## Reprosil 100 chiral-NR ( OH, CA,PS)

手性柱 Reprosil chiral-NR 可以同时使用于正相和反相体系。Reprosil chiral-NR 手性柱与多糖衍生物手性固定相有着相似的手性拆分能力。

Reprosil chiral-NR 的手性作用中心是一个芳香类的化合物，并且通过共价键键合在超纯硅胶上。由于硅胶的孔径 100Å 和大的比表面积 350 m<sup>2</sup>/g，因此具有较大的载样量。半制备手性柱 10\*250mm 可以载样 50-250mg/ 次，制备手性柱 20\*250mm 可以载样 250-1000mg/ 次。

Reprosil chiral-NR 的键合相在通常使用的流动相（包括含水的体系）下是非常稳定的。在正相体系下经典的流动相条件是正己烷和异丙醇体系，在反相体系下经典的流动相条件是甲醇和水体系。最佳工作 PH 范围是 2-7，最大耐受压力是 300bar。

分析手性的酸性成分可以添加 0.1% 乙酸来调整峰形，分析手性的碱性成分可以添加 0.1% 三乙胺来调整峰形。0.01% 乙酸铵在酸性和碱性成分的分析中也可以获得理想的峰形。Reprosil chiral-NR 适合于分离化合物类型：如胺类，环氧化物类，酯类，氨基甲酸酯类，醚类，氮杂环丙烷类，亚磷酸类，酮类，羧酸类和醇类。

手性中心邻位带有芳环或含有氧原子（羧酸和羟基官能团）类成分都可以考虑使用 Reprosil chiral-NR 进行手性分析。

### 手性分析应用案例：

通常使用的色谱柱规格 4.6\*250mm, 流速是 1.5ml/min。

#### 正相体系：

Abscistic acid	Eluent:Hexane/IPA(85/15)+0.1%Acetic acid
Anisoin	Eluent:Hexane/IPA(80/20)+0.5%Acetic acid
Benzoin	Eluent:Hexane/IPA(80/20)+0.5%Acetic acid
Bupivacaine	Eluent:Hexane/IPA(80/20)+0.1%TEA
Bromacil	Eluent:Hexane/IPA(98/2)
Cycloprofen	Eluent:Hexane/IPA(80/20)+0.1%Ammonium acetate
Cyclophosphamid	Eluent:Hexane/Ethanol(95/5)
Chlormezanone	Eluent:Hexane/IPA(60/40)
2,2' -Diamino-1,1' -Binaphthyl	Eluent:Hexane/Ethanol(90/10)
Dihydrotertabenazine	Eluent:Hexane/IPA(60/40)+0.1%TEA
Fenoprofen	Eluent:Hexane/IPA(98/2)+0.1%Acetic acid
Hydrobenzoin	Eluent:Hexane/IPA(95/5)
Ibuprofenol	Eluent:Hexane/IPA(99/1)
Ibuprofen	Eluent:Hexane/IPA(90/10)+0.01%Ammonium acetate
Indapamide	Eluent:Hexane/IPA(50/50)
Ketamine	Eluent:Hexane/IPA(99/1)+0.1%TEA
Ketorolac	Eluent:Hexane/IPA(98/2)+0.1%TFA
Ketoprofen	Eluent:CH <sub>2</sub> Cl <sub>2</sub> /Hexane/Ethanol(47/47/6)+0.01M Amm.Acetate
Lorazepam	Eluent:Hexane/IPA(70/30)+0.1%Acetic acid
Loxoprofen	Eluent:Hexane/Ethanol(85/15)+0.01M Ammonium Acetate
2-Methyl-1-Indanone	Eluent:Hexane/IPA(99/1)
Mecoprop	Eluent:Hexane/IPA(99/1)+0.1%Acetic acid
Metolazone	Eluent:Hexane/Ethanol(55/45)
α -Methoxyphenyl- Acetic acid	Eluent:Hexane/Ethanol(90/10)+0.01% Ammonium Acetate
Nadolol	Eluent:Hexane/Ethanol(78/22)+0.01M Ammonium Acetate
Naproxen	Eluent:Hexane/IPA(60/40)+0.1%Acetic acid
Nicardipine	Eluent:Hexane/IPA(73/27)+0.1%Acetic acid
Nivanol	Eluent:Hexane/IPA(80/20)
Ofloxacin	Eluent:CH <sub>2</sub> Cl <sub>2</sub> /Hexane/Ethanol(47/47/6)+0.01M Amm.Acetate

Oxazepam:	Eluent: Hexane / IPA (75/25) + 0,01 % Ammonium acetate
Permethrin:	Eluent : Hexane + 0,2 % IPA
2-Phenylcyclopropan-Carboxylat:	Eluent: Hexane / IPA (99/1)
Progumide:	Eluent: Hexane / IPA (75/25) + 0,1 % Acetic acid
Propafenone:	Eluent: CH <sub>2</sub> Cl <sub>2</sub> / Hexane / 0,01 M Ammonium acetate (47/47/6)
Resmethrin:	Eluent: Hexane
Styrene-Oxid:	Eluent: Hexane / IPA (99/1)
Stilbene Oxid:	Eluent: Hexane / Ethanol ( 90 / 10)
Sulfinpyrazone:	Eluent: Hexane / Ethanol (75/25) + 0,15 M Ammonium acetate
Temazepam:	Eluent: Hexane / IPA (80/20) + 0,1 % Acetic acid
Terfenadine:	Eluent: Hexane / Ethanol (97/3) + 0,01 m Ammonium acetate
Tiaprofenic acid:	Eluent: Hexane / IPA (80/20) + 0,1 % Acetic acid
Tolperisone:	Eluent: Hexane / IPA (99/1) + 0,1 % TEA
Trolox:	Eluent: Hexane / IPA (95/5) + 0,1 % Acetic acid
Vanilmandelic acid:	Eluent: Hexane / Ethanol (85/15) + 0,01 M Ammonium acetate
Warfarin:	Eluent: Hexane / IPA (65/35) + 0,1 % Acetic acid
Zopiclone:	Eluent: CH <sub>2</sub> Cl <sub>2</sub> / Ethanol (95/5) + 0,01 M Ammonium acetate

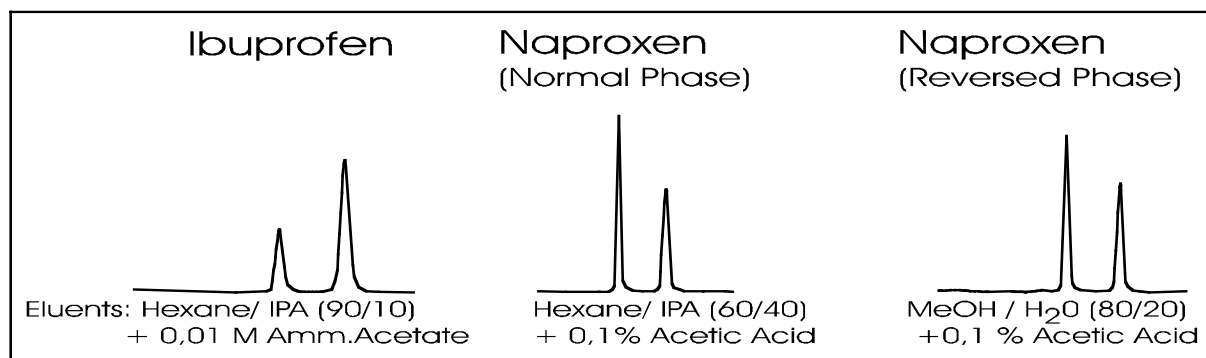
### Reversed-Phase:

Isradipine:	Eluent: MeOH / H <sub>2</sub> O (63/37)
Kynurenine:	Eluent: MeOH / H <sub>2</sub> O (65/35) + 0,1 % Acetic acid
Mandelic acid:	Eluent: H <sub>2</sub> O + 0,1 % Acetic acid
Naproxen:	Eluent: MeOH / H <sub>2</sub> O (80/20) + 0,1 % Acetic acid
Nimodipine:	Eluent: MeOH / H <sub>2</sub> O (65/35)
p-Chloro-Warfarin:	Eluent: MeOH / H <sub>2</sub> O (85/15) + 0,1 % Acetic acid
Warfarin:	Eluent: MeOH / H <sub>2</sub> O (70/30) + 0,1 % Acetic acid

### Method development for Normal-Phase Separations:

- 1.) Start off with a mixture of Hexane / IPA (50/50).
- 2.) If the RT is too short, add less IPA; if the RT is too long, add more IPA.
- 3.) Peak-Tailing  
with acids: use 0,1 % Acetic acid,  
with bases: use 0,1 % TEA.  
You can improve the peak shapes in both cases with 0,01 % Ammonium acetate.
- 4.) The method can be further optimized by replacing Hexane with Heptane and / or IPA with Ethanol.

**Examples:** Reprisil Chiral-NR, 8 µm, 250 x 4.6 mm, Art.No.: r18.nr.s2546



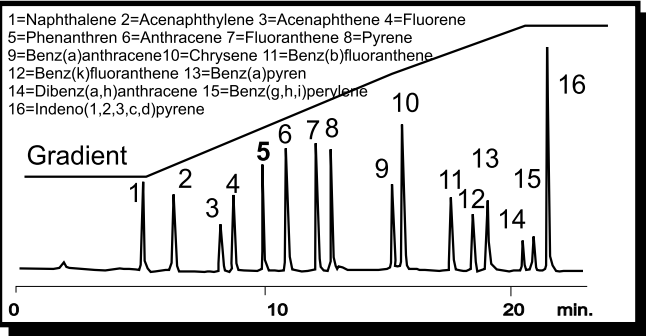
### Other chiral phases from Reprisil family are:

- Reprisil Chiral-OH – for chiral aromatic compounds with OH at the chiral centre, like Aryl Carbinols.
- Reprisil Chiral-CA - for chiral aromatic compounds with a Carboxylic Acid group, like Ibuprofen, Etodolac.
- Reprisil Chiral-PS – for chiral aromatic compounds with P or S, like Sulfoxides, Phosphines, Phosphonates.

# Environmental Analysis

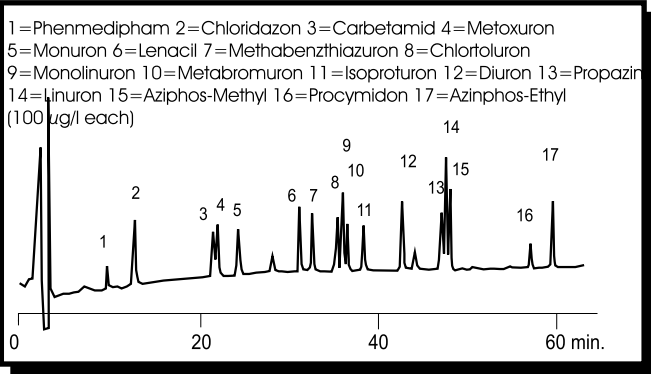
## Analysis of 16 PAHs (EPA 610)

Column: ReproSil PAH-EPA, 5  $\mu$ m 250 x 4 mm)  
 Eluent: A=H<sub>2</sub>O B=ACN, Gradient: 0 min. 50% B, 5 min. 50% B, 15 min. 85% B, 20 min. 100% B, 25 min. 100% B,  
 Opt. temperature: 20-30 C°, Detection: Fluor. or UV at 254 nm



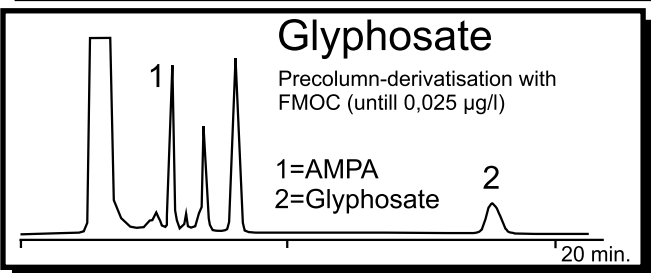
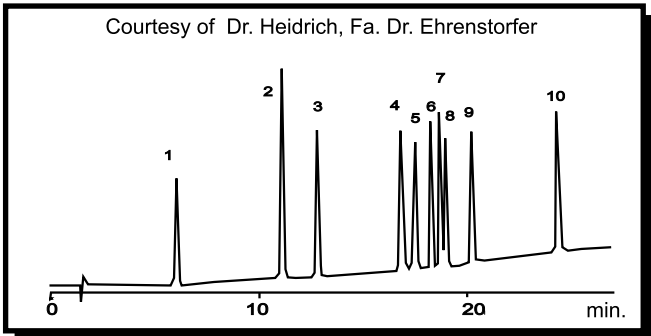
## Pesticides

Column: ReproSil Pestizid III, 5  $\mu$ m (250 x 4 mm)  
 Eluent: A=85% 1 mM NH<sub>4</sub>-Acetate + 15% ACN B=95% ACN + 5% NH<sub>4</sub>-Acetate  
 Gradient: 0 min. 0% B, 55 min. 55% B, 75 min. 100% B  
 Flow rate: 0.9 ml/min. Detection: 230 nm Injection: 50  $\mu$ l



## Pesticides (Urea-Derivates)

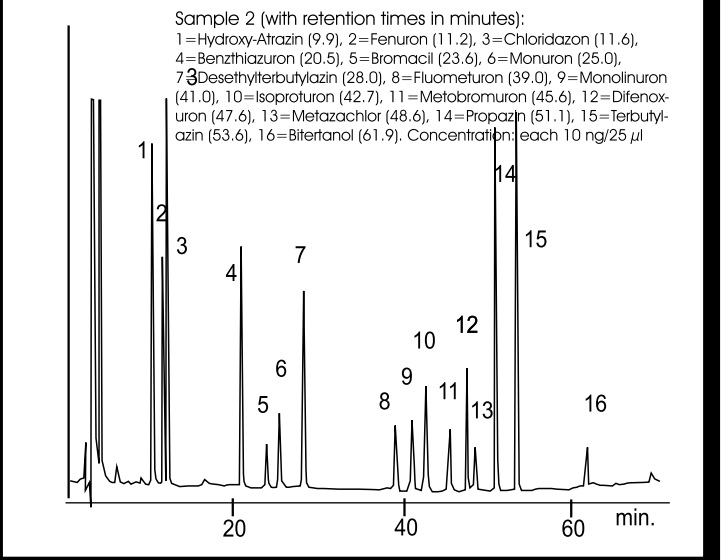
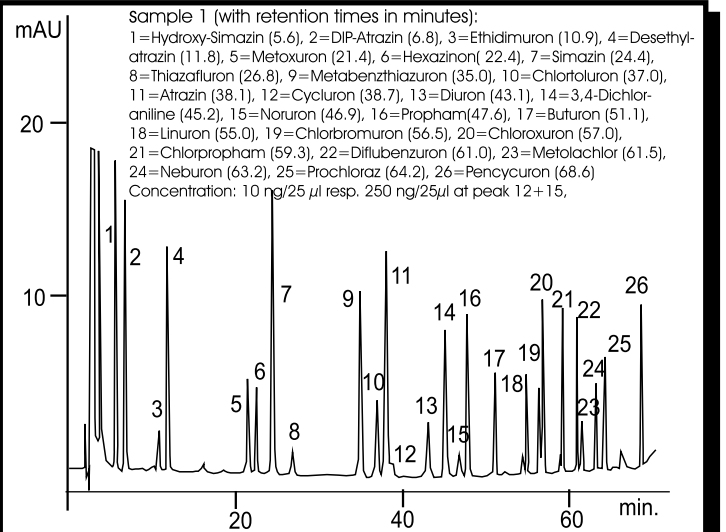
Column: ReproSil-Pur C18-AQ, 5  $\mu$ m (250 x 3 mm)  
 Eluent: A=H<sub>2</sub>O (0,5% H<sub>3</sub>PO<sub>4</sub>) B=ACN  
 Gradient: 4:1 to 1:4 in 30 Min. Flow: 0.5 ml/min. Injection: 5  $\mu$ l  
 Detection: 243 nm  
 1=Fenuron 2=Metoxuron 3=Monolinuron 4=Chlortoluron 5=Isoproturon  
 6=Fluometuron 7=Monuron 8=Diuron 9=Metobromuron 10=Linuron



Column: Equisorb NH<sub>2</sub>, 5  $\mu$ m  
 Eluent: K-Phosphate-buffer, pH=5.8 / ACH (55/45)  
 Flow: 1 ml/min. Det.: Fluoresc.: 260/310 nm (exc./ em.)  
 42

## Analysis of 42 Pesticides

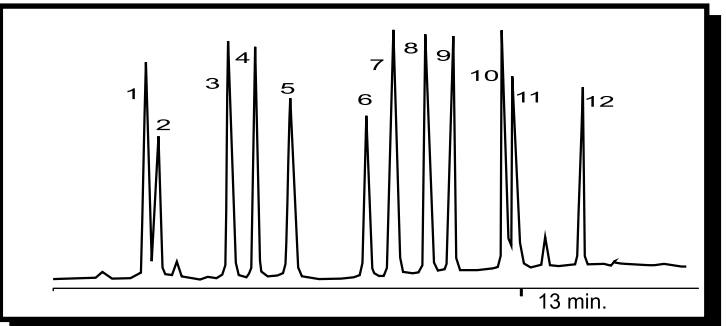
Column: ReproSil-Pesticide III, 5  $\mu$ m (250 x 3 mm) + Guard (5 x 3 mm)  
 Eluent: A=1 mM NH<sub>4</sub>-Acetate B= ACN Gradient: 0 min. 20% B, 40 min. 35% B, 80 min. 90% B, Temperature: 40 C°, Flow rate: 0,5 ml/min  
 Detection: 230 nm Injection: 50  $\mu$ l (in H<sub>2</sub>O/ACN 80/20)



Courtesy of Mr. Riebs and Mr. Dr. Heusinger, Chemische Landesuntersuchungsanstalt Freiburg

## Carbamates

Column: ReproSil-Pur ODS-3, 5  $\mu$ m (150 x 4,6 mm)  
 Eluent: A=H<sub>2</sub>O B=ACN  
 Gradient: 0-3,5 min. (ACN/H<sub>2</sub>O, 40/60) isocratic  
 3,5 min. - 10,5 min.: from 40% to 90% ACN  
 10,5 min. - 13,5 min. ACN/H<sub>2</sub>O (90/10) isocratic  
 Flow rate: 1 ml / min. Injection: 20  $\mu$ m Detection: 210 nm

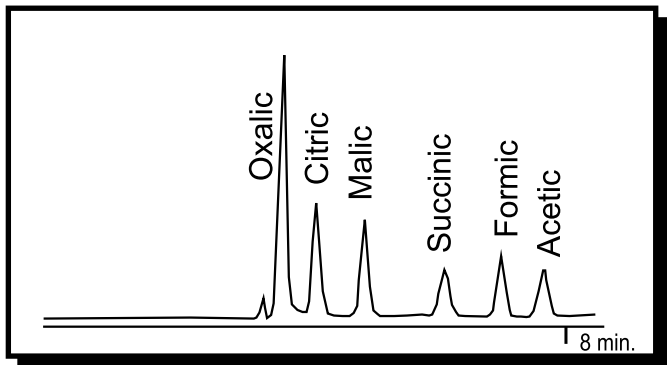


Sample:  
 1=Aldicarb Sulphone 2=Methomyl 3=Carbetamide 4=Aldicarb  
 5=Thiodicarb 6=Pyrimicarb 7=Carbaryl 8=Thiram 9=3,4,5-Trimethacarb  
 10=Phenmedipham 11=Diethofencarb 12=Fenoxycarb

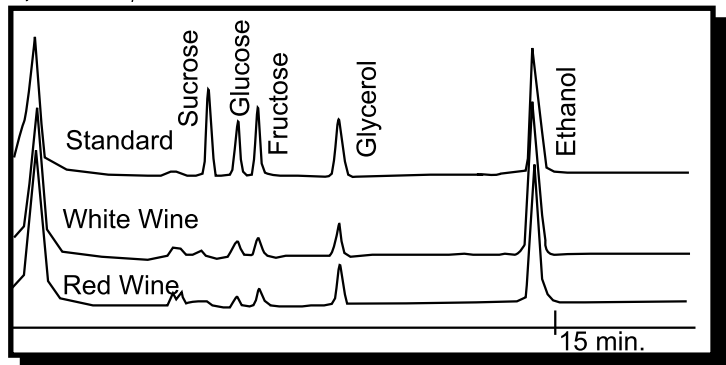


# Sugars, Acids and Alcohols

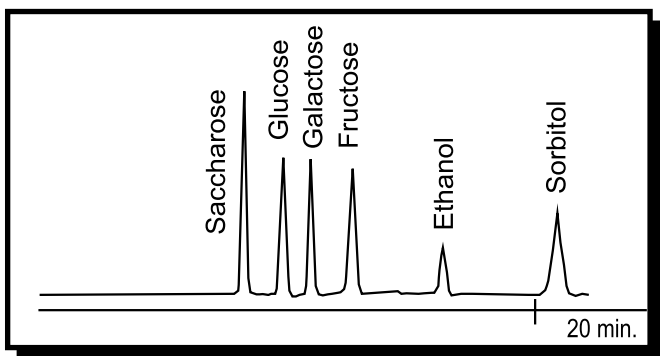
**Organic acids:** Repro-Gel H, 9  $\mu\text{m}$  (250 x 8 mm)  
 Eluent: 9 mM Sulfuric Acid, Flow rate: 1 ml/min., Det.: 210 nm



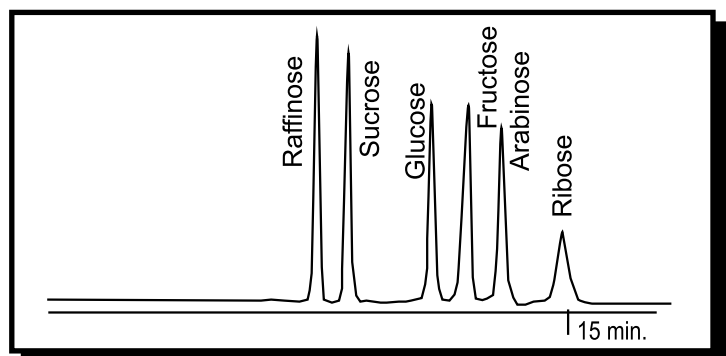
**Red Wine:** Repro-Gel H, 9  $\mu\text{m}$  (250 x 8 mm)  
 Eluent: Water, Flow rate: 0,7 ml/min. Temperature: 25 C°,  
 Injection: 20  $\mu\text{l}$ . Acids are retained with 20 x 4.6 mm SAX-Guard-Column.



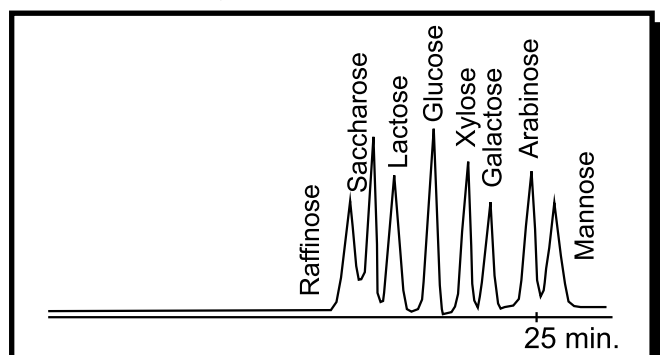
**Sugars and Alcohols:** Repro-Gel-Ca, 9  $\mu\text{m}$  (250 x 8 mm)  
 Eluent: H<sub>2</sub>O, Flow rate: 0,5 ml/min. Temperature: 80 C°,  
 Detection: RI, 35 bar



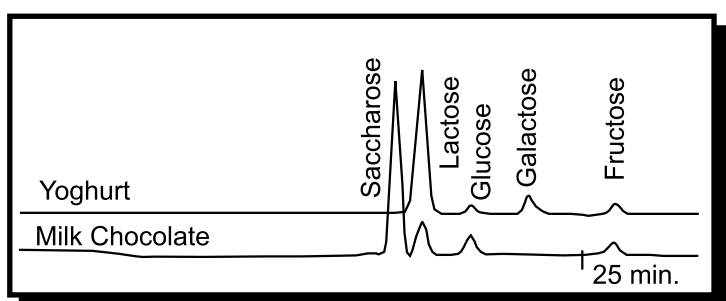
**Sugars:** Repro-Gel-Na, 9  $\mu\text{m}$  (250 x 8 mm)  
 Eluent: Water, Flow rate: 0,5 ml/min., Temperature: 80C°, Detection: RI,  
 Pressure: 45 bar



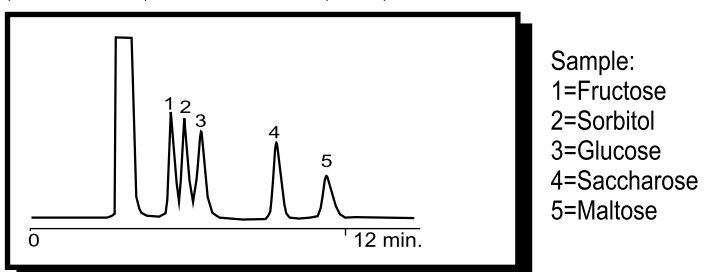
**Sugars:** Repro-Gel-Pb, 9  $\mu\text{m}$  (250 x 8 mm), Eluent: H<sub>2</sub>O, Flow rate: 0,3 ml/min., Temperature: 80 C°, Detection: RI, Pressure: 25 bar



**Lactose:** Repro-Gel-Ca, 9  $\mu\text{m}$  (250 x 8mm)  
 Eluent: water, Flow rate: 0,3 ml/min., Temperature: 80 C° Detection: RI



**Sorbitol and Sugars:** Stability Polyamin, 5  $\mu\text{m}$  (NH<sub>2</sub> on Silical) (250 x 4,6 mm), Eluent: ACN/H<sub>2</sub>O (80/20), Flow rate: 1 ml/min., Detection: UV-DA

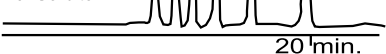


Sample:  
 1=Fructose  
 2=Sorbitol  
 3=Glucose  
 4=Saccharose  
 5=Maltose

Repro-Gel-Ca,  
 9  $\mu\text{m}$ , 250 x 8 mm  
 Flow rate: 0,5 ml/min  
 Temperature: 80 C°  
 Detection: RI  
 Injection: 20  $\mu\text{l}$

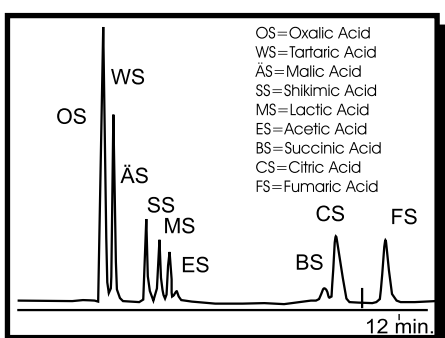
## Sugar-Alcohols

- 1=Glucose
- 2=Mannose
- 3=Fructose
- 4=Ribitol
- 5=Mannitol
- 6=Sorbitol



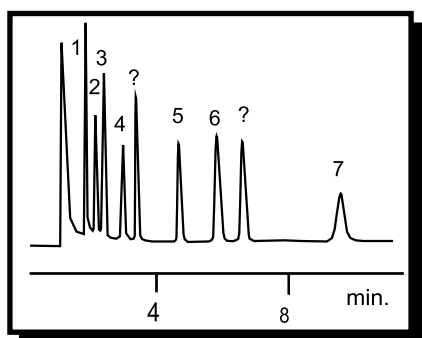
Organic Acids  
 (on C18-AQ Phase)

ReproSil-Pur C18-AQ  
 5  $\mu\text{m}$ , 200 x 4.6 mm  
 Eluent: 200 mmol/L  
 (20 g 85% H<sub>3</sub>PO<sub>4</sub>/l)  
 Temperature: 20 C°,  
 Detection: 230 nm



## Sugars

Column: ReproSil Polyamin,  
 3  $\mu\text{m}$  (60 x 4 mm)  
 Flow rate: 0,8 ml/min  
 Eluent: ACN/H<sub>2</sub>O (80/20)  
 Detection: Diodenarray oder RI  
 Sample: 1=Rhamnose, 2=Xylose  
 3=Fructose, 4=Glucose,  
 5= Sucrose, 6=Maltose,

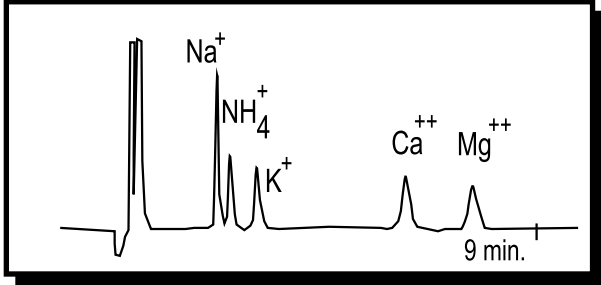


# Miscellaneous

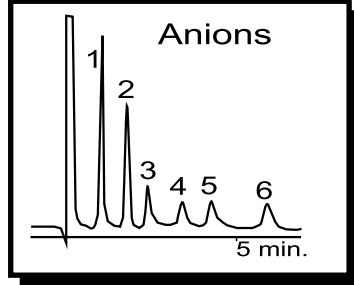
## Anions and Cations

Simultaneous Analysis of 1- and 2-val. Cations

Column: ReproSil Cat, 5 $\mu$ m (or 7  $\mu$ m) (125 x 4.6 mm)  
 Eluent: 5.0 mM Citric Acid + 0.5 mM 2,6 Pyridinedicarboxylic Acid  
 or 0.6 mM Ascorbic Acid + 3.3 mM Phosphoric Acid pH 2,7

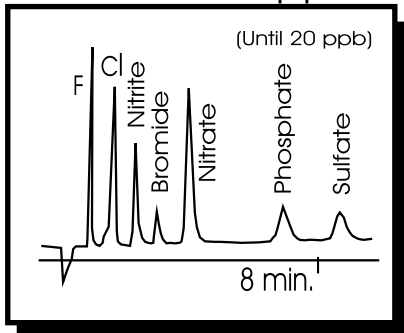


## Anions with indirect UV

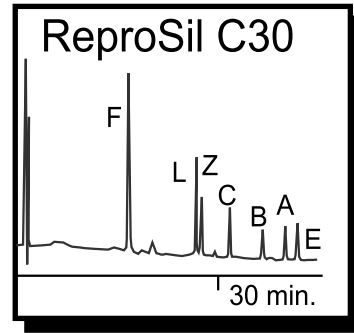


Column: ReproGel AX, 10  $\mu$ m (150 x 4 mm)  
 Eluent: mM K-Hydrogen-Phthalat (pH 6.0)  
 Flow rate: 1.2 ml, Injection: 100  $\mu$ l  
 Detection: Indirect, UV at 280 nm,  
 Sample:  
 1=Fluoride 2=Chloride 3=Nitrite  
 4=Bromide 5=Nitrate 6=Sulfate  
 (10 ppm each)

## Anions with Suppressor

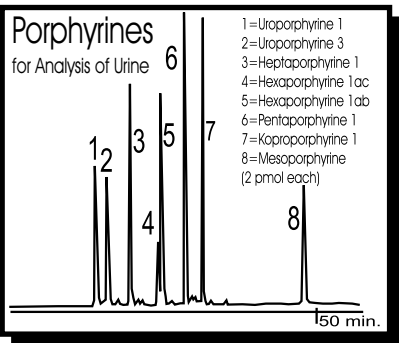


Column: ReproGel AXS  
 150 x 4 mm  
 Eluent: 1,7 mM Natrium-Bicarbonat/1,8 mM Na-Carbonat/ 0,1 mM Na-Thiocyanat  
 Temperature: RT  
 Flow rate: 2ml/min.  
 Injection: 100  $\mu$ l



## Carotinoids + Chlorophyll

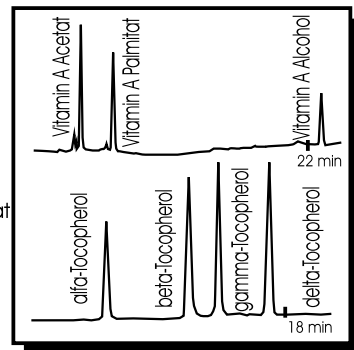
ReproSil 100 C30, 5  $\mu$ m  
 250 x 3 mm  
 Flow: 0.9 ml/min.  
 Eluent: A: Water/ACN (50/50)  
 B: MeOH / Aceton (60/40)  
 Gradient:  
 Sample: F=Fucoxanthin  
 L=Lutein, Z=Zeaxanthin  
 C=Canthaxanthin, B=Chlorophyll B  
 A=Chlorophyll A, E=Echinenone



## Stability C18-NE, 5 $\mu$ m

125 x 3 mm  
 Flow rate: 0,7 ml/min.  
 Eluent: A: 40mM KH<sub>2</sub>PO<sub>4</sub> pH5,4, B: 12,5 mM Tetra-butylammoniumphosphat pH7,3 in MeOH  
 Gradient:

Courtesy of Prof. Jacob, Uni Klinikum Großhadern



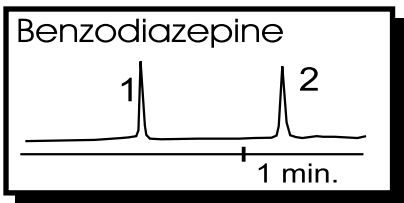
## Vitamin A-deriv. + Tocopherols

ReproSil 100 CN, 5  $\mu$ m  
 250 x 4 mm  
 Flow: 1.5 ml/min  
 Detection:  
 Fluoresc. (Tocopherols)  
 295 / 330 nm  
 UV 325 nm (Vitamin A-deriv.)  
 Eluent:  
 A: n-Hexane  
 B: tert-Butylmethylether  
 Gradient:  
 in 23 min from 98/2 to 80/20

# High Speed-HPLC with Gold Columns

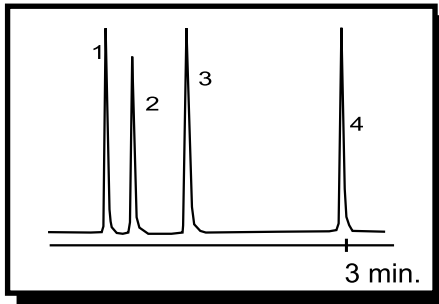
## Benzodiazepine

1=Clonazepam  
 2=Diazepam



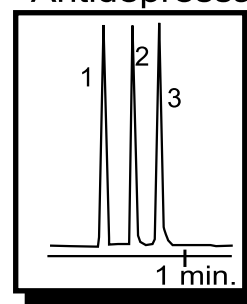
Column:  
 Gold-Turbo 100 ODS, 1.5  $\mu$ m,  
 33 x 4.6 mm,  
 Eluent: ACN / 0,1 % TFA (35/65)  
 Flow: 1,5 ml / min.

## Intermediates of Neurokinin-1 Receptor Antagonist Synthesis



Column:  
 Gold-Turbo Amid-C12, 1.5  $\mu$ m, 33 x 4.6 mm,  
 Eluent: Gradient A: Water/ 5% ACN B: ACN  
 Flow: 2 ml / min.  
 Courtesy of M. Althaus, Hoffmann-La Roche

## Antiarythmics + Antidepressants



1.) Procaine  
 2.) Diphenhydramine  
 3.) Amitriptyline

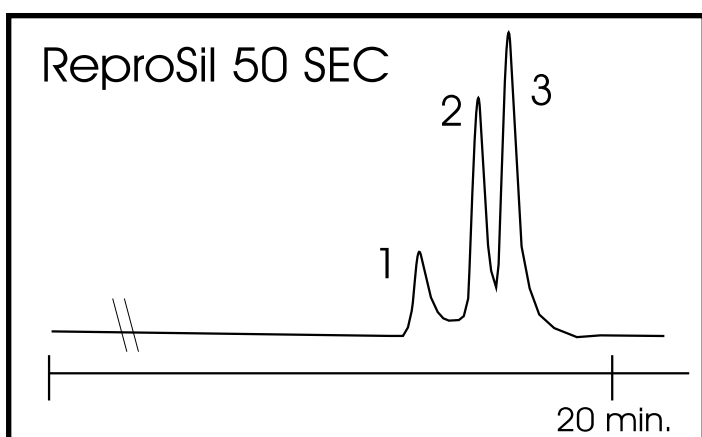
Column:  
 Gold-Turbo ODS-MS, 1.5  $\mu$ m, 33 x 4.6 mm,  
 Eluent: 50 % ACN / 50 % 50 mM KH<sub>2</sub>PO<sub>4</sub>,  
 pH=3 Flow: 1 ml / min.

# ReproSil SEC - for Size Exclusion

Reprosil SEC phases are designed for the Gel Filtration Chromatography (GFC) of proteins, peptides and other org. polymers in aqueous systems. In GFC elution order is a function of molecular weight, the largest molecules eluting first and the smallest last.

The Silica-based Reprosil SEC packings are available with 3 different pore sizes:

Packing:	Pore size:	Molecular weight range	
		of Proteins:	of Linear Molecules: (denaturated proteins, peptides, other org. Polymers)
Reprosil 50 SEC -	50 Å	8 000 - 30 000 D	500 - 10 000 D
Reprosil 200 SEC -	200 Å	10 000 - 500 000 D	2 000 - 70 000 D
Reprosil SEC 4000 -	450 Å	20 000 - 5 000 000 D	4 000 - 500 000 D



Column:

Reprosil 50 SEC, 5  $\mu$ m ( 300 x 8 mm)

Flow: 0,5 ml / min

Eluent:

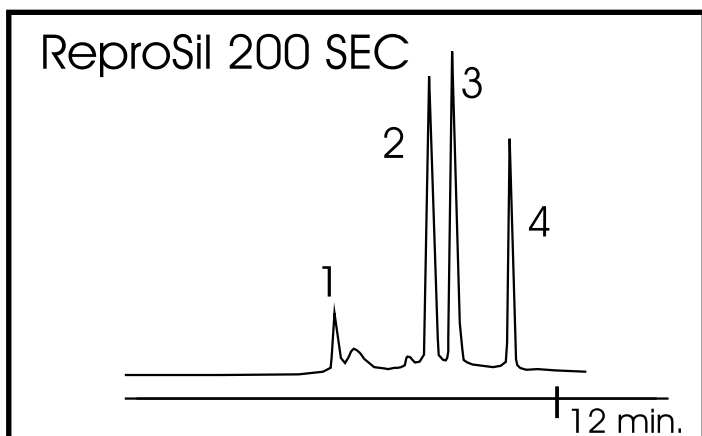
50 mM  $\text{KH}_2\text{PO}_4$  + 100 mM KCL, pH 6,5

Peptide Sample:

1 = MW: 3894 D

2 = MW: 1593 D

3 = MW: 826 D



Column:

Reprosil 200 SEC, 5  $\mu$ m ( 300 x 8 mm)

Flow: 1 ml / min

Eluent:

50 mM  $\text{KH}_2\text{PO}_4$  + 150 mM KCL, pH 7.0

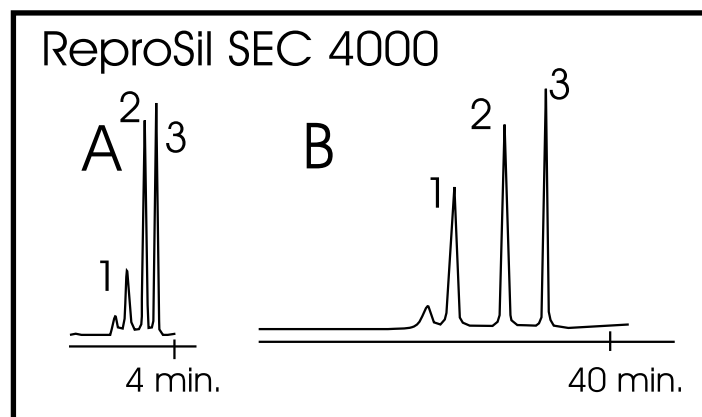
Sample:

1 = Thyroglobulin (MW - 670 KD)

2 = Ovalbumin (MW - 44 KD)

3 = Myoglobin (MW - 17 KD)

4 = Phenylalanine



Column:

Reprosil SEC 4000, 5  $\mu$ m

A.) 250 x 4.6 mm, Flow: 1 ml / min

B.) 750 x 4.6 mm, Flow: 0,33 ml / min

Eluent:

50 mM  $\text{KH}_2\text{PO}_4$  + 150 mM KCL, pH 7.0

Sample:

1 = Thyroglobulin (MW - 670 KD)

2 = Ovalbumin (MW - 44 KD)

3 = Phenylalanine

# GPC - Gel Permeation Chromatography

Reprogel PS GPC columns are packed with *Polystyrol/Divinylbenzene Copolymer* packings with 3, 5 or 10  $\mu\text{m}$  particles.

Typical theoretical plate numbers/m are :

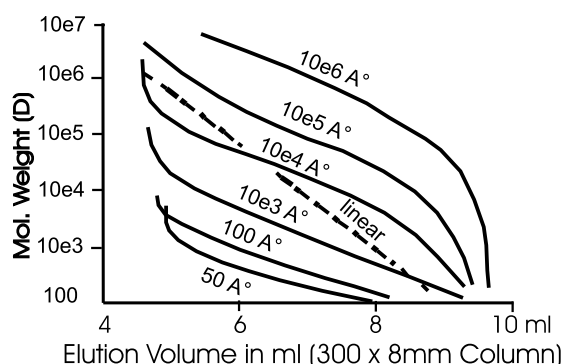
for 3  $\mu\text{m}$ : 110 000/m, for 5  $\mu\text{m}$ : 70 000/m and for 10  $\mu\text{m}$ : 50 000/m.

The particles are totally spherical and pressure stable up to 1160 bars.

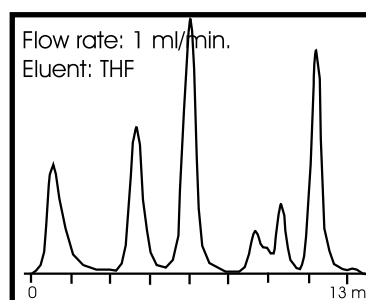
Column dimensions are: 300 x 8 resp. 600 x 8 mm and 30 x 8 mm for guards.

The optimal flow rate is 1 ml/min.

Calibration Curves of Repro-Gel-PS-GPC



Separation of Polystyrols



Column: ReproGel-GPC-PS linear

## Reprogel PS-GPC Columns:

Pore size	Daltons		Exclusion Limit	Mat.No.:
50 A°	<	1 000	3 000	(050.)
100 A°	>	3 000	5 000	(100.)
500 A°	>	20 000	20 000	(500.)
10 <sup>3</sup> A°	1 000 -	40 000	70 000	(103.)
10 <sup>4</sup> A°	4 000 -	500 000	700 000	(104.)
10 <sup>5</sup> A°	10 000 -	2 000 000	4 000 000	(105.)
10 <sup>6</sup> A°	200 000 -	10 000 000	> 10 000 000	(106.)
Linear	1 000 -	1 000 000	> 2 000 000	(lin.)

## Eluents:

Benzene, Chlorierte Aliphate, Chinolin, Cyclohexan, o-Dichlorbenzol, Dimethylformamid, Dimethylacetamid, Dimethylsulfoxid, Dioxan, Ethylacetate, Hexafluorisopropanol, HFIP/CHCl<sub>3</sub>, m-Kresol, Methylethylketon, N-Methylpyrolidinon, Tetrahydrofuran, Toluene, Trichlorbenzol, Xylol

**Ordering numbers: Particle size + Mat. No. (=Porosity) + Column (New=s, Refill=r) + Dimensions**

**example a):** 5  $\mu\text{m}$  and 100 A° and new column 300 x 8 mm  
order no.: Rg5.100.s3008

**example b):** 10  $\mu\text{m}$  and 10<sup>3</sup> A° and Refill 300 x 8 mm  
order no.: Rg0.103.r3008

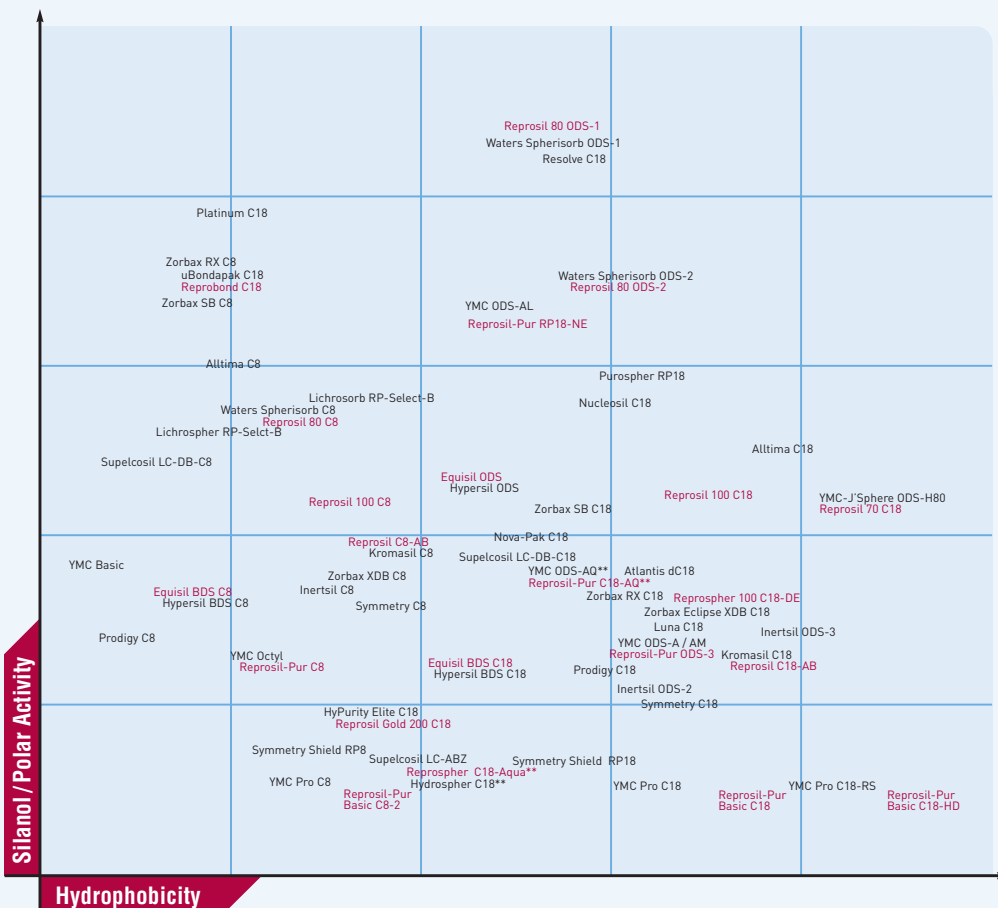
**example c):** 3  $\mu\text{m}$  and 50 A° and new Column 600 x 8 mm  
order no.: Rg3.050.s6008

## USP-List (Dr. Maisch HPLC-Phases ):

Code	Spezifikation	Dr. Maisch Phases
USP-L1	Octadecyl silane / C18, RP18, ODS) chemically bonded to porous or ceramic silica microparticles, 1.8 until 10 µm	Reposil 100 C18 ( XBD) Reposil-Pur C18-AQ Reposil-Pur ODS-3 Reposil Gold C18 Reposil Saphir C18 Reposil 80 ODS-2 Reposil-Pur Basic C18 (HD) Repospher C18 (DE) Equisil ODS Equisil BDS C18 Reprobond C18 Repropack C18
USP-L3	Porous silica microparticles 5-10 µm	Reposil 100 Si Reposil-Pur Si Reposil 80 Si Repospher Si Equisil 120 Si
USP-L7	Octyl silane (C8, RP8, MOS) chemically bonded to totally porous silica particles, 1.8 – 10 µm	Reposil 100 C8 Reposil-Pur C8 Reposil Gold C8 Reposil -Pur Basic C8 (HD) Reposil 80 C8 Repospher C8 (DE) Equisil BDS C8
USP-L8	An essentially monomolecular layer of aminopropylsilane (NH <sub>2</sub> , APS) ) chemically bonded to totally porous silica gel support, 3-10 µm	Reposil 100 NH <sub>2</sub> Reposil-Pur NH <sub>2</sub> Reposil 80 NH <sub>2</sub> Repospher NH <sub>2</sub> Equisil APS
USP-L9	Irregular or spherical, totallyporous silica gel having a chemically bonded, strongly acidic cation-exchange coating (SCX)	Reposil 80 SCX Reposil Saphir SCX
USP-L10	Nitrile groups (CN) chemically bonded to porous silica particles 3-10 µm	Reposil 100 CN Reposil-Pur CN Reposil 80 CN Repospher CN ( DE) Equisil CPS
USP-L11	Phenyl groups chemically bonded to porous silica particles, 3-10 µm	Reposil 100 Phenyl Reposil-Pur Phenyl Reposil 80 Phenyl Repospher Phenyl (DE) Equisil Phenyl
USP-L13	Trimethylsilane (C1, SAS)) chemically bonded to porous silica particles 3-10 µm	Reposil-Pur C1 Reposil 80 C1 Equisil SAS
USP-L14	Silica gel having chemically bonded, strongly basic quaternary ammonium-anion exchange coating, 5-10 µm	Reposil 80 SAX
USP-L15	Hexyl silane (C6, Hexyl) chemically bonded to totally porous silica, 3-10 µm	Reposil 80 C6

USP-L16	Dimethyl silane (C2) chemically bonded to porous silica particles, 3-10 µm	Reposil Gold 120 C2 Reposil Gold 300 C2
USP-L17	Strong cation-exchange resin consisting of sulfonated cross-linked styrene-divinylbenzene copolymer in the H <sup>+</sup> Form, 7-11 µm	Reprogel H <sup>+</sup> , 9 µm
USP-L18	Amino and cyano groups chemically bonded to porous silica particles, 3-10 µm	Reposil PAC
USP-L19	Strong cation-exchange resin consisting of sulfonated cross-linked styrene-divinylbenzene copolymer in the calcium, 9 µm	Reprogel Ca <sup>++</sup>
USP-L20	Dihydroxypropane (OD, Diol) groups chemically bonded to porous silica particles, 5-10 µm	Reposil 100 Diol Reposil-Pur Diol Reposil 80 Diol
USP-L21	A rigid, spherical styrene-divinylbenzene-copolymer, 5-10 µm	Repromer 100 RPS Repromer 300 RPS Repromer 1000 RPS
USP-L22	A cation-exchange resin made of porous polystyrene gel with sulfonic acid groups, about 10 µm in size	Reprogel SCX
USP-L26	Butyl silane (C4) chemically bonded to totally porous silica particles, 5–10 µm	Reposil 100 C4 Reposil-Pur C4 Reposil Gold C4 Reprospher C4 (DE)
USP-L32	A chiral ligand-exchange packing L-Proline copper complex covalently bonded to irregularly shaped silica, particles, 5-10 µm	Reposil Chiral-L-Prolin
USP-L34	Strong cation-exchange resin consisting of sulfonated cross-linked styrene-divinylbenzene copolymer in the lead form, 9 µm	Reprogel Pb, 9 µm
USP-L37	Polymethacrylate gel packing having the capacity to separate proteins by molecular size over a range of 2 000 – 40 000D	Repromer OH-60, 10 µm
USP-L38	Methacrylate based size exclusion packing for water soluble samples	Repromer OH, 10 µ
USP-L40	Cellulose tris-3,5-dimethylphenylcarbamate coated porous silica particles, 5-20 µm	Reposil Chiral-OM
USP-L41	Immobilized alfa-1-acid glycoprotein on spherical silica particles, 5 µm	Chiral-AGP
USP-L43	Pentafluorophenyl groups chemically bonded to silica particles, 5 -10 µm	Reposil Fluosil PFP
USP-L47	High capacity anion-exchange microporous substrate, fully, Functionalized with trimethylamine groups, 8 µm	PRPX-110 RCX-10 RCX-30
USP-L51	Amylose-tris-3,5-dimethylphenylcarbamate coated, porous, spherical silica particles, 5-10 µm	Reposil Chiral-AM
USP-L58	Strong cation-exchange resin consisting of sulfonated cross linked copolymer in the Na <sup>+</sup> Form, 7-11 µm	Reprogel Na <sup>+</sup>
USP-L60	Spherical, porous silica gel, surface has been covalently modified with alkylamid-groups with endcapping	Reposil ABZ-Amid C18
USP-L62	C30-silane bonded phase on a fully spherically silica , 3-15 µm	Stability C30

## Equal but more economic: Dr. Maisch Columns and Phases



### Phase Selection Guide\*

**Red:** Dr. Maisch-phases.

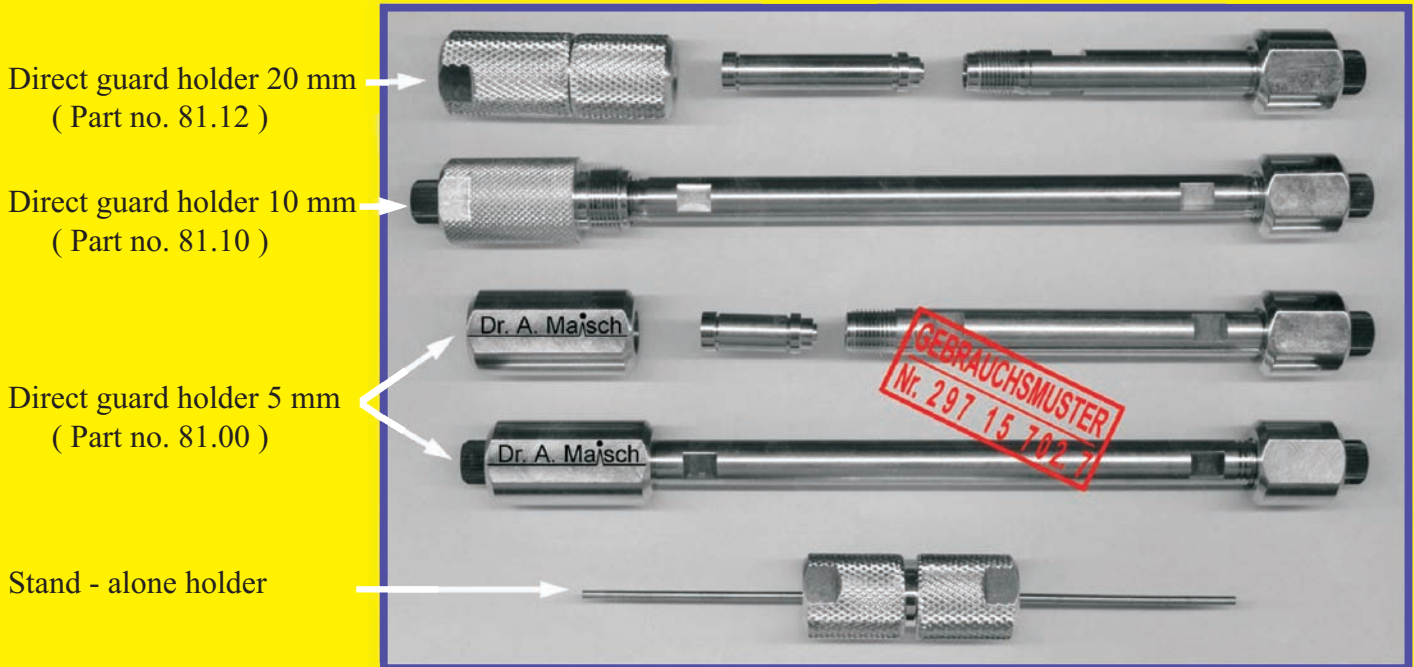
Phases in the **upper part of the chart** are polar RP-phases, which are based on lower purity silicas or/and are not endcapped.

For bases please select phases in the **lower part of the chart**.

If you are looking for a similar phase from a different supplier, please look in the same area of the chart.

\* Based on YMC Phase Selection Guide and Waters Selectivity Chart (1999)

### Possibilities for connecting standard guards and columns



### FixGuards - the new universal Guards...

