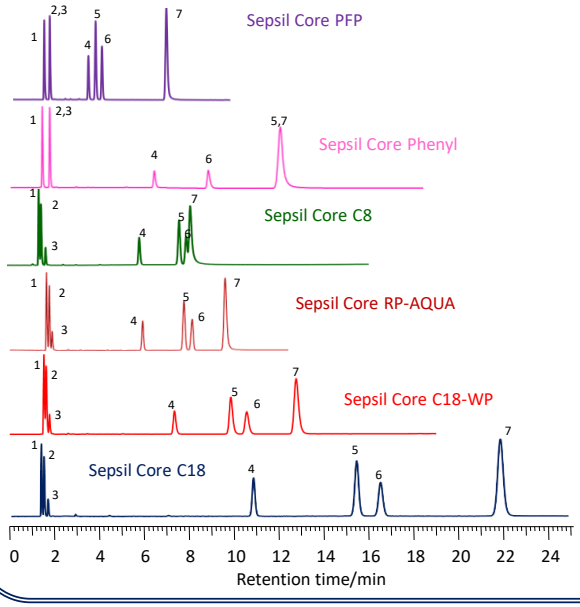
Sepsil Core C18-WP, RP-AQUA, C8, Phenyl, PFP, 2.6 µm

(Pentafluoropheny)

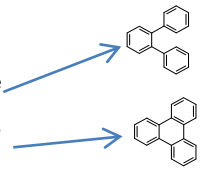
◆ 物理参数

	粒径	孔径	比表面积	含碳量	键合相	封尾	最大耐压	pH范围
Sepsil Core C18	2.6 µm	9 nm	150 m^2/g	7%	C18	yes	60 MPa	1.5 - 10
Sepsil Core C18-WP	2.6 µm	16 nm	90 m^2/g	5%	C18	Yes	60 MPa	1.5 - 10
Sepsil Core RP-AQUA	2.6 µm	16 nm	90 m^2/g	4%	C28	Yes	60 MPa	2 - 8
Sepsil Core C8	2.6 µm	9 nm	150 m^2/g	4.5%	C8	Yes	60 MPa	1.5 - 9
Sepsil Core Phenyl	2.6 µm	9 nm	150 m^2/g	5%	Phenylhexyl	Yes	60 MPa	1.5 - 9
Sepsil Core PFP	2.6 µm	9 nm	150 m^2/g	4.5%	Pentafluorophenyl	Yes	60 MPa	2 - 8

◆ 标准样品分离

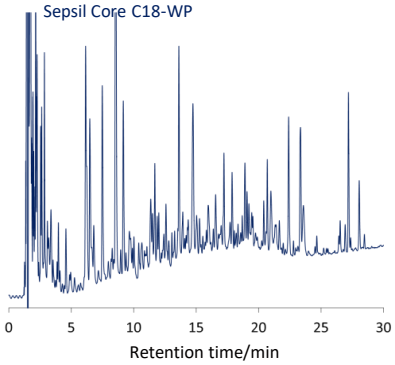


Column: Sepsil Core C18, C18-WP, RP-AQUA, C8, Phenyl, PFP, 2.6 µm
150 x 4.6 mm
Mobile phase: CH_3OH/H_2O=75/25
Flow rate: 1.0 mL/min
Temperature: 40 °C
Sample: 1 = Uracil
2 = Caffeine
3 = Phenol
4 = Butylbenzene
5 = o-Terphenyl
6 = Amylbenzene
7 = Triphenylene



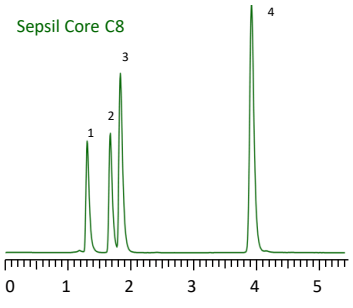
	氢结合性 (Caffeine/Phenol)	疏水性 (Amylbenzene/Butylbenzene)	选择性 (Triphenylene/o-Terphenyl)
PFP	1.00	1.31	2.38
Phenyl	1.00	1.48	1.01
C8	0.32	1.46	1.08
RP-AQUA	0.52	1.52	1.30
C18-WP	0.40	1.55	1.35
SunShell C18	0.39	1.60	1.46

多肽分离



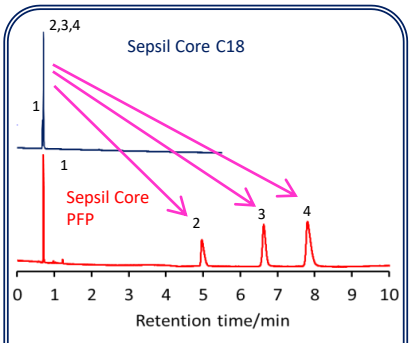
Column: C18-WP, 2.6 µm (16 nm) 150 x 4.6 mm,
Mobile phase: A) 0.1% TFA in Acetonitrile/water(10:90)
B) 0.1 % TFA in Acetonitrile
Gradient program: %B 5% – 50% in 50 min
Flow rate: 1.0 mL/min , Temperature: 25 °C,
Detection: UV@210 nm,
Sample: Tryptic digest of BSA

阿米替林分离



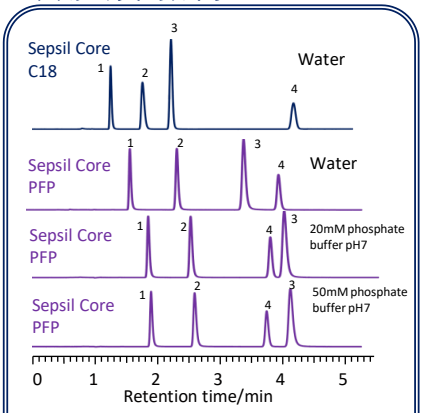
Column: C8, 2.6 µm 150 x 4.6 mm
Mobile phase:
CH_3CN/20mM phosphate buffer H7.0=60/40
Flow rate: 1.0 mL/min
Temperature: 40 °C
Detection: UV@250nm
Sample: 1 = Uracil, 2 = Propranolol,
3 = Nortriptyline, 4 = Amitriptyline

碱性化合物的保留时间比较



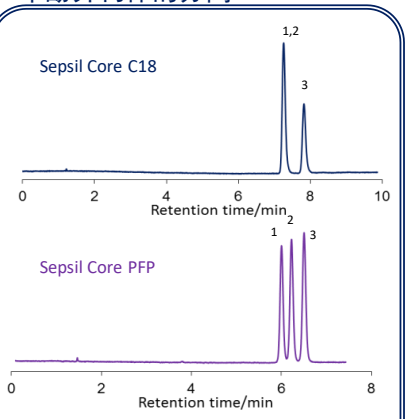
Column: C18, 2.6 µm 150 x 4.6 mm
PFP, 2.6 µm 150 x 4.6 mm
Mobile phase:
CH_3CN/10mM phosphate buffer pH7.0=80/20
Flow rate: 1.8 mL/min
Temperature: 25 ºC
Sample: 1 = Uracil, 2 = Propranolol,
3 = Nortriptyline, 4 =Amitriptyline

黄嘌呤类的分离



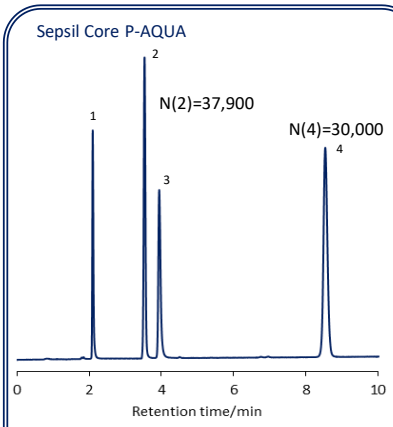
Column: C18, PFP, 2.6 µm 150 x 2.1 mm
Mobile phase: CH_3OH/water or buffer=30/70
Flow rate: 0.3 mL/min
Temperature: 25 °C
Detection: UV@250nm
Sample: 1 = Theobromine
2 = Theophyline
3 = Caffeine
4 = Phenol

甲酚异构体的分离



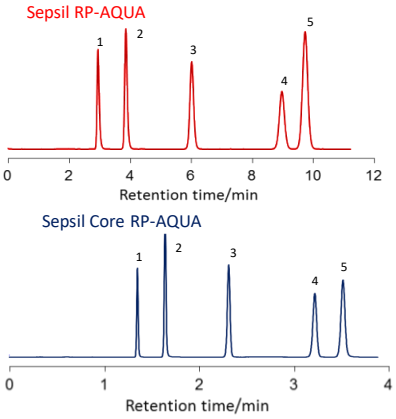
Column: C18, PFP, 2.6 µm 150 x 4.6 mm
Mobile phase: CH_3OH/H_2O=40/60
Flow rate: 1.0 mL/min
Temperature: 25 °C
Detection: UV@250nm
Sample: 1 = p-Cresol
2 = m-Cresol
3 = o-Cresol

核苷酸的分离



Column: RP-AQUA, 2.6 µm 150 x 4.6 mm
Mobile phase: 20mM Phosphate buffer pH6.0
Flow rate: 1.0 mL/min
Temperature: 25 ºC
Detection: UV@250nm
Sample: 1 = 5'-GDP
2 = 5'-ATP
3 = 5'-ADP
4 = 5'-AMP

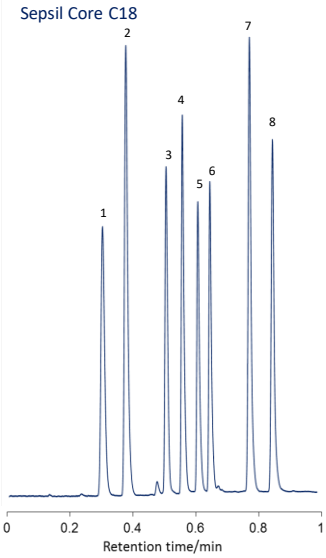
核酸碱基的分离



Column:
Sepsil RP-AQUA, 5 µm 150 x 4.6 mm
Sepsil Core RP-AQUA, 2.6 µm 150 x 4.6 mm
Mobile phase:
10mM Phosphate buffer pH7.0
Flow rate: 1.0 mL/min for Sunniest
1.5 ml/min for SunShell
Temperature: 24 ºC
Sample: 1 = Cytosine, 2 = Uracil, 3 = Thymidine,
4 = Uridine, 5 = Thymine

	Plate(5)	Resolution (4,5)
Sunniest	14,000	1.98
SunShell	30,000	3.79

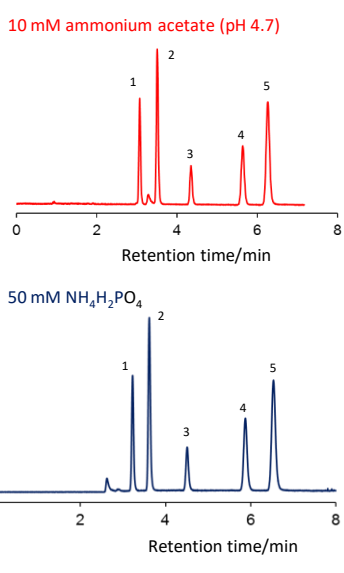
高速分离

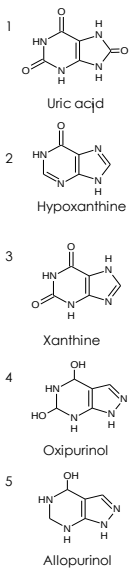


Column: Sepsil Core C18, 30 x 3.0 mm.
Mobile phase: A) Water, B) Acetonitrile; Gradient (Acetonitrile %), 0.00 min - 35%, 0.40 min - 100%, 0.80 min - 100%, 0.85 min - 35%, 1cycle; 1.8min, (High-pressure gradient).
Flow rate: 1.0 mL/min.
Temperature: 40 ºC.
Injection Volume: 1 µL.
Wavelength: 200 - 500nm, CH-9, 215 - 500nm (Max Abs.).
Sample: Mixture of ultraviolet absorbers,
1 = 2,2',4,4'-Tetrahydroxybenzophenone,
2 = Ethyl *p*-aminobenzoate,
3 = 2, 4-Dihydroxybenzophenone,
4 = 2,2'-Dihydroxy-4-methoxybenzophenone,
5 = 2,2'-Dihydroxy-4,4'-dimethoxybenzophenone,
6 = 2-Hydroxy-4-methoxybenzophenone,
7 = 2-(2'-Hydroxy-5'-metylphenyl) benzotriazole,
8 = 4-tert-Butylphenyl salicylate.
Courtesy of Jasco.

峰宽只有1秒钟

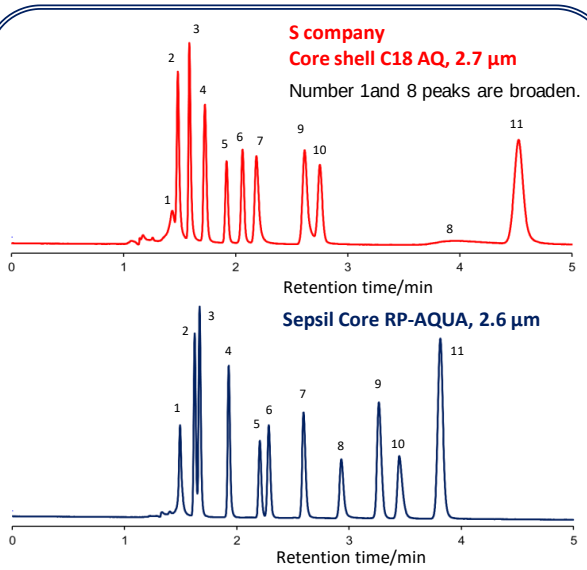
嘌呤类似物的分离





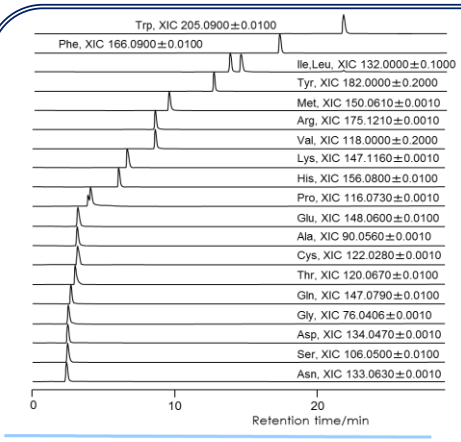
Column: Sepsil Core RP-AQUA, 2.6 µm 100 x 4.6 mm
Mobile phase: 50 mM $NH_4H_2PO_4$ or 10 mM ammonium acetate (pH 4.7)
Flow rate: 1.0 mL/min
Temperature: Ambient
Detection: UV@250 nm
Sample: 1 = Uric acid, 2 = Hypoxanthine, 3 = Xanthine, 4 = Oxipurinol, 5 = Allopurinol

有机酸的分离

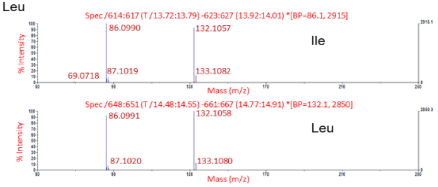


Column dimension: 150 x 4.6 mm
Mobile phase: 0.1% H_3PO_4
Flow rate: 1.0 mL/min
Temperature: 40 ºC
Detection: UV@210nm
Sample:
1 = Oxalic acid, 2 = Tartaric acid, 3 = Formic acid, 4 = Malic acid, 5 = Lactic acid, 6 = Acetic acid, 7 = Diglycolic acid, 8 = Maleic acid, 9 = Citric acid, 10 = Succinic acid, 11 = Fumaric acid.

氨基酸的分离(LC/MS)

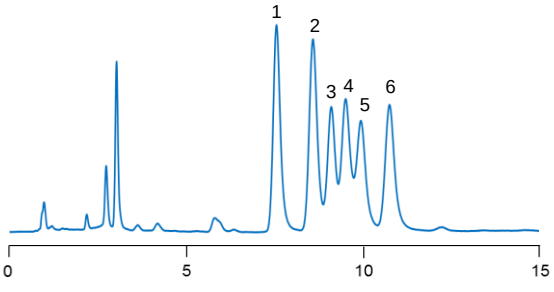


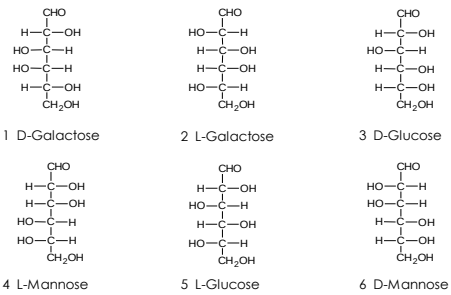
Mass spectra of Ile and Leu



Column: Sepsil Core RP-AQUA, 2.6 µm, 150 x 2.1 mm
Mobile phase: A) 5 mM HFBA, B) 5 mM HFBA in CH_3CN / H_2O (9/1)
%B 0% to 20% in 20 min (HFBA: Heptafluorobutyric acid)
Flow rate: 0.2 mL / min
Temperature: 40 ºC
Detection: MS (NanoFrontier LD) ESI Positive,
Extracted ion chromatogram (EIC)

色氨酸衍生单糖的分离





Column: Sepsil Core RP-AQUA, 2.6 µm 100 x 4.6 mm
Mobile phase: 5 mM Phosphate and 25 mM tetraborate (pH 9.6)
Flow rate: 1.0 mL/min
Temperature: 20 ºC
Detection: UV@220 nm
Sample: Monosaccharides derivatized with L-Tryptphan