

<< Develosil Column >>

TEST REPORT

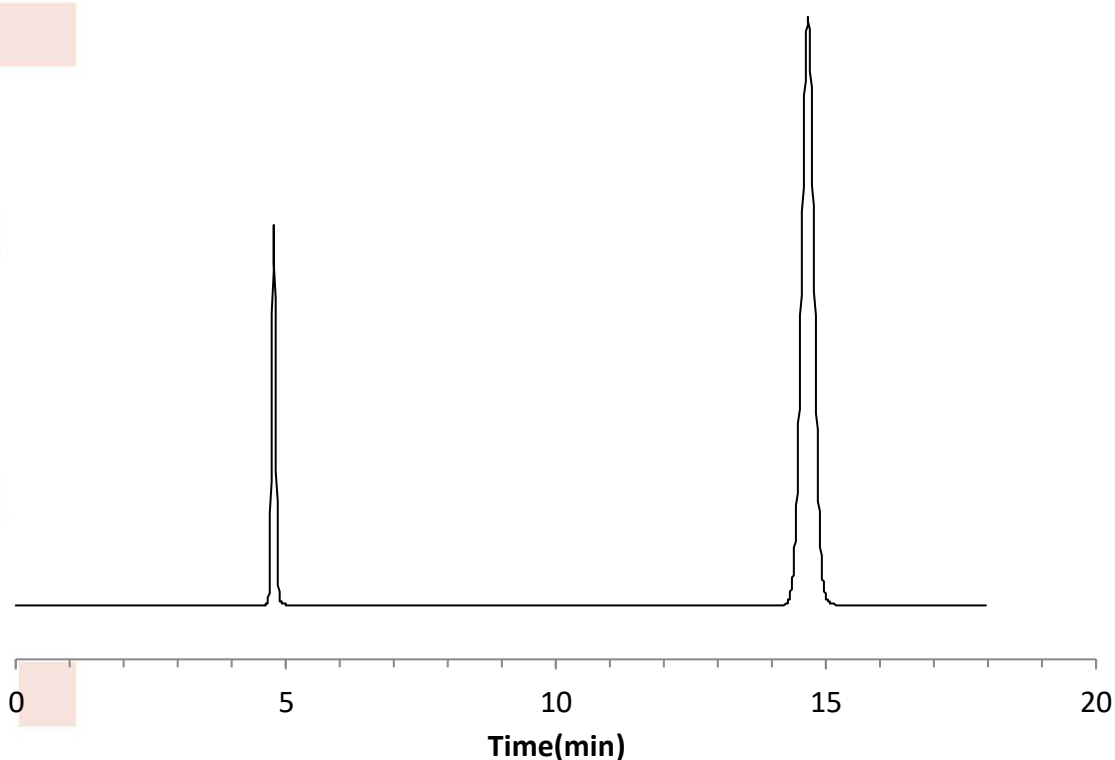
Packings	Develosil	300C4-HG, 5 μ m	Batch No.	110612
Column size	Inner diameter	4.6 mm	Length	250 mm
End fitting type	NW			
Mfg. No.	16111867-PI			

Operating conditions

Mobile phase	:	Acetonitrile:water=60:40
Flow rate	:	1.0 mL/min
Column temp.	:	30 $^{\circ}$ C
Pressure	:	5.7 MPa
Detection	:	UV 254 nm

Sample (Order of elution)

- 1 Benzene
- 2 1,3,5 Triphenyl benzene



Theoretical plate	(Last peak)	$5.54 \times (t_R/W_{0.5})^2 = 18163$
Asymmetry factor	(10% Height of Last peak)	= 0.97
Mobile phase at shipment:	Acetonitrile:water=60:40	

Certificate of Analysis

Develosil 300C4-HG-5

Batch # 110612

Analytical Results for Develosil 300C4-HG-5

Analysis of Unbonded Silica Gel	Result
Median Particle Size [μm]	5.84
Surface Area [m^2/g]	175
Pore Volume [ml/g]	1.03
Median Pore Diameter [nm]	24.36

※Median Particle Size was measured using Coulter Multisizer III, and Surface Area, Pore Volume and Median Pore Diameter were measured using Coulter SA3100.

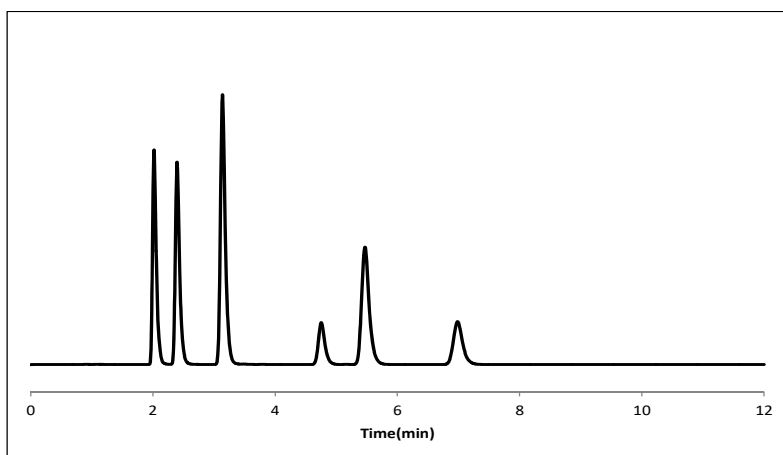
Analysis of Develosil 300C4-HG-5

Total carbon [%]	4.0
------------------	------------

Chromatographic Results for Develosil 300C4-HG-5

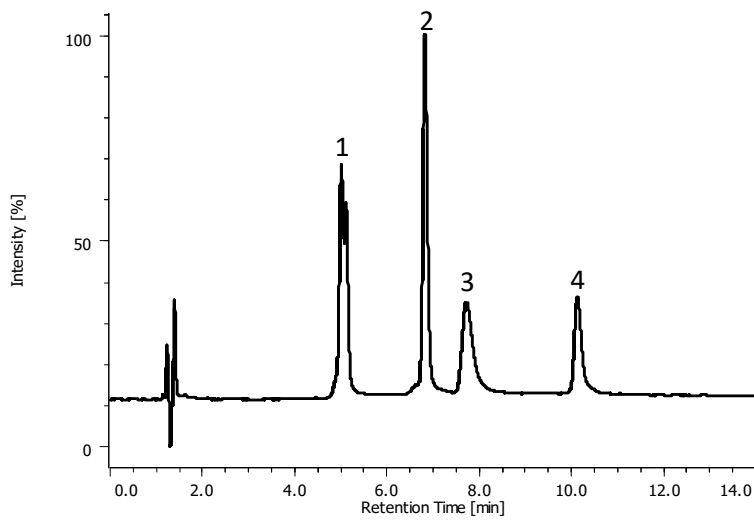
Separation Factor

α (Caffeine/Phenol)	0.34
α (Toluene/Benzene)	1.82
α (Methyl benzoate/Toluene)	0.69



Column size :150x4.6mm I.D.
 Mobile Phase :CH₃OH/Water(40/60)
 Flow rate :1.0ml/min
 Detection :UV 254nm
 Temperature :40°C
 Sample
 1:Uracil
 2:Caffeine
 3:Phenol
 4:Benzene
 5:Methyl benzoate
 6:Toluene

Separation of Proteins



Column size :150x4.6mm I.D.

Mobile Phase :A) 0.05% TFA in Water

B) 0.05% TFA in Acetonitrile

Gradient :

Time(min)	%A	%B
0.0	80	20
15.0	35	65
30.0	35	65
30.1	80	20

Flow rate :1.5ml/min

Detection :UV 214nm

Temperature :40°C

Sample 1:Ribonuclease

2:Cytochrome C

3:HOLO-Transferrin

4:Apomyoglobin

Retention Time (min)	Result
1. Ribonuclease	5.00
2. Cytochrome C	6.81
3. HOLO-Transferrin	7.71
4. Apomyoglobin	10.11