

<< Develosil Column >>

TEST REPORT

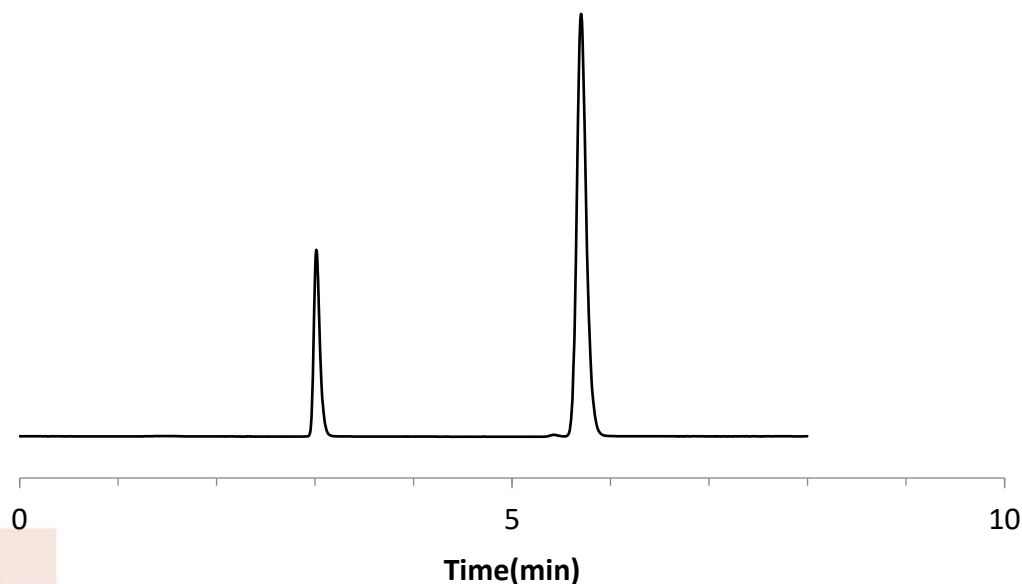
Packings	Develosil	300C4-HG, 5 μm	Batch No.	110117
Column size	Inner diameter	4.6 mm	Length	250 mm
End fitting type	NW			
Mfg. No.	17032194C-DW			

Operating conditions

Mobile phase	:	Acetonitrile:water=60:40
Flow rate	:	1.0 mL/min
Column temp.	:	30 °C
Pressure	:	5.9 MPa
Detection	:	UV 254 nm

Sample (Order of elution)

1	Uracil (0.01mg/mL)	
2	Naphthalene (0.1mg/mL)	
Injection vol.	:	1.0 uL



Theoretical plate	(Last peak) $5.54 \times (t_R/W_{0.5})^2 = 17053$
Asymmetry factor	(10% Height of Last peak) = 1.22

Mobile phase at shipment: Acetonitrile:water=60:40

Certificate of Analysis

Develosil 300C4-HG-5

Batch # 110117

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

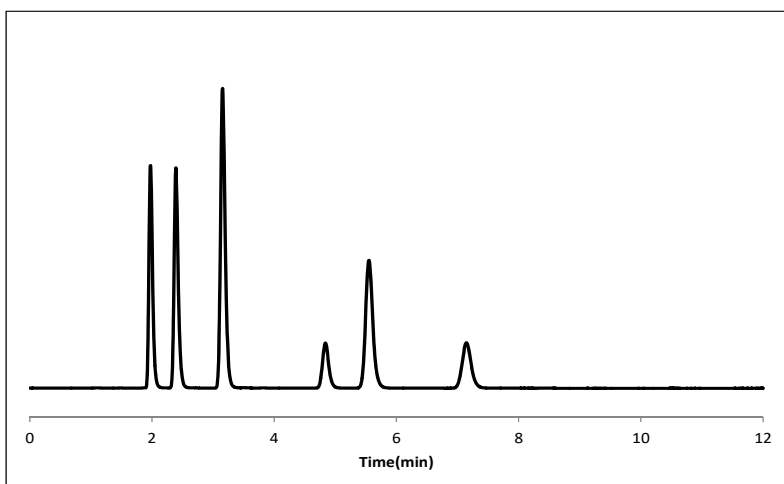
※Median Particle Size was measured using Coulter Multisizer III, and Surface Area, Pore Volume and Median Pore Diameter were measured using Coulter SA3100.

Analysis of Develosil 300C4-HG-5

Total carbon [%]	4.5
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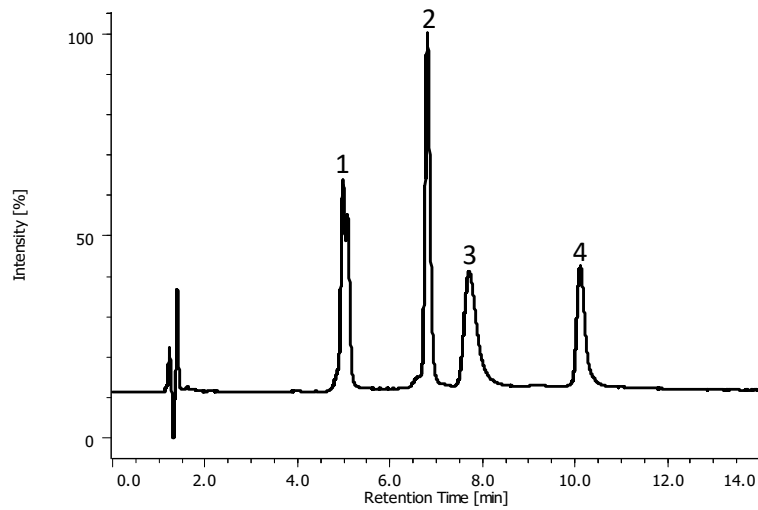
Chromatographic Results for Develosil 300C4-HG-5

Separation Factor	
α (Caffeine/Phenol)	0.35
α (Toluene/Benzene)	1.81
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	4.97
2. Cytochrome C	6.80
3. HOLO-Transferrin	7.70
4. Apomyoglobin	10.10