

# << Develosil Column >>

## TEST REPORT

Packings	Develosil	C8-UG, 5 μm	Batch No.	1Y010420
Column size	Inner diameter	4.6 mm	Length	150 mm
End fitting type	NW			
Mfg. No.	31052128C-EP			

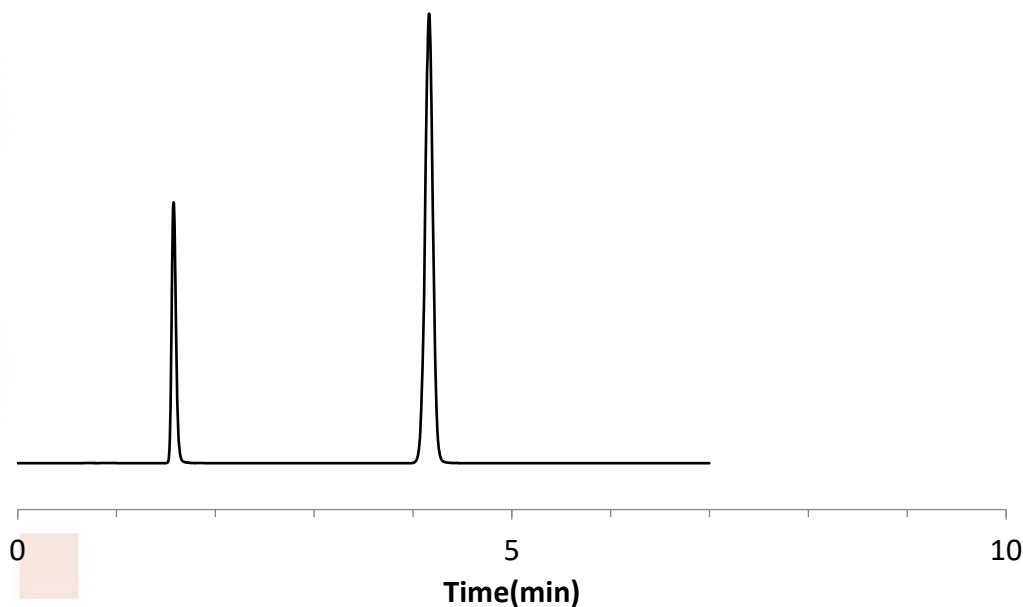
### Operating conditions

Mobile phase : Acetonitrile:water=70:30  
 Flow rate : 1.0 mL/min  
 Column temp. : 30 °C

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)  $5.54 \times (t_R/W_{0.5})^2 = 13158$   
 Asymmetry factor (10% Height of Last peak) = 0.97

Mobile phase at shipment: Acetonitrile:water=70:30

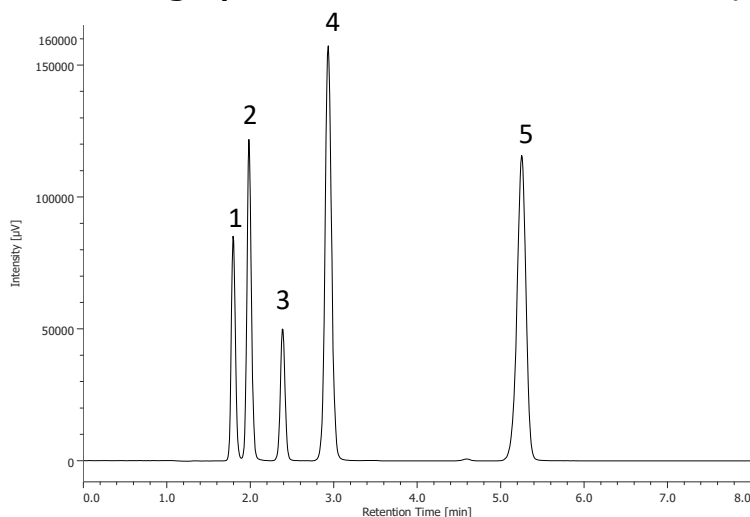
# Certificate of Analysis

Develosil<sup>®</sup> C8-UG, 5 $\mu$ m Batch# 1Y010420

## Analytical Results for Develosil<sup>®</sup> C8-UG, 5 $\mu$ m

Analysis of Unbonded Silica Gel		Result
Median Particle Size	[ $\mu$ m]	4.95
Surface Area	[m <sup>2</sup> /g]	296
Pore Volume	[mL/g]	1.06
Average Pore Diameter	[nm]	12.3
Analysis of Bonded Silica Gel		
Total Carbon Content	[%]	10.4

## Chromatographic Results for Develosil<sup>®</sup> C8-UG, 5 $\mu$ m



### Sample:

1. Uracil
2. Caffeine
3. Phenol
4. Amitriptyline
5. Naphthalene

### Analytical Conditions;

Column: Develosil C8-UG, 5 $\mu$ m (4.6x150mm)  
 Mobile phase: Methanol/25mM Ammonium Phosphate, pH3.0=70/30  
 Flow rate: 1.0mL/min  
 Temperature: 40 $^{\circ}$ C  
 Detection: UV254nm  
 Sample: 1.Uracil 2.Caffeine 3.Phenol 4.Amitriptyline 5.Naphthalene  
 Injection volume: 1.0 $\mu$ L

<i>k</i> Naphthalene	Result
Relative retention	3.46
<i>k</i> (Caffeine/Naphthalene)	0.05
<i>k</i> (Phenol/Naphthalene)	0.17
<i>k</i> (Amitriptyline/Naphthalene)	0.33
<i>k</i> (Caffeine/Phenol)	0.32
Tailing Factor	
Amitriptyline	1.06

Approved Yoshinobu Hatano

Date: 2020.04.14