

# << Develosil Column >>

## TEST REPORT

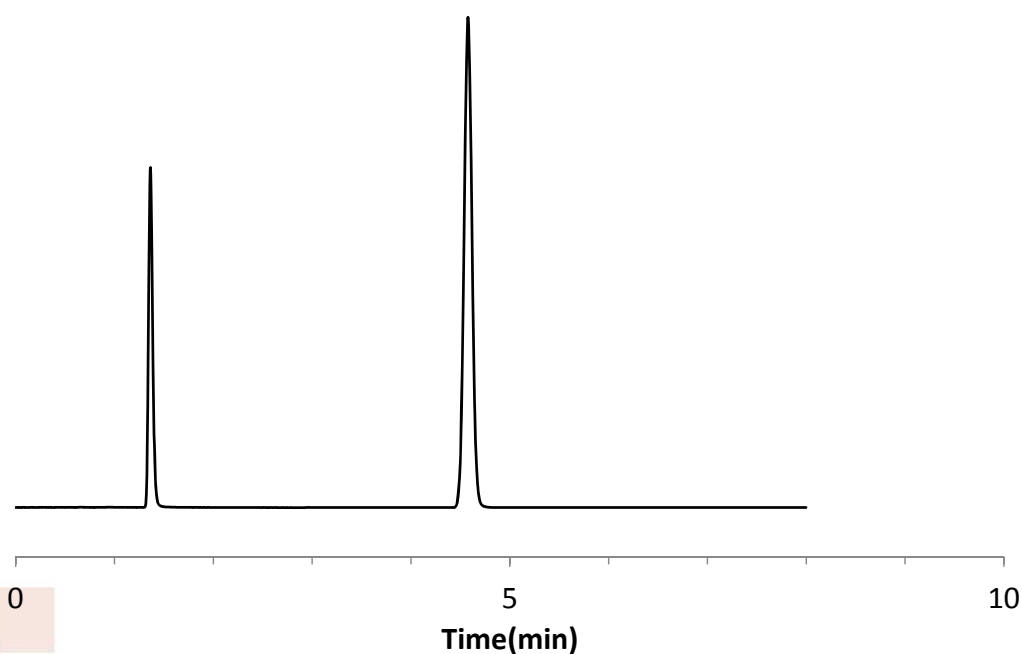
Packings	Develosil	ODS-HG, 5 $\mu$ m	Batch No.	2Y020620
Column size	Inner diameter	4.6 mm	Length	150 mm
End fitting type	NW			
Mfg. No.	18022195C-RI			

### Operating conditions

Mobile phase	:	Acetonitrile:water=70:30
Flow rate	:	1.0 mL/min
Column temp.	:	30 $^{\circ}$ C
Pressure	:	4.4 MPa

### Sample (Order of elution)

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



Theoretical plate	(Last peak) $5.54 \times (t_R/W_{0.5})^2 = 15118$
Asymmetry factor	(10% Height of Last peak) = 1.04
Mobile phase at shipment:	Acetonitrile:water=70:30

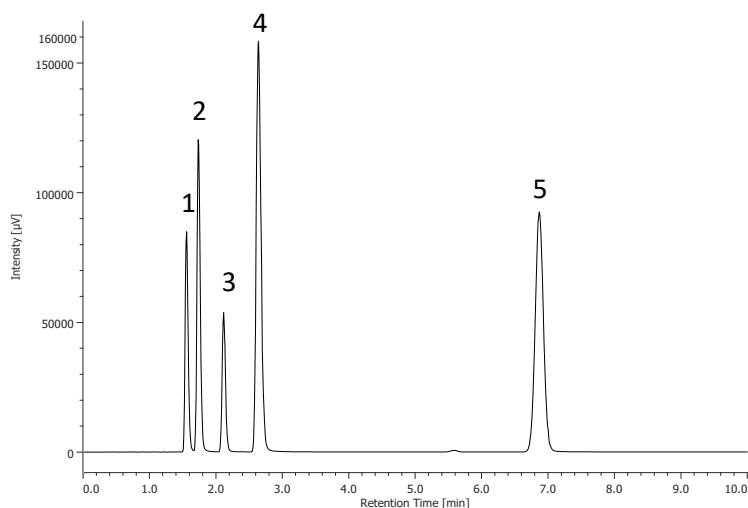
# Certificate of Analysis

Develosil® ODS-HG, 5µm Batch# 2Y020620

## Analytical Results for Develosil® ODS-HG, 5µm

Analysis of Unbonded Silica Gel		Result
Median Particle Size	[µm]	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	[%]	19.3

## Chromatographic Results for Develosil® ODS-HG, 5µm



### Sample:

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

### Analytical Conditions;

Column: Develosil ODS-HG, 5µm (4.6x150mm)  
 Mobile phase: Methanol/25mM Ammonium Phosphate, pH3.0=70/30  
 Flow rate: 1.0mL/min  
 Temperature: 40°C  
 Detection: UV254nm  
 Sample: 1.Uracil 2.Caffeine 3.Phenol 4.Amitriptyline 5.Naphthalene  
 Injection volume: 1.0µL

<i>k</i> Naphthalene	Result
Relative retention	5.31
<i>k</i> (Caffeine/Naphthalene)	0.03
<i>k</i> (Phenol/Naphthalene)	0.11
<i>k</i> (Amitriptyline/Naphthalene)	0.20
<i>k</i> (Caffeine/Phenol)	0.30
Tailing Factor	
Amitriptyline	1.28

 Approved Ikuo Yamamoto

 Date: 2020.09.11