

Separation of highly polar compounds by reverse phase column

HSR UHPLC

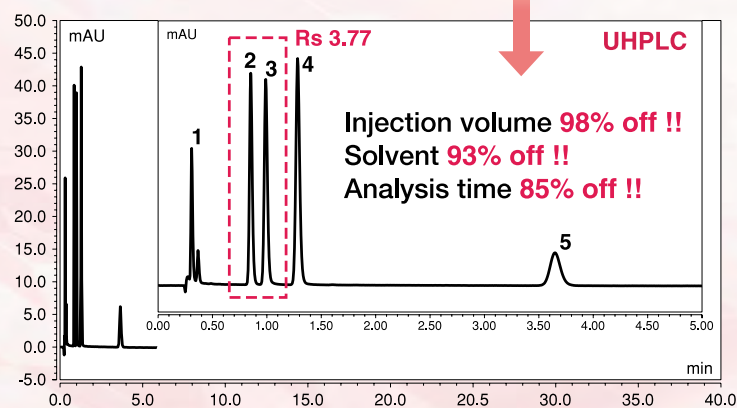
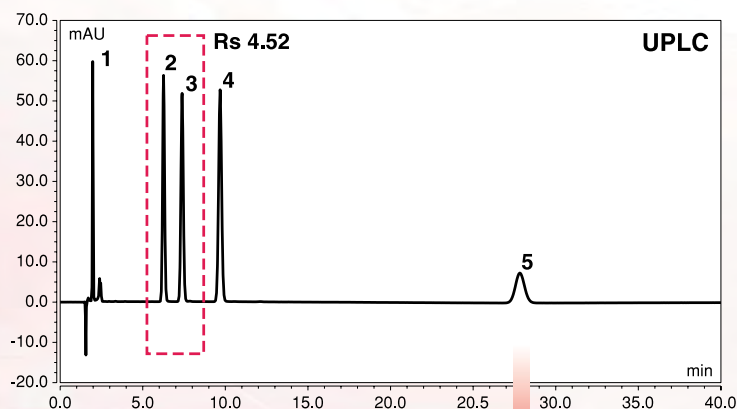
Develosil®

True UHPLC realized with maximum column efficiency

- The strictly controlled particles are appropriately transferred to 5 μm , 3 μm , 2 μm .
- Ensure high durability by our unique bonding and filling technology
- Maximized high column efficiency realizes low cost by reducing solvent usage



[Superior resolution and retention of HSR AQ C18 for UHPLC]



■ UHPLC method transfer of Purine Derivative

Conditions;

Column : Develosil HSR AQ C18, 5 μm (4.6x150mm)
Develosil HSR AQ C18, 2 μm (2.0x50mm)

Mobile phase : 0.1%TFA

Flow rate : 1.0mL/min (HPLC)

0.474mL/min (UHPLC)

Temperature : 30°C

Detection : UV220nm

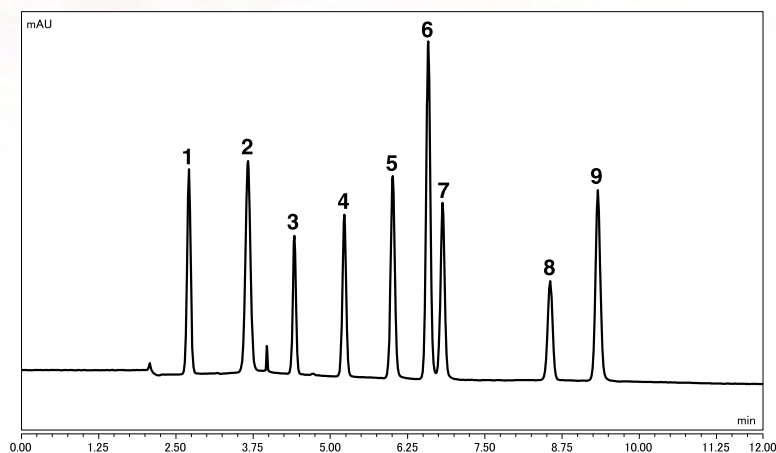
Sample : 1. Allantoin
2. Hypoxanthine
3. Uric acid
4. Xanthine
5. Inosine

Injection volume : 2.0 μL (HPLC)

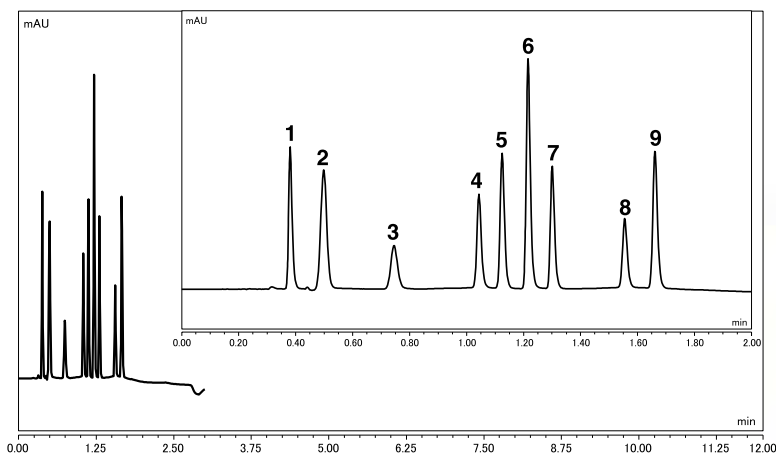
0.16 μL (UHPLC)

Gradient elution with organic solvent can further shorten it. Excellent isolation and retention will give great results to UHPLC method transfer.

[UHPLC Gradient Method]



UHPLC Transfer!!



The choice of column length is also important for method transfer.

■ UHPLC method transfer of Nucleic acid related compounds

Conditions;

Column : Develosil HSR AQ C18, 5µm (4.6x150mm)

Develosil HSR AQ C18, 2µm (2.0x50mm)

Mobile phase : A) 50mM Ammonium buffer, pH7.0

B) Acetonitrile

Flow rate : 1.0mL/min (HPLC)

0.474mL/min (UHPLC)

Temperature : 40°C

Detection : UV254nm

Sample : 1.Cytosine 2.Uracil 3.Citidine 4.Uridine

5.Thymine 6.Adenine 7.Guanine 8.Thymidine

Injection volume : 2.0µL (HPLC)

0.16µL (UHPLC)

Mixer volume : 10µL

Gradient:

5µm

min	%B	Curve
0.00	0	5
12.0	12	5
15.0	12	5
15.1	0	5

2µm

T(min)	%B	Curve
0.00	0	5
1.76	25	5
2.20	25	5
2.15	0	5

