

# TCI Stella PFP



## Pentafluorophenyl bonded phase

TCI Stella PFP is the latest HPLC column manufactured by TCI, this new pentafluorophenyl bonded phase gives rise to different types of interactions.

- If the separation is not satisfying using an ODS column, try out our new TCI Stella PFP column.
- Suitable for a wide range of compounds: polar, basic and hydrophobic.
- High efficiency separation of similar hydrophobic compounds
- All column sizes available in 5 $\mu$ m or 3 $\mu$ m at affordable prices

### Multiple interactions

- Hydrophobic interaction
- Hydrogen bond
- Dipole-dipole interaction
- $\pi$ - $\pi$  interaction



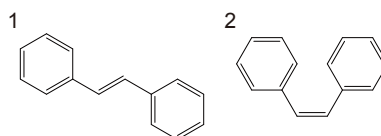
### Stilbene

*cis, trans*-isomers having similar hydrophobicity can be separated by the PFP column.

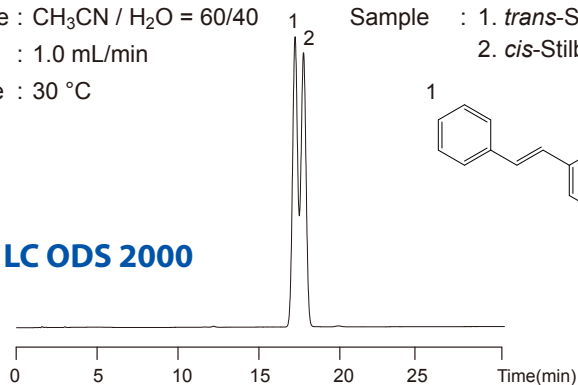
Column Size : 4.6 mm I.D.  $\times$  150 mm  
Mobile phase : CH<sub>3</sub>CN / H<sub>2</sub>O = 60/40  
Flow Rate : 1.0 mL/min  
Temperature : 30  $^{\circ}$ C

Detection : UV 230 nm

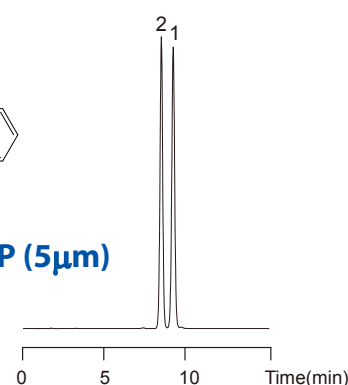
Sample : 1. *trans*-Stilbene  
2. *cis*-Stilbene



#### Kaseisorb LC ODS 2000



#### TCI Stella PFP (5 $\mu$ m)



### Methylacetophenones

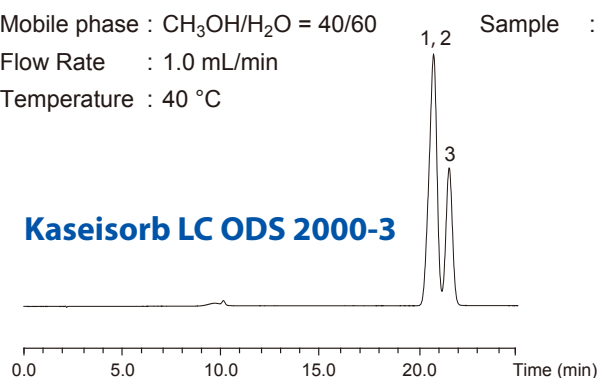
Positional isomers having similar hydrophobicity can be separated by the PFP column.

Column Size : 4.6 mm I.D.  $\times$  150 mm  
Mobile phase : CH<sub>3</sub>OH/H<sub>2</sub>O = 40/60  
Flow Rate : 1.0 mL/min  
Temperature : 40  $^{\circ}$ C

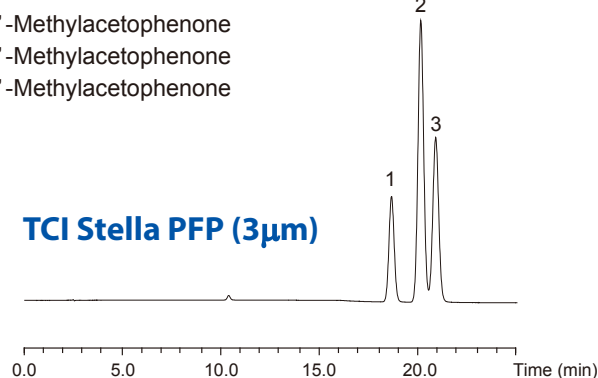
Detection : UV 254 nm

Sample : 1. 2'-Methylacetophenone  
2. 4'-Methylacetophenone  
3. 3'-Methylacetophenone

#### Kaseisorb LC ODS 2000-3



#### TCI Stella PFP (3 $\mu$ m)



## Nucleobases

PFP gives a better separation of these polar compounds than ODS with the same mobile phase.

Column Size : 4.6 mm I.D. × 150 mm

Mobile phase : CH<sub>3</sub>OH / 20mmol/L CH<sub>3</sub>COONH<sub>4</sub> (pH4.5, CH<sub>3</sub>COOH) = 20/80

Flow Rate : 1.0 mL/min

Temperature : 25 °C

Detection : UV 254 nm

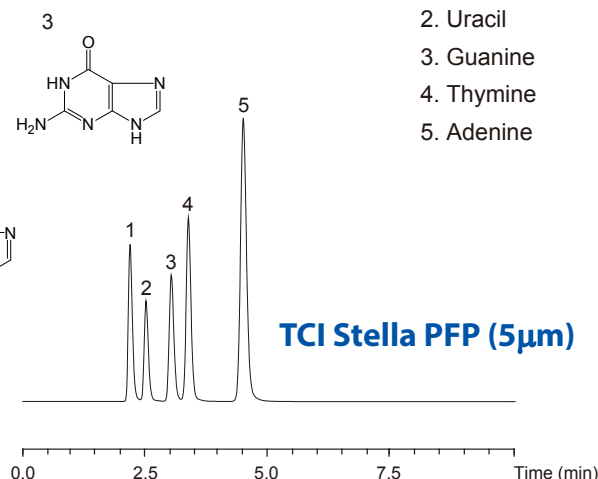
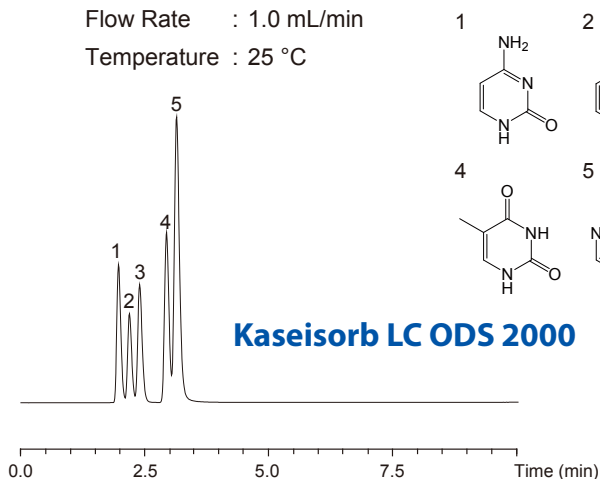
Sample : 1. Cytosine

2. Uracil

3. Guanine

4. Thymine

5. Adenine



## Catecholamines

PFP achieves remarkable separations of basic compounds.

Column : TCI Stella PFP (5µm) 4.6 mm I.D. × 150 mm

Mobile phase : A) 5mmol/L HCOONH<sub>4</sub> (pH3.5, HCOOH)

B) CH<sub>3</sub>OH

5-20% B (0-10min.)

Flow Rate : 1.0 mL/min

Temperature : 25 °C

Detection : UV 254 nm

Sample : 1. Noradrenaline

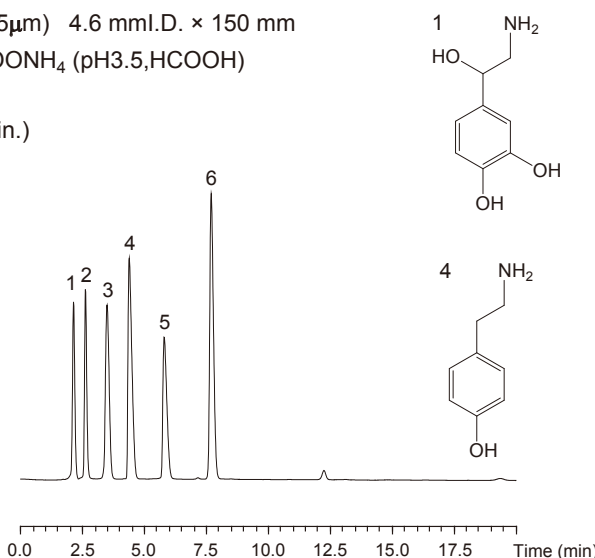
2. Adrenaline

3. Dopamine

4. Tyramine

5. Isoproterenol

6. Serotonin



## TCI Stella PFP

pH range : 2-8 Particle size : 5µm, 3µm Pore size : 12nm

Size	Column	TCI Stella PFP (5µm) Product No.	TCI Stella PFP (3µm) Product Code
2.0 mm I.D. × 50 mm		S3905	S3916
2.0 mm I.D. × 100 mm		S3906	S3917
2.0 mm I.D. × 150 mm		S3907	S3918
2.0 mm I.D. × 250 mm		S3908	-
4.6 mm I.D. × 50 mm		S3901	S3912
4.6 mm I.D. × 100 mm		S3902	S3913
4.6 mm I.D. × 150 mm		S3903	S3914
4.6 mm I.D. × 250 mm		S3904	S3915
10.0 mm I.D. × 150 mm		S3909	-
10.0 mm I.D. × 250 mm		S3910	-
20.0 mm I.D. × 250 mm		S3911	-

## Ordering and Customer Service

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