

# *New product Chiral Column for HPLC*

A novel chiral stationary phase chemically bonded with chiral crown ether

## ***SUMICHIRAL OA-8000***

**SUMICHIRAL OA-8000** is a novel chiral stationary phase (CSP) for HPLC, chemically bonded with chiral pseudo 18-crown-6 ether to Silica gel. This CSP has mechanisms for enantiomeric recognition based on host-guest complexations, and is very effective for **separations of chiral amines**.

This CSP is chemically bonded to Silica gel, instead of simply coated, and both the reversed and normal phases can be used as the mobile phases.

### *Characteristics : SUMICHIRAL OA-8000*

*enantiomer separations of a wide range of chiral amines !*

- ◇ Can use for enantiomer separations of the compounds having -NH<sub>2</sub>, chiral amines, amino acids, amino alcohols.
- ◇ Both reverse and normal phase solvents can be used.  
No restrictions on organic solvent concentrations, and very stable.  
Especially suited for hydrophobic amines that elute too late on usual columns.
- ◇ Sharp peaks and high theoretical plate number are obtained.

### *Details : SUMICHIRAL OA-8000*

| Name               | Size               |
|--------------------|--------------------|
| SUMICHIRAL OA-8000 | 4.0 mmi.d. × 1 cm  |
|                    | 4.6 mmi.d. × 15 cm |
|                    | 4.6 mmi.d. × 25 cm |

To protect your columns, we recommend to use of a garde column.

**SCAS** Sumika Chemical  
Analysis Service

SUMIKA CHEMICAL ANALYSIS SERVICE, LTD.

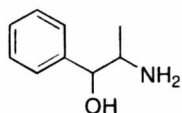
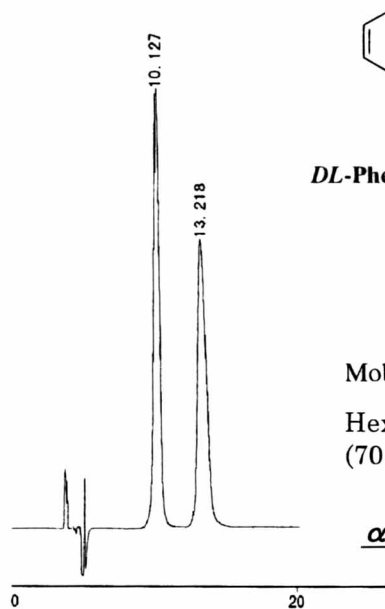
1-135,3-CHOME,KASUGADE-NAKA,KONOHANA-KU,OSAKA,554-0022,JAPAN

FAX : 81-6-6466-5255 e-mail : column@scas.co.jp

# Analysis : SUMICHIRAL OA-8000

## Enantiomer separations under Normal phase conditions.

### Separation of *DL*-Phenylpropanolamine

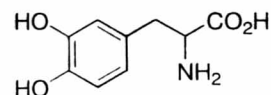
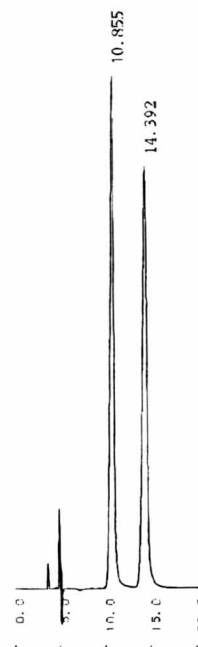


*DL*-Phenylpropanolamine

Mobile Phase :  
Hex / EtOH / TFA  
(70 : 30 : 0.5)

$$\alpha = 1.57$$

### Separation of *DL*-DOPA



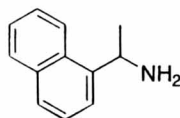
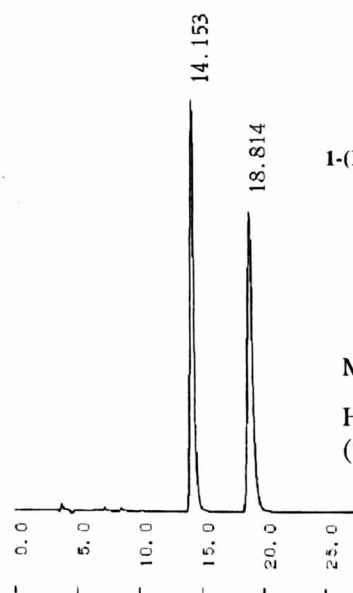
*DL*-DOPA  
3-(3,4-dihydroxyphenyl)-*DL*-alanine

Mobile Phase :  
Hex / EtOH / TFA  
(65 : 35 : 0.5)

$$\alpha = 1.58$$

## Enantiomer separations under Reversed phase conditions.

### Separation of 1-(1-Naphthyl)-ethylamine

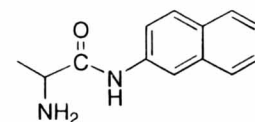
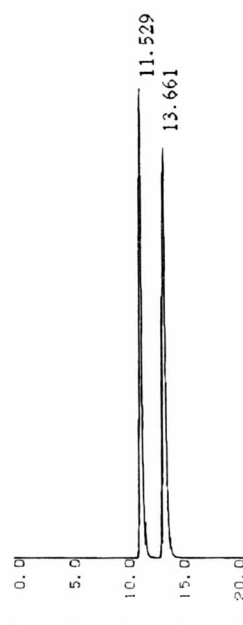


1-(1-Naphthyl)-ethylamine

Mobile Phase :  
HClO<sub>4</sub>(pH=2) / CH<sub>3</sub>CN  
(70 : 30)

$$\alpha = 1.45$$

### Separation of *DL*-Alanine- $\beta$ -naphthylamide



Alanine- $\beta$ -naphthylamide

Mobile Phase :  
HClO<sub>4</sub>(pH=2) / CH<sub>3</sub>CN  
(75 : 25)

$$\alpha = 1.31$$