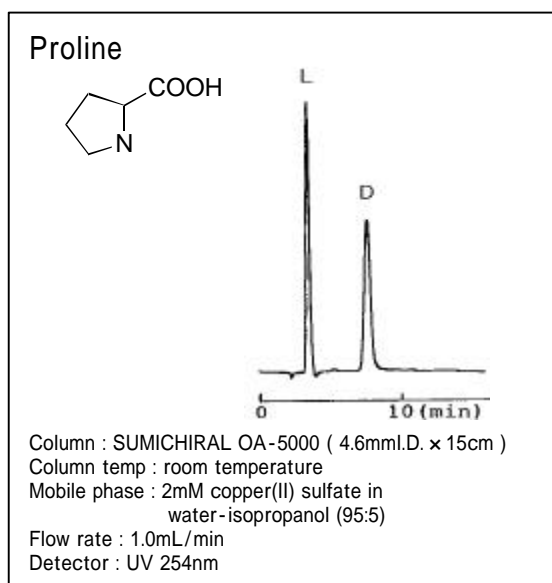
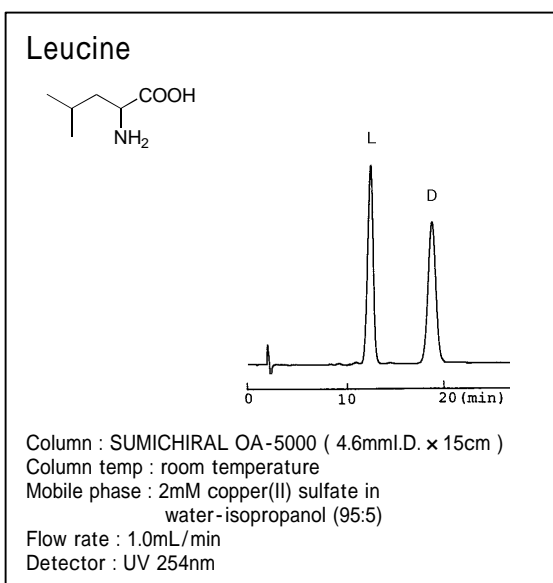
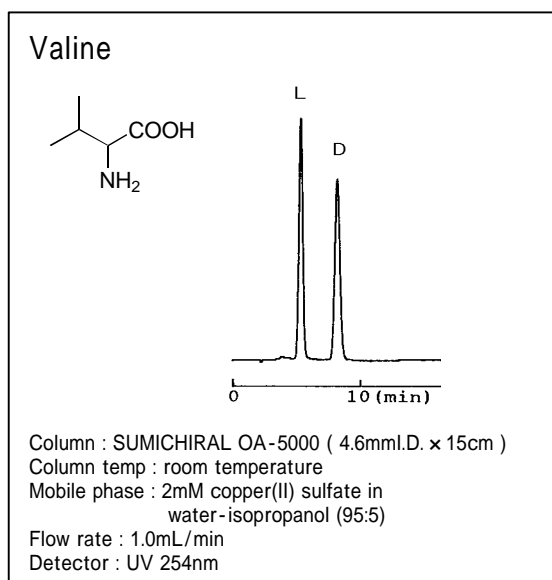
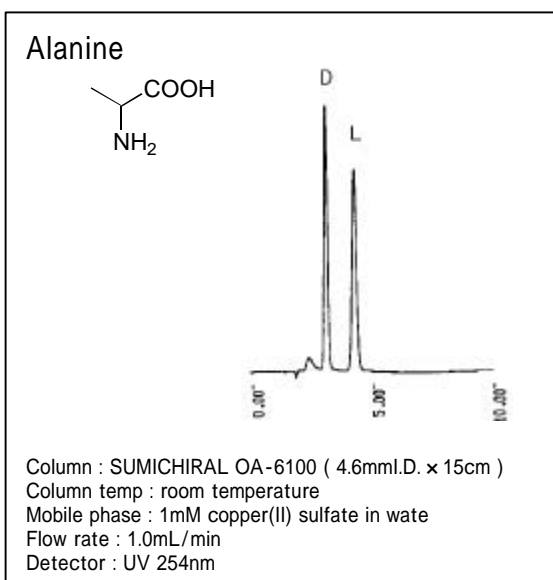


SUMICHIRAL TECHNICAL NEWS

(Vol. 9 7 1 2)

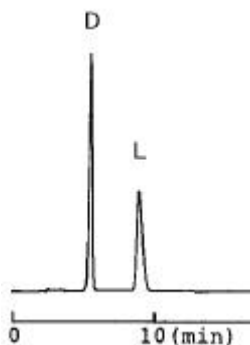
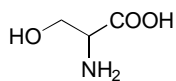
Enantiomer Separation of Non Aromatic Amino Acids by SUMICHIRAL OA

SUMICHIRAL OA-5000 and OA-6100 are chiral ligand exchange HPLC columns, and are extremely effective for direct enantiomer separation of wide range of amino acids. In this report, we introduce our applications of enantiomer separation of non aromatic amino acids.



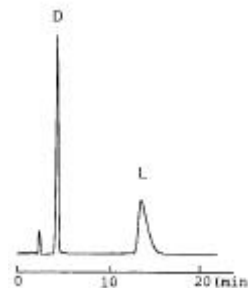
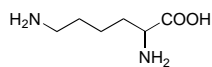
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Serine



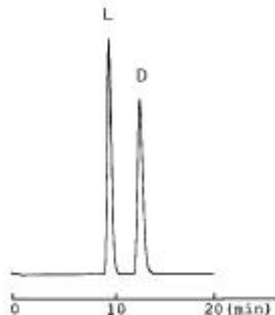
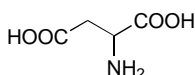
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Column temp : room temperature
Mobile phase : 1mM copper(II) sulfate in water
Flow rate : 1.0mL/min
Detector : UV 254nm

Lysine



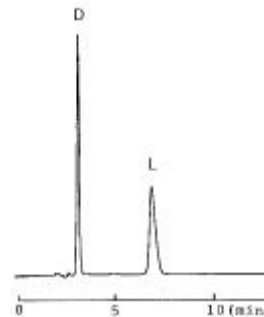
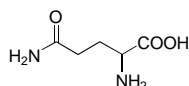
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Column temp : room temperature
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Flow rate : 1.0mL/min
Detector : UV 254nm

Aspartic acid



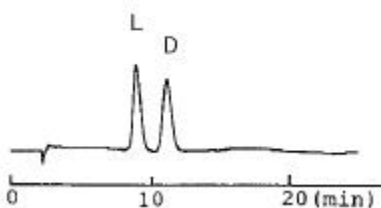
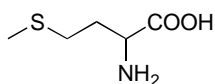
Column : SUMICHIRAL OA-5000 (4.6mmI.D. × 15cm)
Column temp : room temperature
Mobile phase : 2mM copper(II) sulfate in
water-isopropanol (95:5)
Flow rate : 1.0mL/min
Detector : UV 254nm

Glutamine



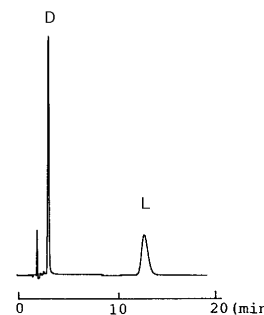
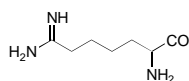
Column : SUMICHIRAL OA-6100 (4.6mmI.D. × 15cm)
Column temp : room temperature
Mobile phase : 2mM copper(II) sulfate in
water-acetonitrile (98:2)
Flow rate : 1.0mL/min
Detector : UV 254nm

Methionine



Column : SUMICHIRAL OA-5000 (4.6mmI.D. × 15cm)
Column temp : room temperature
Mobile phase : 2mM copper(II) sulfate in
water-isopropanol (95:5)
Flow rate : 1.0mL/min
Detector : UV 254nm

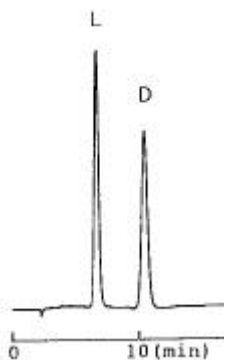
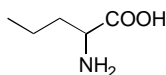
Arginine



Column : SUMICHIRAL OA-6100 (4.6mmI.D. × 15cm)
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Mobile phase : 2mM copper(II) sulfate in
water-acetonitrile (98:2)
Flow rate : 1.0mL/min
Detector : UV 254nm

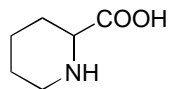
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Norvaline



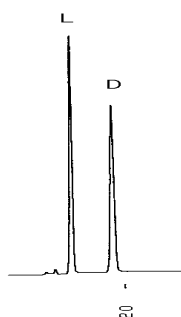
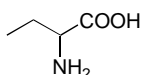
Column : SUMICHIRAL OA-5000 (4.6mmI.D. x 15cm)
Column temp : room temperature
Mobile phase : 2mM copper(II) sulfate in
water-isopropanol (95:5)
Flow rate : 1.0mL/min
Detector : UV 254nm

Pipecolic acid



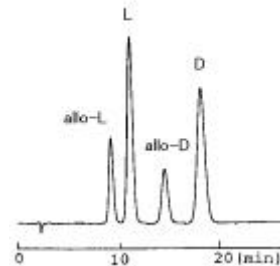
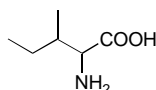
Column : SUMICHIRAL OA-5000 (4.6mmI.D. x 15cm)
Column temp : room temperature
Mobile phase : 1mM copper(II) sulfate in water
Flow rate : 1.0mL/min
Detector : UV 254nm

2-Amino-n-butvric acid



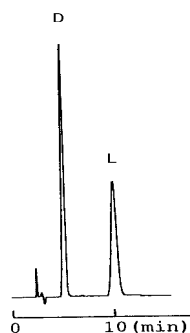
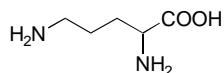
Column : SUMICHIRAL OA-5000 (4.6mmI.D. x 15cm)
Column temp : room temperature
Mobile phase : 1mM copper(II) sulfate in water
Flow rate : 1.0mL/min
Detector : UV 254nm

Isoleucine



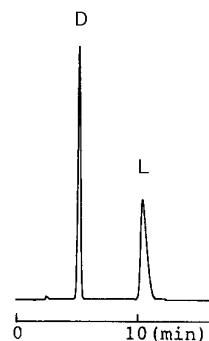
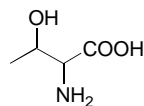
Column : SUMICHIRAL OA-5000 (4.6mmI.D. x 15cm)
Column temp : room temperature
Mobile phase : 2mM copper(II) sulfate in
water-isopropanol (95:5)
Flow rate : 1.0mL/min
Detector : UV 254nm

Ornithine



Column : SUMICHIRAL OA-6100 (4.6mmI.D. x 15cm)
Column temp : room temperature
Mobile phase : 1mM copper(II) sulfate in water
Flow rate : 1.0mL/min
Detector : UV 254nm

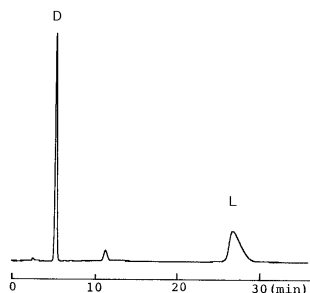
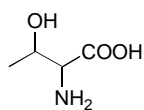
Threonine



Column : SUMICHIRAL OA-6100 (4.6mmI.D. x 15cm)
Column temp : room temperature
Mobile phase : 1mM copper(II) sulfate in water
Flow rate : 1.0mL/min
Detector : UV 254nm

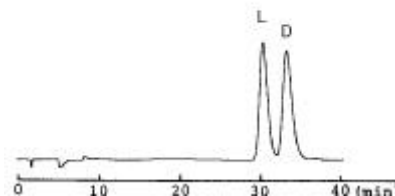
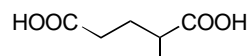
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Allothreonine



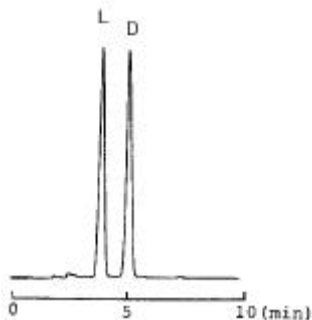
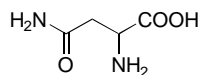
Column : SUMICHIRAL OA-6100 (4.6mmI.D. x 15cm)
Column temp : room temperature
Mobile phase : 1mM copper(II) sulfate in water
Flow rate : 1.0mL/min
Detector : UV 254nm

Glutamic acid



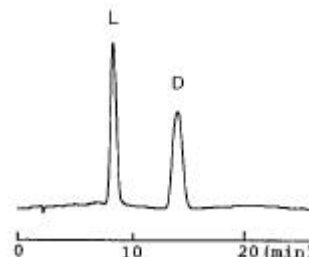
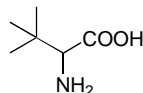
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Mobile phase : 2mM copper(II) sulfate in water-methanol (85:15)
Flow rate : 1.0mL/min
Detector : UV 254nm

Asparagine



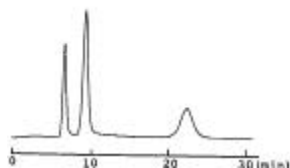
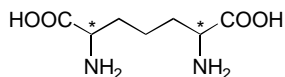
Column : SUMICHIRAL OA-6100 (4.6mmI.D. x 15cm)
Column temp : room temperature
Mobile phase : 1mM copper(II) sulfate in water
Flow rate : 1.0mL/min
Detector : UV 254nm

tert.-Leucine



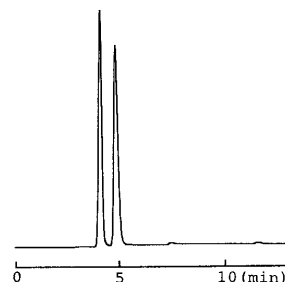
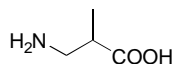
Column : SUMICHIRAL OA-5000 (4.6mmI.D. x 15cm)
Column temp : room temperature
Mobile phase : 2mM copper(II) sulfate in water-isopropanol (95:5)
Flow rate : 1.0mL/min
Detector : UV 254nm

2,6-Diaminopimelic acid



Column : SUMICHIRAL OA-5000 (4.6mmI.D. x 15cm)
Column temp : room temperature
Mobile phase : 2mM copper(II) sulfate in water-isopropanol (95:5)
Flow rate : 1.0mL/min
Detector : UV 254nm

3-Aminobutylic acid



Column : SUMICHIRAL OA-6100 (4.6mmI.D. x 15cm)
Column temp : room temperature
Mobile phase : 1mM copper(II) acetate in water
Flow rate : 1.0mL/min
Detector : UV 254nm