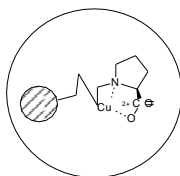


**INSTRUCTION MANUAL FOR CHIRALPAK® WH**  
**Analytical column for: Free Amino Acid**  
**Amino Acid Derivatives**  
**Carboxylic Acid**

**Please read this instruction sheet completely before using this column**

### Column Description

**Chemical composition:** Amino acid chemically bonded to a 10µm silica-gel support.



**Column size:** 250mm L x 4.6mm i.d.

All columns have been pre-tested before packaging. Test parameters and results, as well as the Column Lot Number, are included on a separate (enclosed) page.

#### CAUTION

**Some of the most popular buffer solutions and/or organic solvent remaining in your HPLC system may destroy this column.**

**Be careful not to connect the column to your HPLC system before the system is completely flushed with the appropriate eluent.**

**Do not use racemate of strong acid or base.**

### Operating Procedure

**Typical mobile phase:** 0.25mM CuSO<sub>4</sub> aq (up to 0.5mM)

Suitable mobile phase modifiers include CH<sub>3</sub>CN and CH<sub>3</sub>OH from 0 to 80% (v/v).

Notes: Retention time is generally shorter with higher CuSO<sub>4</sub> concentration and/or higher column temperature.

High content of organic solvent may cause precipitation of CuSO<sub>4</sub> and clogging of the tubing.

- Flow Direction:** As indicated by arrow on column label.
- Flow Rate:** Typical flow rate is 1.0 ml/min.  
Maintain flow rate that will result in column pressures of less than 1400 psi.  
(100 kg/cm<sup>2</sup>). DO NOT EXCEED 3.0 ml/min.
- Temperature:** 0°C – 50°C.  
☞ If your sample is a free amino acid, column temperature should be maintained more than 40°C.
- Pressure:** 1400 psi, MAXIMUM; less than 700 psi is recommended for maximum column life.

☞ Sample/eluent solution should be filtered through a 0.45 µm membrane filter.

☞ The use of a guard column is recommended for maximum column life.

## Maintenance

- The mobile phase should be displaced with Storage Solvent (0.25mM CuSO<sub>4</sub> aq.) when stored more than a week.
- When washing is required, use 10mM CuSO<sub>4</sub> aq. + 10% MeOH at 0.3ml/min for 3 hours.

## Important Notice

⇒ STRONGLY BASIC solvent modifiers or sample solutions MUST BE AVOIDED, because they are likely to damage the silica gel used in this column.

*Operating this column in accordance with the guidelines outlined here will result in a long column life.*

⇒ If you have any questions about the use of these columns, or encounter a problem, contact:

In the USA: [questions@cti.daicel.com](mailto:questions@cti.daicel.com) or call 800-6-CHIRAL

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In India: [chiral@chiral.daicel.com](mailto:chiral@chiral.daicel.com) or call Tel: +91 84 1866 0700 & 703

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