Chiral-AGP

- **Broadest applicability**
- **Acids, bases, and neutrals**
- **No derivatization**

CHIRAL-AGP is the second generation chiral separation column based on the use of α_1-acid glycoprotein (AGP) as the chiral stationary phase. Through a patented process α_1-AGP has been immobilized on porous, spherical silica particles (5µm). The surface chemistry of the silica proves a stable chiral separation material with extremely broad applicability.

Enantioselectivity

Racemic amines, acids and nonprotolytic compounds can be resolved directly, without derivatization. The column enables resolution of a very large number of chiral compounds from different compound classes. This is due to the unique nature of the chiral stationary phase, and the fact that enantioselectivity can be induced by choosing a proper mobile phase composition.

Chromatographic Conditions

Phosphate buffers with addition of organic modifiers are used as mobile phase. (1- and 2-propanol and acetonitrile are the most frequently used modifiers.) Enantioselectivity and retention can be regulated by changing the mobile phase composition; ie: the pH, the concentration or the nature of the organic modifier. The column temperature also affects these parameters.

Storage Conditions:

The column should be used at room temperature or below. During short periods of storage (ie: weekends) it is recommneded to fill the column with 10% 2-propanol in distilled water. When the column is stored for longer periods of time it is recommended to fill with 15% 2-propanol in distilled water and place it in the refrigerator.

Cleaning of the Column:

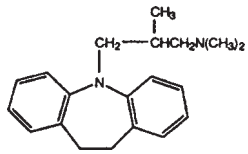
If the column has been contaminated with very hydrophobic material, wash the column over night with 25% 2-propanol in distilled water at a flow rate of 0.2mL/min.

See page 80 for ordering information.

Please note: The USP L-41 column is the CHIRAL-AGP.

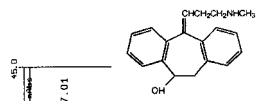
For additional applications, please ask for our Chiral Users Guide.

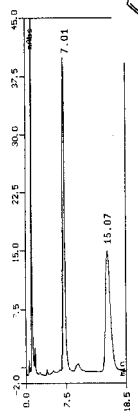
Trimipramine



Column: Chiral-AGP 100 x 4.0mm
Eluent: 1% 2-propanol in 10mM sodium acetate pH4.0 total acetatte conc.=60mM
Flow: 0.9mL/min.
Temperature: Ambient
Detection: UV at 225nm

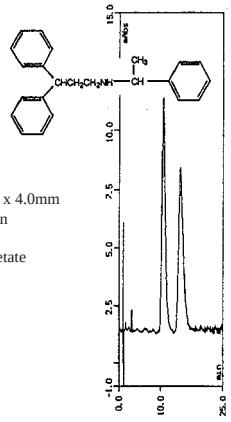
E-10-Hydroxy nortriptyline





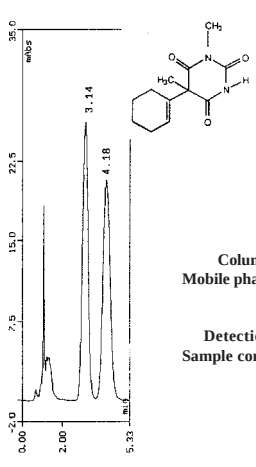
Column: Chiral-AGP 100 x 4.0mm and Chiral-AGP guard column 10 x 3.0mm
Mobile phase: 7.5% 2-propanol in 0.01M sod.ph.b. pH 6.0
Detection: UV 225nm
Sample conc.: 0.03 mg/mL

Fendiline



Column: Chiral-AGP 100 x 4.0mm
Mobile phase: 3% acetonitrile in 10mM sod.ac.b. pH 4.1 (total acetate conc. = 60mM)
Detection: UV 225nm
Sample conc.: 0.025 mg/mL

Hexobarbital



Column: Chiral-AGP 100 x 4.0mm
Mobile phase: 2% 2-propanol in 10mM sod.ph.b. pH 7.0
Detection: UV 225nm
Sample conc.: 0.02 mg/mL