High-Resolution Chiral Separation of Fluoxetine (PROZAC®) Enantiomers Using ULTRON ES-OVM

Application

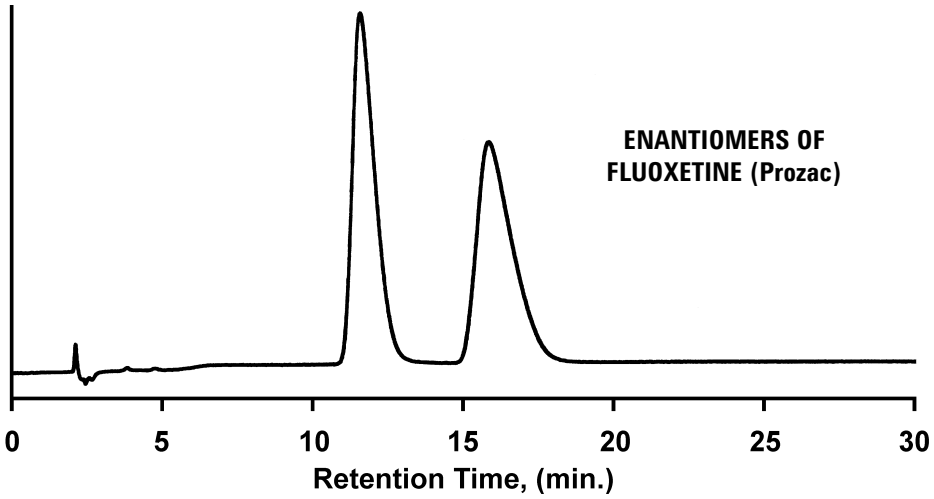
Biochemical

Robert Ricker

Methods for separation and accurate quantitation of chiral compounds is an important part of drug research and determination of drug purity. High resolution helps in the process, but it is often difficult to achieve the resolution in chiral separations. The chromatogram below shows exceptional resolution of Fluoxetine (Prozac) enantiomers on the ULTRON ES-OVM column. The ULTRON ES-OVM column is an alternative to the ULTRON ES- Pepsin column, which could not separate this mixture under any conditions tested. Fluoxetine-HCl formulation is marketed as 20 mg (base equivalent) capsules under the proprietary name Prozac, a registered trademark of Eli Lilly and Co.

Highlights

- *The R and S chiral forms of Fluoxetine (Prozac) are separated with high resolution (3.0) under these conditions, resulting in a rugged method and extended useful lifetime of the column.*
- *The ULTRON ES-OVM column complements ULTRON ES-Pepsin, to achieve separations not possible on other chiral columns (J. Liquid Chromatogr. 19(3), 449-465 (1996)).*



Courtesy of D.S. Risley and V.S. Sharp of Lilly Research Laboratories, Eli Lilly and Co.

Conditions:
ULTRON® ES-OVM (4.6 x 150 mm) (Agilent P/N: 702111651)
Mobile Phase: 25:75 (v/v) EtOH / 20 mM KH_2PO_4, pH 5.5 (adjusted with NaOH)
Injection: 10 µL, 0.8 mL/min, Ambient, Detect. UV(225 nm)
Sample: mixture Fluoxetine (Prozac) enantiomers

Agilent Technologies

Robert Ricker is an application chemist based at Agilent Technologies, Wilmington, Delaware.

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Information, descriptions, and specifications in this publication are subject to change without notice.

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