

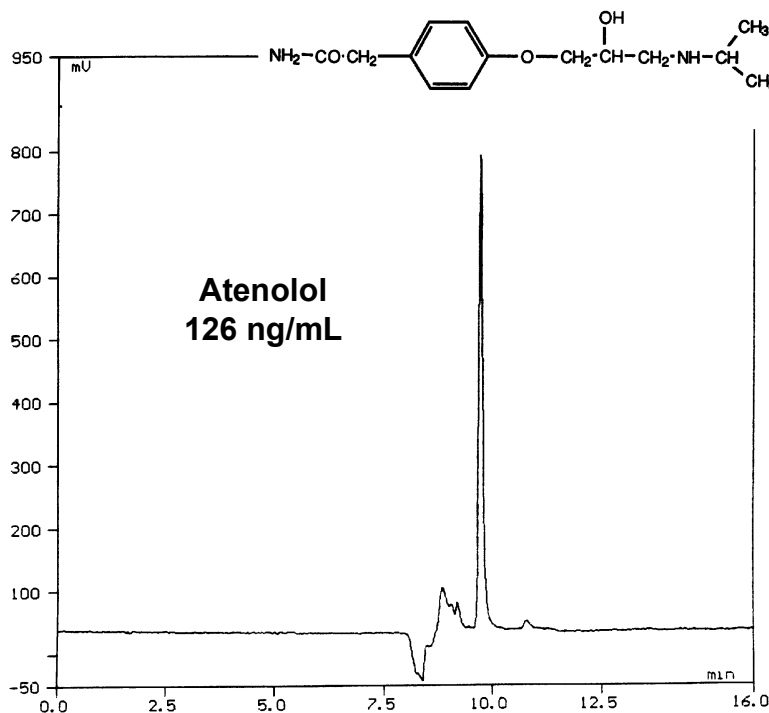
Analysis of Atenolol in Plasma

Application Note

Pharmaceutical

Robert Ricker

Atenolol is a beta-1-adrenergic receptor-blocking agent. Levels may be monitored in the clinical research setting to determine physiological levels in the blood stream. On-line sample preparation/concentration using column switching enabled this analysis to be a fast, direct approach. The final analytical separation was performed using a ZORBAX SB-CN column. For details of the column switching technique visit the applications page of the ChromTech Website: <http://www.chromtech.se/biotrap>



Courtesy of ChromTech, Sweden

Conditions:
ZORBAX SB-CN, 4.6 x 150 mm, 5µm, Agilent P/N: 883975-905
Mobile Phase: 25% ACN in 116 mM sodium phosphate buffer
pH 3.0 + 2mM Na Octane-sulfonic acid
F=1.0 mL/min, Det. Fluorescence: Ex=230 nm, Em=300 nm

Highlights

- After on-line extraction, atenolol in a 200 µL serum-sample was analyzed using a ZORBAX SB-CN column.
- Atenolol is eluted from the ZORBAX StableBond column with good peak shape and narrow peak width.
- ZORBAX StableBond columns are extremely stable at low pH. This is true also for short-chain, more-polar bonded phases like those in ZORBAX SB-CN and SB-C3.



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