

# Analysis of Carbamazepine and Phenytoin in Plasma

## Application Note

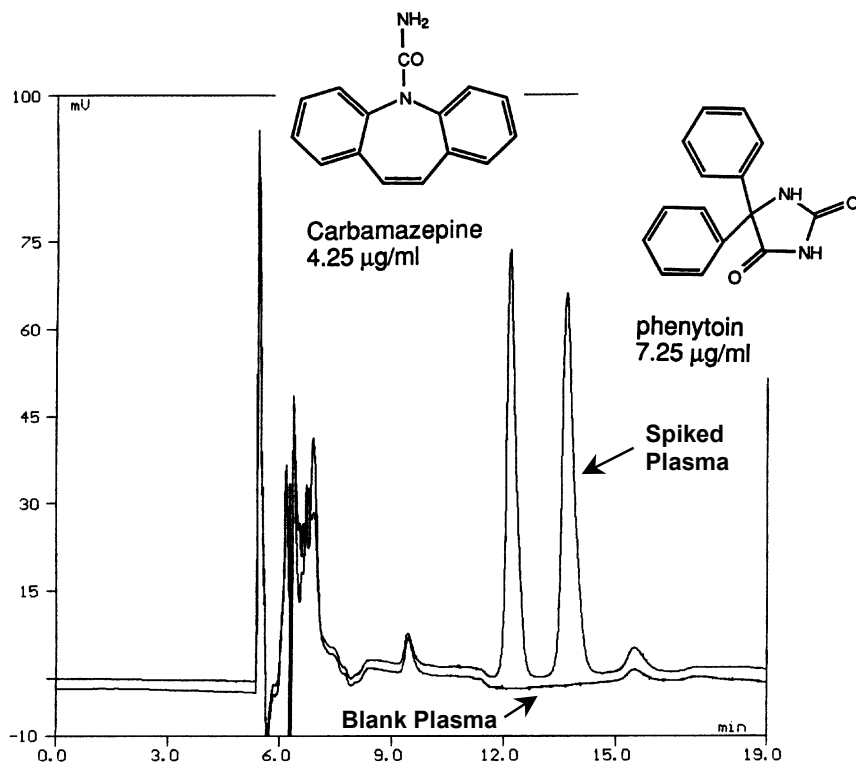
### Pharmaceutical

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Carbamazepine and phenytoin levels are tested to determine physiological levels in the blood stream upon treatment or misuse. 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>

### Highlights

- After on-line extraction, carbamazepine and phenytoin in a 200 $\mu$ L plasma sample were analyzed using a ZORBAX SB-CN column.
- The analytes eluted from the ZORBAX SB-CN column with excellent peak shape. ZORBAX StableBond columns operate optimally and with excellent stability at low pH.



Courtesy of ChromTech, Sweden

**Conditions:**  
ZORBAX SB-CN, 4.6 x 150 mm, 5 $\mu$ m, Agilent P/N: 883975-905  
Mobile Phase: 28% ACN in 116 mM sodium phosphate buffer, pH 2.8  
F=1.0 ml/min, Det.: UV 210 nm



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