

# Enantioseparation of Baclofen\*

Enantioseparation of Baclofen by Capillary Electrophoresis with Laser-Induced Fluorescence Detection.

## Instruments:

Capillary Electrophoresis: Agilent 3D CE  
Detector: Picometrics ZETALIF 2000 detector  
Laser: He-Cd, Laser 442 nm, 20 mW

## Sample:

1.0  $\mu\text{M}$  standard racemic solution of Baclofen derivatized with NDA

## Reagents:

Derivatization agent: Naphthalene Dicarboxaldehyde (NDA)

## Methods:

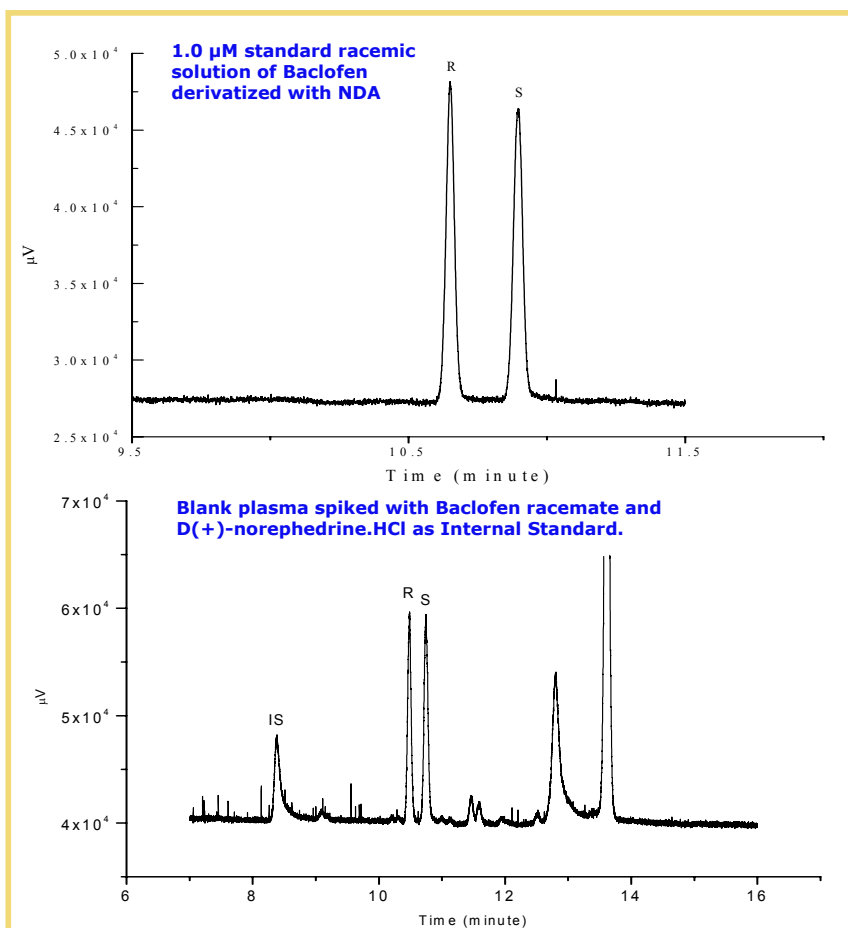
Capillary: 50  $\mu\text{m}$  I.D. with a total length of 85 cm and an effective length of 60 cm  
Buffer: 2% Highly sulfated  $\beta$ -cyclodextrin (HS- $\beta$ -CD) containing 50 mM borate, pH=9.5  
Voltage: 30 kV  
Injection: 6 sec. at 50 mbar

## \* Baclofen (Lioresal®)

Baclofen is a GABA (gamma-aminobutyric acid) agonist, a neurotransmitter inhibitor. It is habitually prescribed in the treatment of spasticity. It also shows some efficacy in neuralgia of the triplet and in some neuropathic attacks. It is sometimes useful in paroxysmic pains not relieved by antiepileptics.

Limit of Detection\*:  
 $3 \times 10^{-8} \text{ M}$

\* Estimated for a S/N of 3



Source: Courtesy of Dr. Gamze Kavran Belin, Department of Chemistry, University of Geneva, Switzerland.