



Waters Application Library

Identification of Psuedoephedrine Enantiomers
by Chiral MEKC Using Peak Reversal
CE-Chiral Application Library

Compound: psuedoephedrine; ^{saccharin}sacharin; doxylamine; acetominophen; dextromethorphan
Type:
Matrix: Cough/cold preparation
Secondary Matrix:

Conditions:

Column / Capillary: AccuSep
Column / Capillary Dimensions: 50 um by 60 cm
Column / Capillary Part Number: WAT250-01
Flow Rate / Voltage: 15 KV
Temperature: 30 degrees C
Injection Volume / Type: Hydrostatic
Injection Conditions: 10 seconds
Sample Concentration: various
Sample Preparation: Dilute 1/50 and filter
Run Time: 35min.

Mobile Phase / Electrolyte: 25 mM PO₄/BO₄, pH 9.0, 50 mM Enantioselect-(S)-and (R)-Val-1

Gradient Conditions:

Detection (Primary): 214 nm

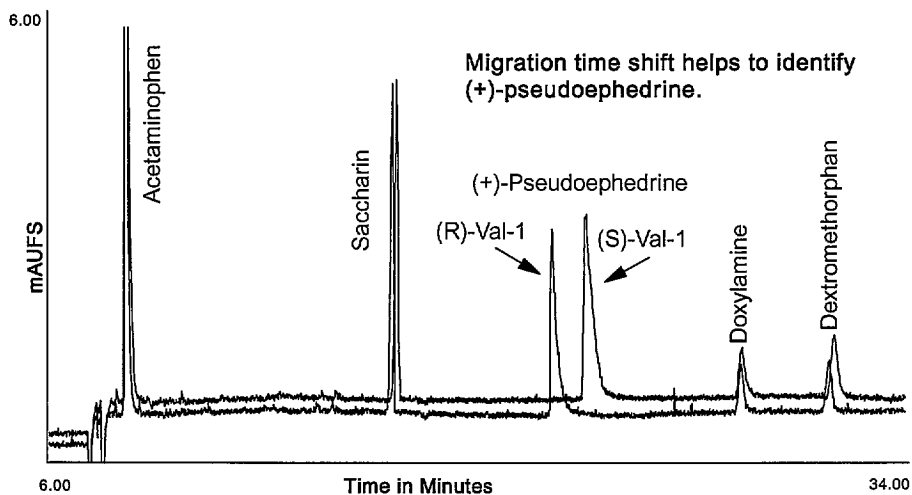
Detection (Secondary):

Instrumentation /System:

Waters Q4000E
Millennium Chromatography Manager V2.1 Control

Chromatogram / Electropherogram:

CMEKC Migration Order Reversal For Enantiomeric Peak Identification



Objectives:

Identification of psuedoephedrine enantiomers by Chiral MEKC.

Details:

The identification of the chiral compound in a complex mixture can be accomplished by utilizing first one Enantioselect reagent, and then the other. This exact migration time reversal can not be accomplished with other reagent such as cyclodextrins without further significant method development.

Ordering Information:

| Part Number | Description | Quantity |
|-------------|--------------------------------------|----------|
| WAT066270 | WATERS ENANTIOSELECT CHIRAL TEST KIT | 1 |

References:

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|--------------------|---|
| Reference 1 | Swartz, etal, J. Chrom (Invited), In Press. |
| Reference 2 | |
| Reference 3 | |
| Reference 4 | |
| Reference 5 | |

Journal Name:

Volume Number:

Page#:

Author:

Ref. Number:

Obsolete: ☐ Yes

Date:

☒ No

Year: