

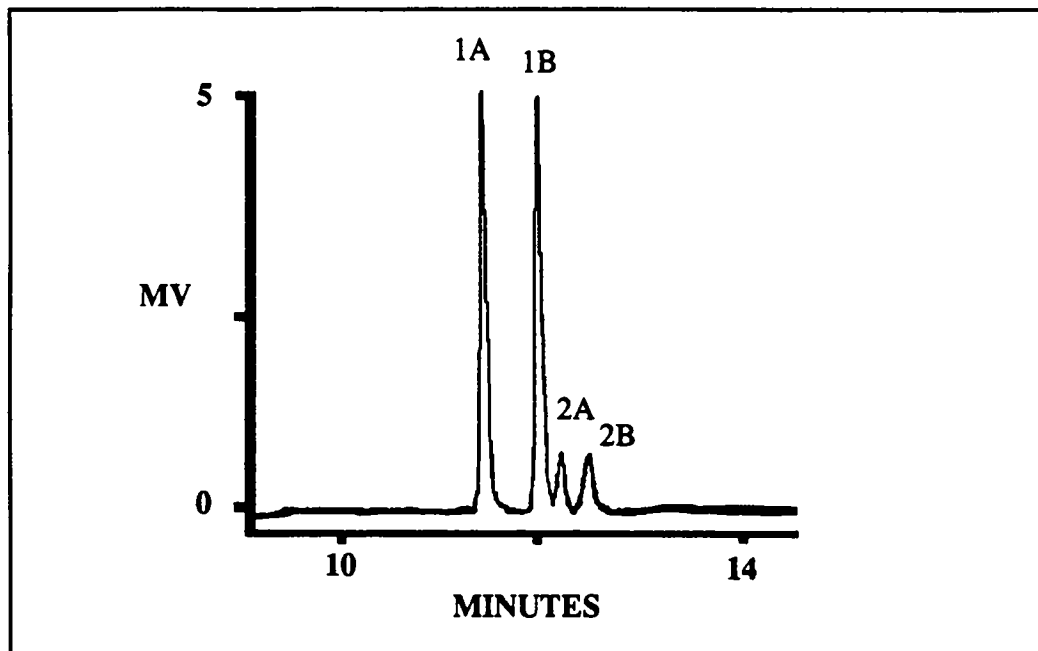


R Prescription for success

930792

Rx 022 8/90

ELECTROPHEROGRAM OF AN ENANTIOMERIC SYNTHESIS PRODUCT PRIOR TO HPLC PURIFICATION



CONDITIONS ON WATERS QUANTA™ 4000

MODE: FZCE
BUFFER: 0.01 M H_3PO_4
pH = 2
12 mM Heptakis(2,6-di-O-methyl)- β -Cyclodextrin
MODIFIER: 20 % MEOH
CAPILLARY: 35 cm X 50 μ m i.d.
VOLTAGE: + 18 KV
DETECTOR: UV @ 214 nm
INJECTION: 5 sec x 10 cm Hydrostatic

PEAK IDENTIFICATION:

1A. Desired Product (-)
1B. Desired Product (+)
2A. Impurity (-)
2B. Impurity (+)

SAMPLE MATRIX:

Sample Solution
@ 0.05 mg/ml in
50:50 MeOH / H_2O

REFERENCE:

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Author: Peter Rahn

INTERESTING FACTS

1. Chiral Separations are a critical concern for the pharmaceutical chemist. Capillary electrophoresis represents a new technique available for these chemists.
2. CE offers high efficiency separations with a very short analysis time. The CE separation was performed on a 75 μm capillary for better sensitivity.
3. The impurity in this sample was also enantiomeric as shown in the first electropherogram.
4. The excellent signal to baseline noise level noted in this electropherogram is typical of the Quanta 4000's performance using the discretely variable UV/VIS detector.
5. Other chiral separations performed on the Quanta 4000 are presented in Rx 017 8/90 through Rx 021 8/90.
6. The electrolyte is prepared by adding 0.01M Phosphoric acid at pH = 2 to 12 mM Heptakis(2,6-di-O-methyl)- β -Cyclodextrin. This derivatized cyclodextrin is available from Pierce Chemical. After filtering, 20% MeOH is added as the organic modifier.