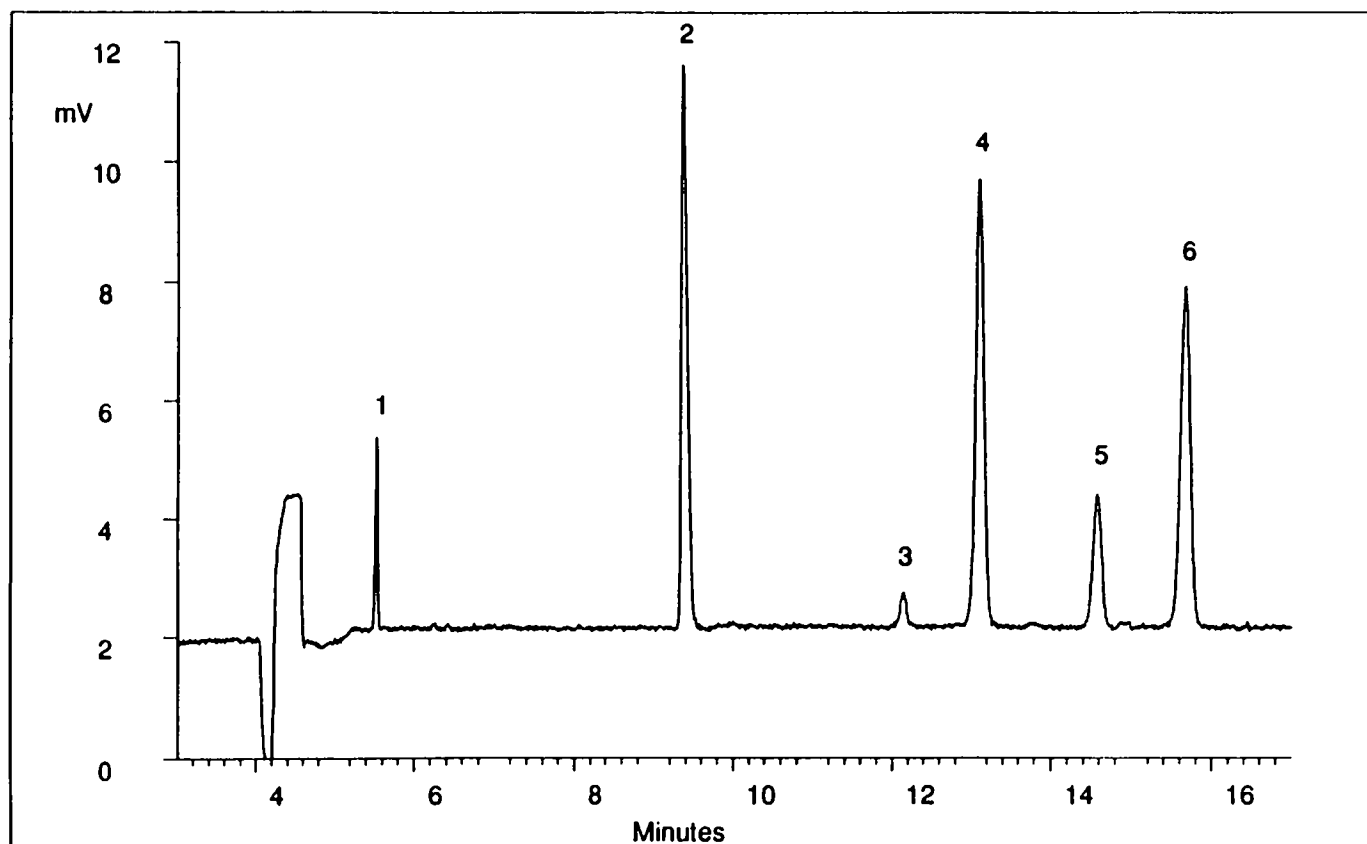


CE Separation of Morphine and Related Compounds



Conditions:

Mode: MECC

Capillary: AccuSep 75 micron
by 60 cm

Buffer: 20mM phosphate/
borate, pH9.1

Additive: 50 mM SDS

Voltage: 18KV

Detection: UV @ 214 nm
Injection: 15 second Hydrostatic

Sample:

- 1) Morphine-3-glucuronide, 14 ppm
- 2) Morphine, 29 ppm
- 3) Unknown impurity from
Diacetylmorphine
- 4) Codeine, 29 ppm
- 5) Diacetylmorphine, 14 ppm
- 6) Methadone, 29 ppm

This separation illustrates the selectivity that is possible using the MECC mode.

Objective:

To separate morphine from its major metabolites and from methadone.

Details:

This separation illustrates the selectivity that is possible using the MECC mode. This separation could be used to monitor serum or urine samples for the presence of these drugs of abuse. With the exception of methadone, all of these compounds are metabolites of heroin. Methadone is included in this mixture because it is used in treatment of heroin addiction.

System:

Waters Quanta 4000 CE System
Waters 845 Data Station

References:
