

Epinephrine

Determination of Epinephrine using μHPLC and Laser Induced Fluorescence Detection

Instruments:

HPLC pump: Agilent 1100 series + LC Packings
Acurate™ Flow Splitter
Injector: LC packings Famos Automated Injector
Detector: Picometrics ZETALIF 2000 detector
Laser: He-Cd Laser, 325 nm, 15 mW

Sample:

Standard solution of Epinephrine

Reagents:

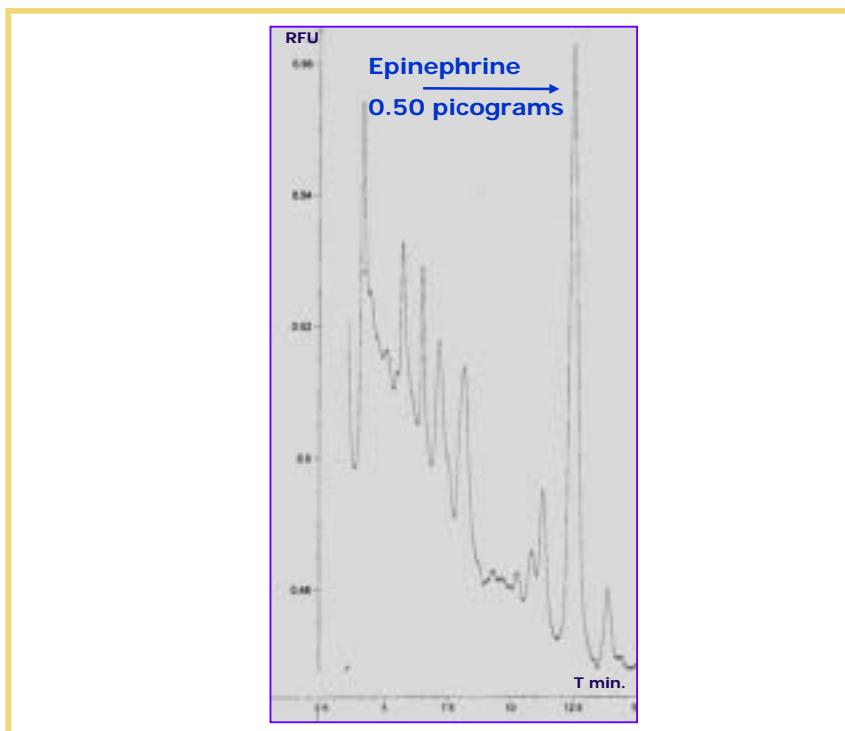
Derivatization agent: 1,2 – diphenylethylene-
diamine (DPE)
Alberts G, Lameris T, van den Meiracker AH, Man in 't Veld
AJ, Boomsma F.
J Chromatogr B Biomed Sci Appl. 1999;730(2):213-9

Methods:

Mobile Phase: Isocratic conditions, buffer sodium
acetate, Methanol, acetonitrile
Flow rate: 4 μL/min (0.4 mL/min at the pump)
Injection volume: 1 μL
Column: micro column LC Packings PepMap™, C18,
3 μm, 300 μm ID
Detector Capillary: 100 μm ID

Limit of Detection*:
 $3 \times 10^{-11} M$

* Estimated for a S/N of 3



Source: Picometrics application lab.