

Homocysteine

Determination of Plasma Thiols by Capillary Electrophoresis and Laser Induced Fluorescence Detection

Instruments:

Capillary Electrophoresis: PRINCE 510, from Prince Technologies
Detector: Picometrics ZETALIF 2000 detector
Laser: Argon Ion laser, 488 nm, 25 mW

Sample:

Sample from human Plasma. After extraction and labeling steps, sample is diluted 5 000 times before injection

Reagents:

Derivatization agent: 6-iodoacetamidofluorescein (IAF)

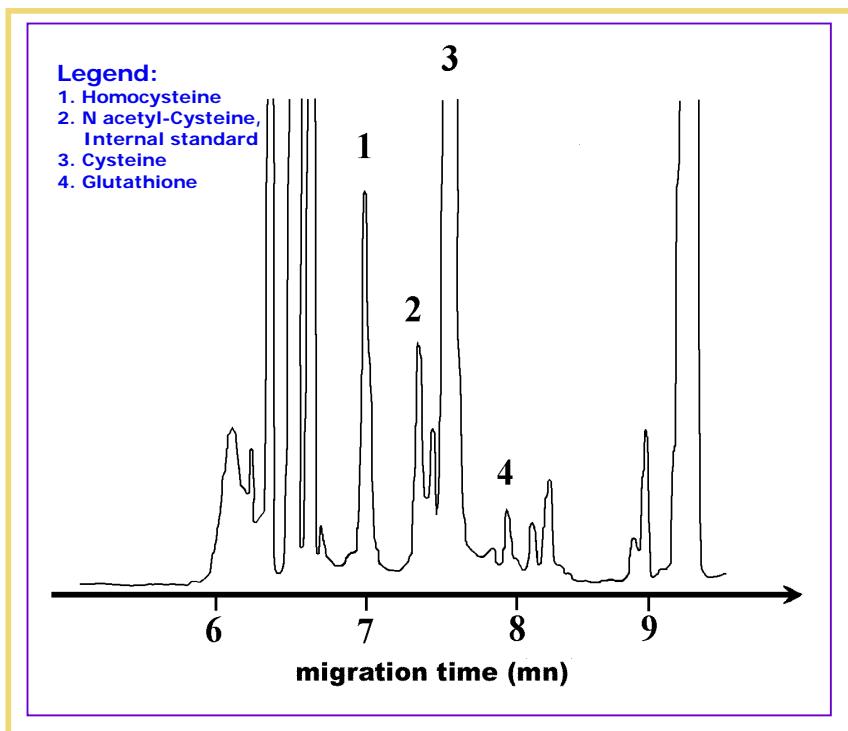
Methods:

Capillary: 50 µm ID, 75 cm length (43 cm effective length)
Buffer: 10 mM of SDS, 50 mM of Boric acid, 20 mM CAPS, pH = 9,5
Voltage: 25 kV, 25 µA
Injection: hydrodynamic, 1 second

Limit of Detection*:

0.25 µM of homocysteine in plasma
or 50 pM injection

* Estimated for a S/N of 3



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E. Caussé, N. Siri, H. Bellet, S. Champagne, C. Bayle, P. Valdiguié, R. Salvayre, F. Couderc.