Application Note
Reference ***AN 017-03A***

CE-LIF **488 nm**

Short Chain Fatty Acids

Determination of fatty acids using Capillary Electrophoresis and Laser Induced Fluorescence Detection

Limit of Detection*:
Subnanomolar range

** Estimated for a S/N of 3*

Instruments:
Capillary Electrophoresis: Dual Impact Europhor
Detector: Picometrics ZETALIF 2000 detector
Laser: Argon Ion laser 488 nm, 25 mW

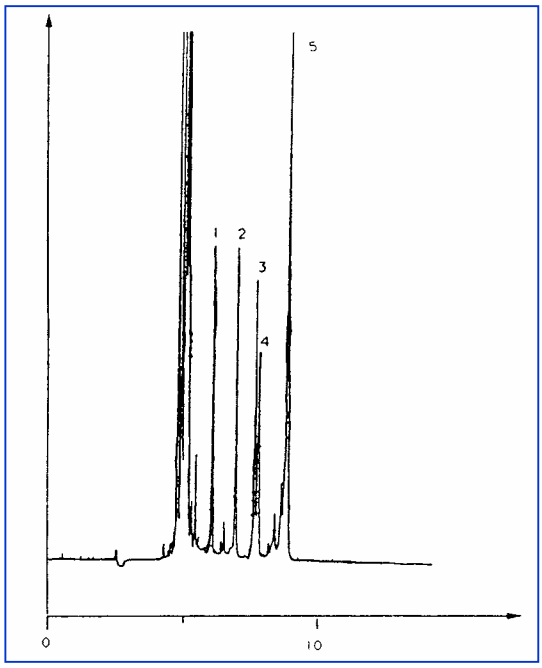
Sample:
Short Chain Fatty Acids (SCFA) in Serum after 1:3000 dilution in water

Reagents:
Derivatization agent: 5-bromomethylfluorescein

Methods:
Capillary: 50 µm ID, 75 cm length (42 cm effective length)
Buffer: 100 mM Borate, pH = 10, 20 mM SDS, 4 M Urea buffer
Voltage: 27 kV
Injection: 1 second (15 nL)

legend:
1 = C_8
2 = C_9
3 = C_{10}
4 = C_{11}
5 = C_{14} and C_{16}.

All SCFA 10 $^{-8}$ M



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J. Chromatogr. A, 781 (1997), 233-238. V. Zuriguel, E. Caussé, J.D. Bounery, G. Nouadje, N. Siméon, M. Nertz, R. Salvayre ,F. Couderc.

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