

Amino acids

Determination of FMOc labeled Amino Acids using Capillary Electrophoresis and Laser Induced Fluorescence Detection

Instruments:

Capillary Electrophoresis: Agilent CE
Detector: Picometrics ZETALIF 2000 detector
Laser: DPSS Laser 266 nm, 2 mW

Sample:

Standard Solution in doubly distilled water

Reagents:

Derivatization agent: 9-fluorenylmethyl chloroformate (FMOC)*

Methods:

Capillary: 50 μ m ID, 50 cm effective length (total length 65 cm), T = 25°C
Buffer: Boric acid 15 mM adjusted to pH=9.2 with NaOH 1M and 30 mM SDS
Voltage: +18 kV (10 μ A)
Injection: 20 sec. at 50 mBar (estimated injected volume: approximately 30 nL)

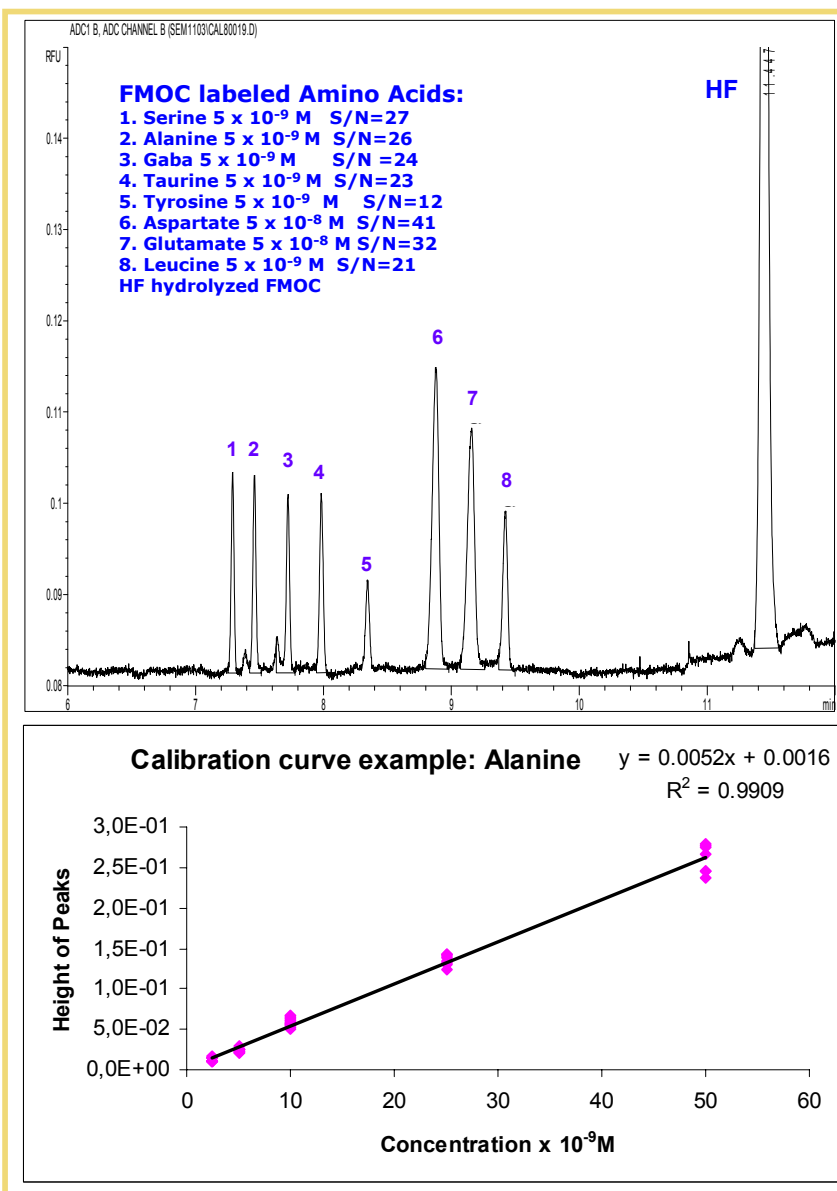
* Derivatization performed at 5×10^{-7} M and followed by a 100 x dilution in water prior to the injection.

Limit of Detection*:

0.5 to 5×10^{-9} M

(15 to 150 Attomoles injected)

* Estimated for a S/N of 3



Source: Picometrics application lab. 06/2003

more on www.picometrics.com