

Protein

Determination of a Protein containing Tryptophan and Tyrosine, 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:

Protein Solution in water, 0.3 µg/ml (MW 200 kD)

Reagents:

None (Naturally fluorescent compound)

Methods:

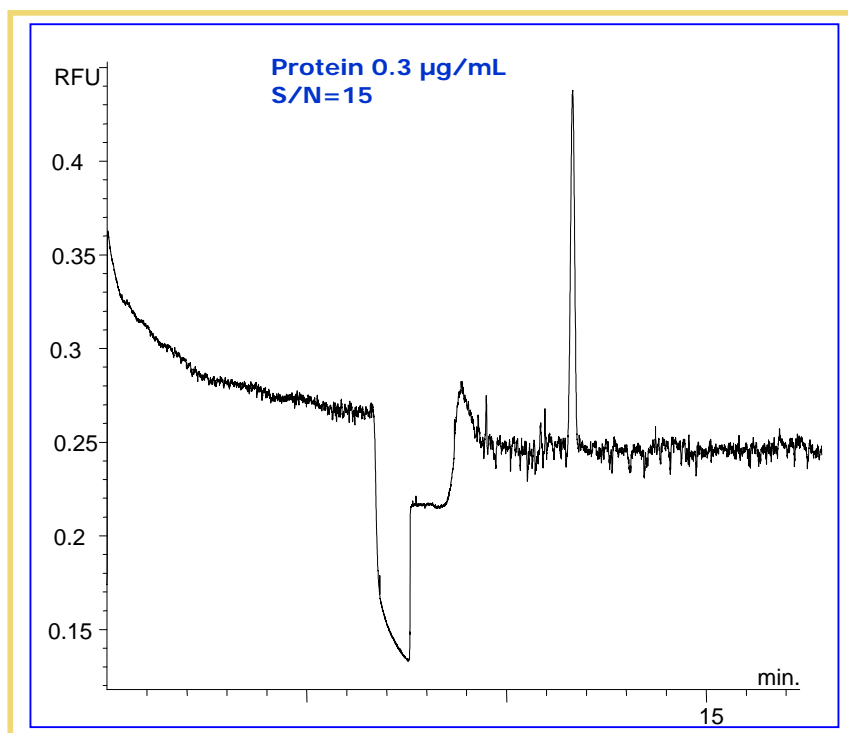
Capillary: 50 µm ID, 68 cm length (54 cm effective length)
Buffer: 50 mM Borate (pH = 9.2), SDS 20 mM
Voltage: 20 kV (45 µA)
Injection: 60 sec., 50 mbars

Note:

For the same Protein, a conventional DAD detector used at 200 nm show a LOD of 2 µg/ml.

Limit of Detection*:
60 nanograms/mL

* Estimated for a S/N of 3



Source: Picometrics application lab. 08/2001.