

Norepinephrine, Dopamine, GABA, Aspartate & Glutamate

Determination of Norepinephrine, Dopamine*, Gamma-Amino-n Butyric, Aspartic and Glutamic acids using Capillary Electrophoresis and Laser Induced Fluorescence Detection

Instruments:

Capillary Electrophoresis: Agilent CE
Detector: Picometrics ZETALIF 2000 detector
Laser: He-Cd laser, 442 nm, 30 mW

Sample:

Standard solution of Norepinephrine, Dopamine, GABA, Aspartate and Glutamate.

Reagents:

Derivatization agent: Naphthalene Dicarboxaldehyde (NDA)

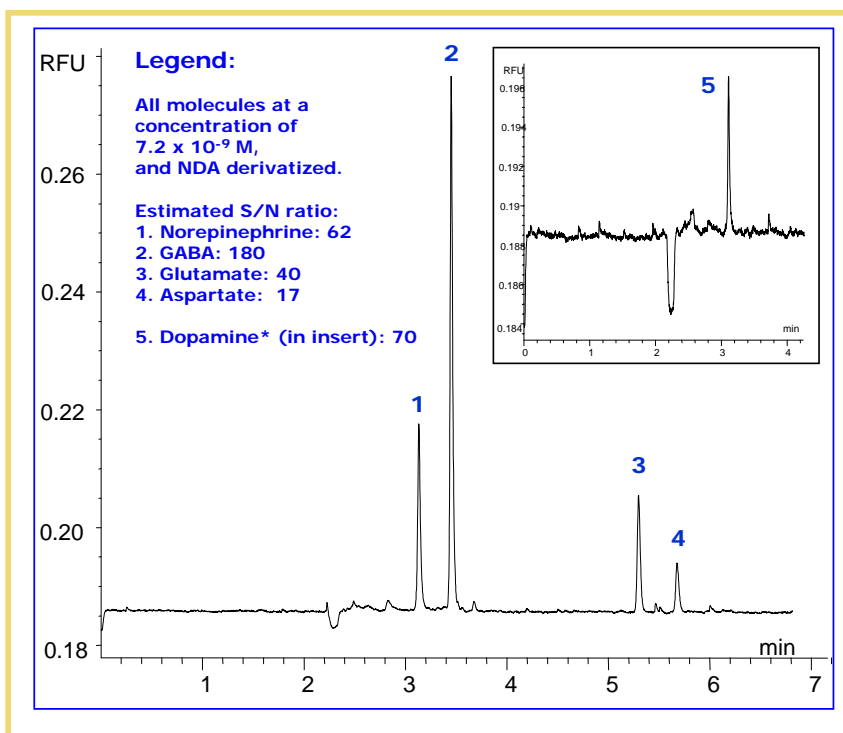
Methods:

Capillary: 50 μm ID, 60 cm length (47 cm effective length)
Buffer: 100 mM borate pH=9.2
Voltage: 30 kV
Injection: 15 seconds at 50 mbar

* Due to an identical migration time Dopamine and Norepinephrine cannot be identified in the same run under such conditions. This separation may however be achieved under other conditions.

Limit of Detection*:
0.1 to 1×10^{-9} M depending
on the considered molecule

* Estimated for a S/N of 3



Source: Picometrics application lab. 07/2001.