

Serotonin

Determination of serotonin in brain microdialysates by Capillary Electrophoresis with Laser Induced native Fluorescence detection

Instruments:

Capillary Electrophoresis: TSP Spectra PHORESIS 100
Detector: Picometrics ZETALIF detector
Laser: DPSS Laser 266 nm, 2 mW

Sample:

Microdialysates from rat brain (ventral Hippocampus), injected with no prepration at all.

Reagents:

None (Naturally fluorescent compound)

Methods:

Capillary: 50 µm ID, 120 cm length (60 cm effective length)
Buffer: 80 mmol/L pH 2.5 citrate buffer as running buffer containing 20 mM HP-β-CD.
Voltage: 30 kV
Injection: 200 seconds at 200 mbar (est. 640 nL) and 5 seconds HCl 0.1M at 200 mbar

More Information in...

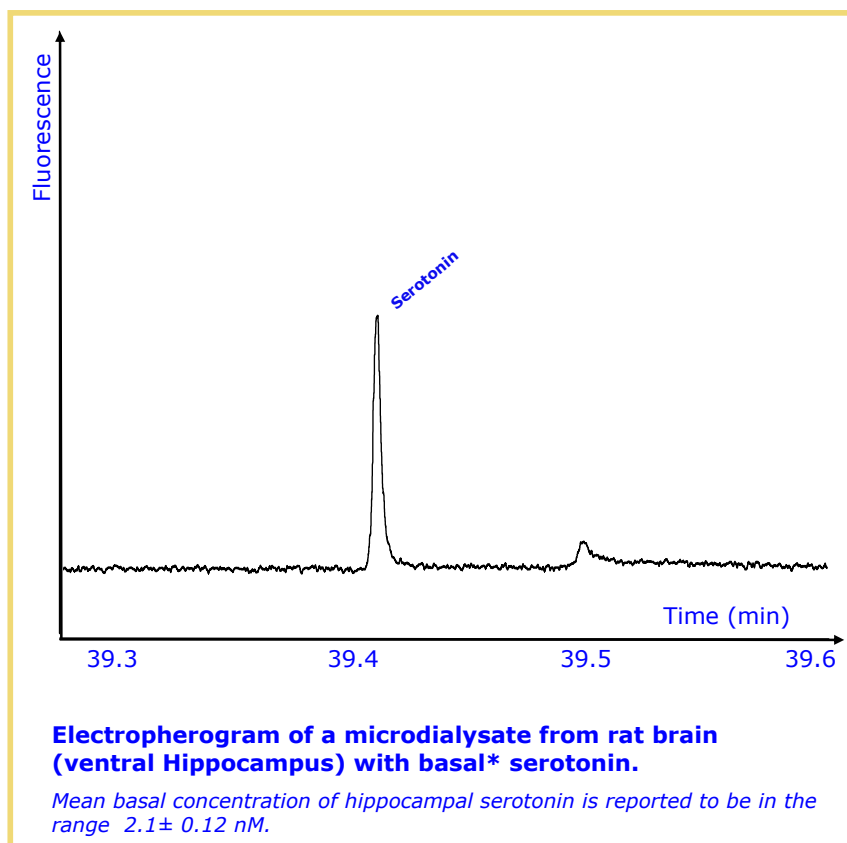
Analysis of serotonin in brain microdialysates using capillary electrophoresis and native laser-induced fluorescence detection.

N. Benturquia, F. Couderc, V. Sauvinet, C. Orset, S. Parrot, C. Bayle, B. Renaud, L. Denoroy

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Limit of Detection*:
0.25 nM

* Estimated for a S/N of 3



Source: Laboratoire de Neuropharmacologie et Neurochimie, INSERM U512, Uté de Lyon, France, in conjunction with Picometrics application lab. (08/2004).