

# Indolamines

Simultaneous Determination of N-acetyl Serotonin, Serotonin and Tryptophan by nanoHPLC and Laser Induced Native Fluorescence Detection

## Instruments:

HPLC pump: Ultimate™, LC Packings  
Injector: LC packings Famos™ Automated Injector  
Detector: Picometrics ZETALIF detector  
Laser: DPSS Laser 266 nm, 2 mW

## Sample:

standards diluted in water

## Reagents:

None (Naturally fluorescent compound)

## Methods:

Phase A:  
100% 2.5 mM 1 Heptanesulfonic acid +10 mM Phosphoric Acid

Phase B:  
20% 2.5 mM 1 Heptanesulfonic acid +10 mM Phosphoric Acid+  
80 % Acetonitrile

### Gradient:

00.00 mn 10% of mobile phase B  
10.00 mn 40% of mobile phase B  
40.00 mn 40% of mobile phase B  
45.00 mn 10% of mobile phase B

Flowrate: 200 nL/min

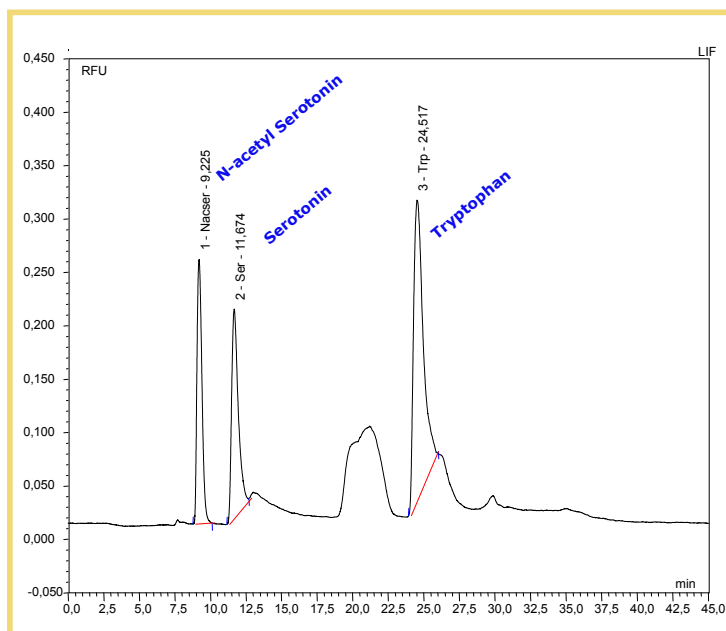
Injection volume: 1µL

Column: LC Packings PepMap C18, 5 µm, 100A, 75 µm ID x 15cm

Detector Capillary: 50 µm ID

Limit of Detection\*:  
3,3 to 4,6 nM

\* Estimated for a S/N of 3



Source: Picometrics application lab. 06/2004.

## Legend:

1) N-acetyl Serotonin 10 <sup>-6</sup> M	S/N: 823	LOD: 3.6 nM
2) Serotonin 10 <sup>-6</sup> M	S/N: 645	LOD: 4.6 nM
3) Tryptophan 10 <sup>-6</sup> M	S/N: 923	LOD: 3.3 nM