

Glyoxal

Determination of Pterin (TRI derivatized glyoxal) using μ HPLC and Laser Induced Fluorescence Detection

Instruments:

HPLC pump: Agilent 1100 series + ASI Flow Splitter
Injector: LC packings Famos Automated Injector
Detector: Picometrics ZETALIF detector
Laser: He-Cd Laser, 325 nm, 40 mW

Sample:

Standard solution of Pterin

Reagents:

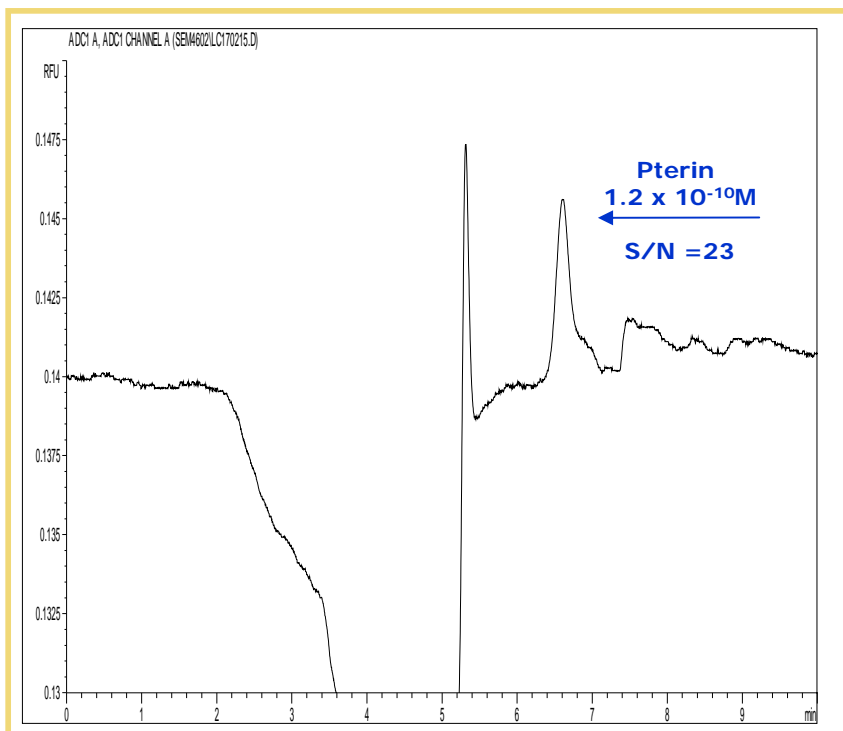
Derivatization agent: TRI (6-hydroxy-2,4,5-triaminopyrimidine)

Methods:

Mobile Phase: Isocratic conditions, (0.015 M NaH₂PO₄ / Na₂HPO₄) pH 6.5 / Acetonitrile (95/5 v/v)
Flow rate: 4 μ L / min (0.4 mL / min at the pump)
Injection volume: 5 μ L
Column: micro column LC Packings FUS 15-03-C18, Inertsil ODS-3 C18 3 μ m, 300 μ m ID x 15 cm
Detector Capillary: 75 μ m ID

Limit of Detection*:
 1.6×10^{-11} M

* Estimated for a S/N of 3



Source: Picometrics application lab. 10/2002.