## **HPLC Application**

ID No.: 20684



#### PLP and PA in Human sera/plasma on Gemini-NX 3u, C18, 100x4.6 by HPLC w Fluorescence Detection

Gemini® 3 µm NX-C18 110 Å, LC Column 100 x 4.6 mm, Ea

100 x 4.6 mm ID **Dimensions:** Order No: 00D-4453-E0 **Elution Type:** Gradient

Eluent A: 20mmol/L Na2HPO4 + 1mL acetic acid in 1L DI Water

**Eluent B:** ACN: MeOH (70:30)

Gradient	Step No.	Time (min)	Pct A	Pct B
Profile:	1	0	95	5
	2	5	40	60
	3	5.1	5	95
	4	6	95	5
	5	7	95	5



Products used in this application:



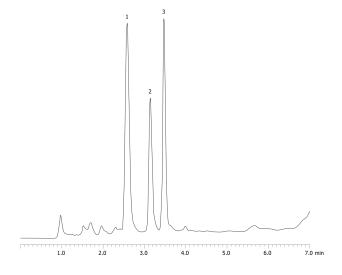
Flow Rate: 1 mL/min 35 °C Col. Temp.:

Circular Dichroism @ 0.000000000 (ambient) **Detection:** 

SAMPLE PREPARATION **Analyst Note:** 

- 1. Thaw patient plasma samples and sera/plasma spiked calibrators or pre-manufactured calibration standards and controls at ambient temperature. Protect from light. 2. Pipette 400 µL of the blank (Water), calibration standards, controls and plasma specimens into the appropriate labeled 1.5 mL Eppendorf microcentrifuge tubes.
  i. Briefly vortex the calibrators and controls immediately prior to sampling.
- ii. Mix the plasma samples by gentle inversion immediately prior to sampling.
- iii. Protect the tubes from light
- 3. Add 30 µL of 250 mg/mL semicarbazide/glycine solution in rapid succession into all the tubes containing samples; cap the tubes, vortex for 15 seconds. 4. Incubate in the dark at room temperature for 30 minutes.
- 5. Uncap the tubes; add 50 µL of 20 % meta-Phosphoric acid to the controls and patient samples.
- 6. Recap the tubes and vortex for 30 seconds at room temperature.
- 7. Centrifuge for 5 minutes at 14,000 rpm. Note: The relative centrifugal force (RCF)=16,000 g.
- 8. Transfer 350  $\mu\text{L}$  of supernatant to a 2 mL amber vial.
- 9. Cover the vial with lid and place in the autosampler (RT).
- 10. Inject 30 μL

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### **ANALYTES:**

- Pyridoxal 5'-phosphate
- 4-Pyridoxic acid
- Pyridoxal