HPLC Application ID No.: **20875**



TMP and Thiamine Standard by Impact PPT on Kinetex 5u C18 100x4.6mm

Kinetex® 5µm C18 100 Å, LC Column 100 x 4.6 mm, Ea

100 x 4.6 mm ID **Dimensions:** Order No: 00D-4601-E0 Elution Type: Gradient

Eluent A: 25mM Na2HPO4, 10% Methanol, pH 7.0 25mM Na2HPO4, 70% Methanol, pH 7.0 **Eluent B:**

Liuciic Di	231111 Na2111 0 1, 7 0 70 1 Techanol, pri 7:0						
Gradient	Step No.	Time (min)	Pct A	Pct B			
Profile:	1	0	97	3			
	2	0.25	75	25			
	3	0.75	75	25			
	4	3	65	35			
	5	4	40	60			
	6	4.5	97	3			
	7	5	97	3			



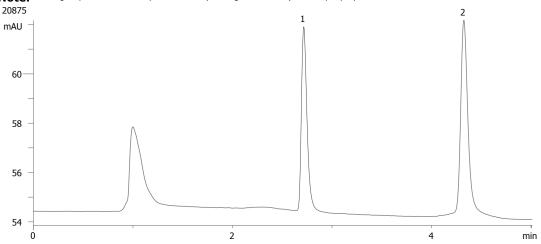
Products used in this application:



Flow Rate: 1 mL/min Col. Temp.: 25 °C

Fluorescence (FLUOR) @ Ex. 375 nm (ambient) **Detection:**

Using Impact Protein Precipitation Plate (Cat Log #CE0-7565) for sample preparation **Analyst Note:**



ANALYTES:

Thiamine monophosphate

Retention Time: 2.715 min

2 Thiamine

Retention Time: 4.323 min

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Sample Preparation Details

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PRODUCT DESCRIPTION:

Impact™ Protein Precipitation, 2mL Square Well Filter Plate, 2/Pk

Order No.: CE0-7565

Conditions

SOLID PHASE EXTRACTION (SPE) PRODCEDURE:

Note: The solvent volumes shown below are for a Proprietary bed mass.

The solvent volumes will need to be adjusted for a smaller or larger bed mass.

condition.					
Load:					
Wash:					
Dry:					
Elute:					
Final Prep and Analysis:					
Add $400\mu L$ of methanol to a well of a Protein Precipitation Plate; Add $100\mu L$ plasma to the well. Mix 3 times with pipette tip (or vortex the whole plate briefly); Wait for 5 minutes; Filter through					
Inject: 20 μL on HPLC Fluorescence (FLUOR) @ Ex. 375 nm (ambient)					

ANALYTES:	Spiked Conc. (ng/mL)	Log P	pKa	% Rec	%RSC (n=0)
1 Thiamine monophosphate	200				
2 Thiamine	200				

This method is designed as a convenient starting point for further investigation and can be tailored to meet your extraction goals. Call your local Phenomenex Representative for assistance in method development and optimization techniques.

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