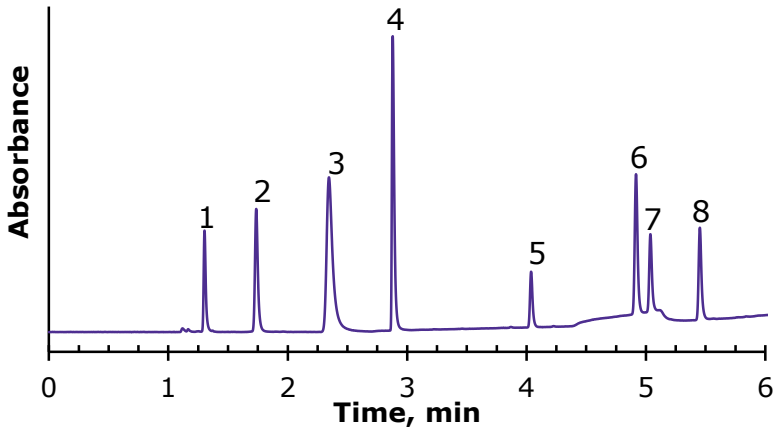
U/HPLC Analysis of Water Soluble Vitamins on Ascentis® Express AQ-C18, 2.7 µm



Peak Number	Compound
1	Thiamine (B1)
2	Ascorbic Acid (C)
3	Nicotinamide (B3)
4	Pyridoxine (B6)
5	Pantothenic Acid (B5)
6	Cyanocobalamin (B12)
7	Folic Acid (B9)
8	Riboflavin (B2)

Conditions:

column: Ascentis® Express AQ-C18, 15 cm x 4.6 mm I.D., 2.7 µm

mobile phase: [A] 0.025 M potassium phosphate in water, pH 2.5; [B] Methanol

gradient: Hold at 0% B for 1 min; 0% B to 70% B in 5 min; hold at 70% B for 4 min.

flow rate: 1.2 mL/min

column temp.: 30 °C

detector: UV, 215 nm

injection: 2 µL

sample: Water soluble vitamins, varied concentration, water

Description:

Water soluble vitamins are important for various functions in the human body. They are naturally found in fruits, vegetables, and some animal products, and can also be taken as supplements. They are also commonly added to processed and fortified foods. The Ascentis® Express AQ-C18 is ideal for the separation of water soluble molecules such as these due to its resistance to dewetting when using aqueous mobile phases.

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Materials:

Product Part Number	Description
577337-U	Ascentis® Express AQ-C18, 15 cm x 4.6 mm I.D., 2.7 µm
270733	Water
34860	Methanol
P5655	Potassium phosphate monobasic
P3786	Potassium phosphate dibasic
T4625	Thiamine hydrochloride
11140	(+) Sodium L-ascorbate
72340	Nicotinamide
P5669	Pyridoxine
47867	D-Pantothenic acid hemicalcium salt
47869	Cyanocobalamin
F7876	Folic acid
47861	Riboflavin