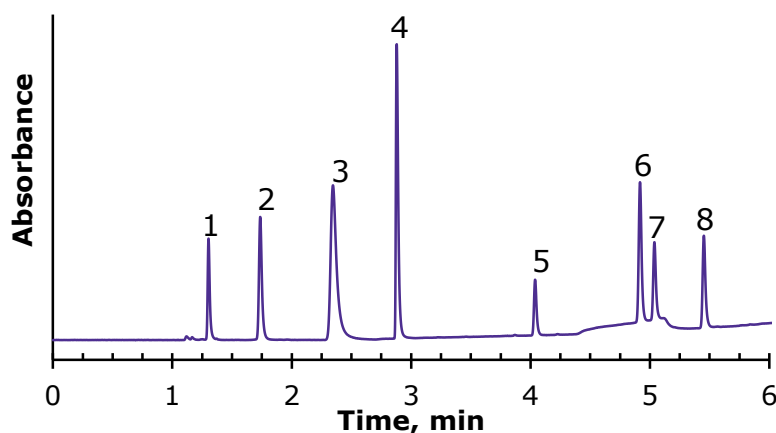




# U/HPLC Analysis of Water Soluble Vitamins on Ascentis® Express AQ-C18, 2.7 µm



| 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.



## 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  |

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