

Application Report 278

Separation of Water Soluble Vitamins Using Ascentis™ RP-Amide

The suitability of the Ascentis RP-Amide for the separation of water soluble vitamins, niacin, ascorbic acid, pyridoxine, thiamine using 100% aqueous conditions is demonstrated.

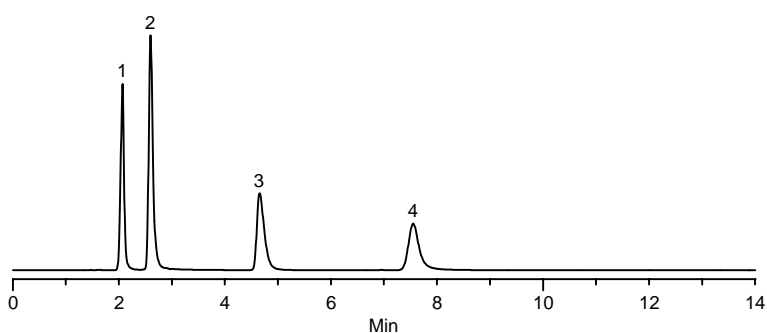
Key Words

Ascentis RP-Amide, 565324-U, vitamins, aqueous, ascorbic acid, 1007, 6950-81-7, niacinamide, N3376, 98-92-0, pyridoxine, P5669, 65-23-6, thiamine HCl, 10917-7, 67-03-8

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Acquisition System: Hitachi LC

Notebook Reference: 1550-45



G003035

Conditions

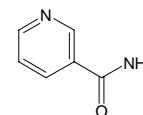
column: Ascentis RP-Amide, 15 cm x 4.6 mm I.D., 5 µm particles (565324-U)
mobile phase: 25 mM potassium phosphate, dibasic (pH 3.5 with phosphoric acid)
flow rate: 1.0 mL/min.
temp.: 30 °C
det.: UV at 230 nm
injection: 10 µL
sample: as indicated in 25 mM potassium phosphate, dibasic (pH 3.5 with phosphoric acid)

Peak IDs

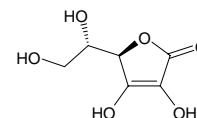
1. Niacin (50 µg/mL)
2. Ascorbic acid (100 µg/mL)
3. Pyridoxine (100 µg/mL)
4. Thiamine (75 µg/mL)

Structures

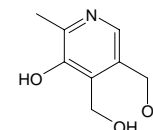
Niacin - G003036



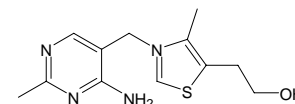
Ascorbic acid - G002720



Pyridoxine - G003038



Thiamine - G003037



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