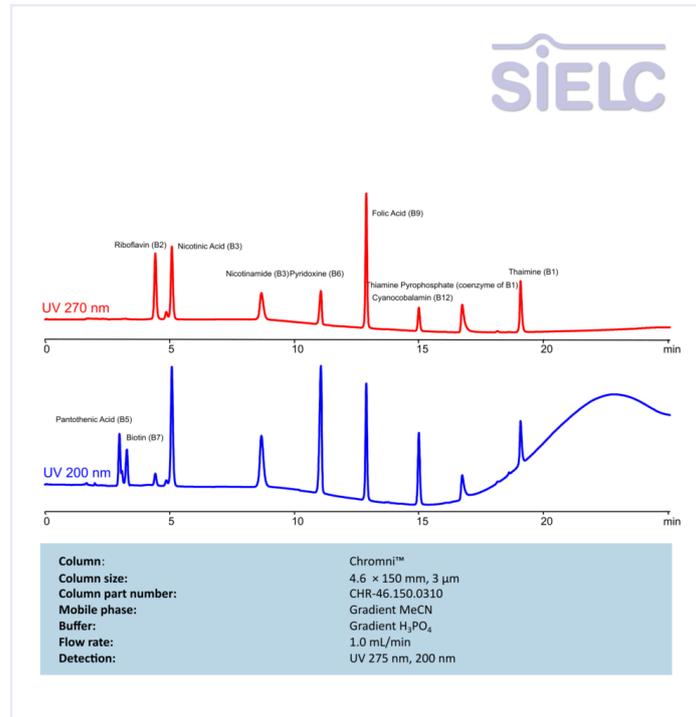


HPLC Method for Separation of 10 Water-Soluble Vitamins on Chromni Column



High Performance Liquid Chromatography (HPLC) Method for separation of Vitamin B2 (Riboflavin) , Nicotinic Acid/Niacin (3-pyridinecarboxylic acid) , Nicotinamide , Vitamin B6 (Pyridoxine) , Folic Acid , Cyanocobalamin , Thiamine diphosphate (Thiamine pyrophosphate) , Vitamin B1 (Thiamine) , Pantothenic Acid (Vitamin B5) , Biotin

Riboflavin (B2), Nicotinic Acid (B3), Nicotinamide (B3), Pyridoxine (B6), Folic Acid (B9), Cyanocobalamin (B12), Thiamine Pyrophosphate (coenzyme of B1), Thiamine (B1), Pantothenic Acid (B5), Biotin (B7) are water soluble vitamins with a key function of energy metabolism. These coenzymes are responsible for converting food into usable energy.

Vitamin B2 (Riboflavin) , Nicotinic Acid/Niacin (3-pyridinecarboxylic acid) , Nicotinamide , Vitamin B6 (Pyridoxine) , Folic Acid , Cyanocobalamin , Thiamine diphosphate (Thiamine pyrophosphate) , Vitamin B1 (Thiamine) , Pantothenic Acid (Vitamin B5) , Biotin can be retained and analyzed using the Chromni stationary phase column. The analysis utilizes a gradient method with a simple mobile phase consisting of water, acetonitrile (MeCN). Detection is performed using UV.

Gradient Elution Program for HPLC Method

Method Parameters

Column	Chromni, 4.6 x 150 mm, 3 µm, 100 Å, dual ended
Mobile Phase	MeCN/H ₂ O – see table
Buffer	H ₃ PO ₄ – see table
Flow Rate	1.0 mL/min
Detection	UV 275 nm, 200 nm

Quelle: <https://sielc.com/hplc-method-for-analysis-of-10-water-soluble-vitamins>