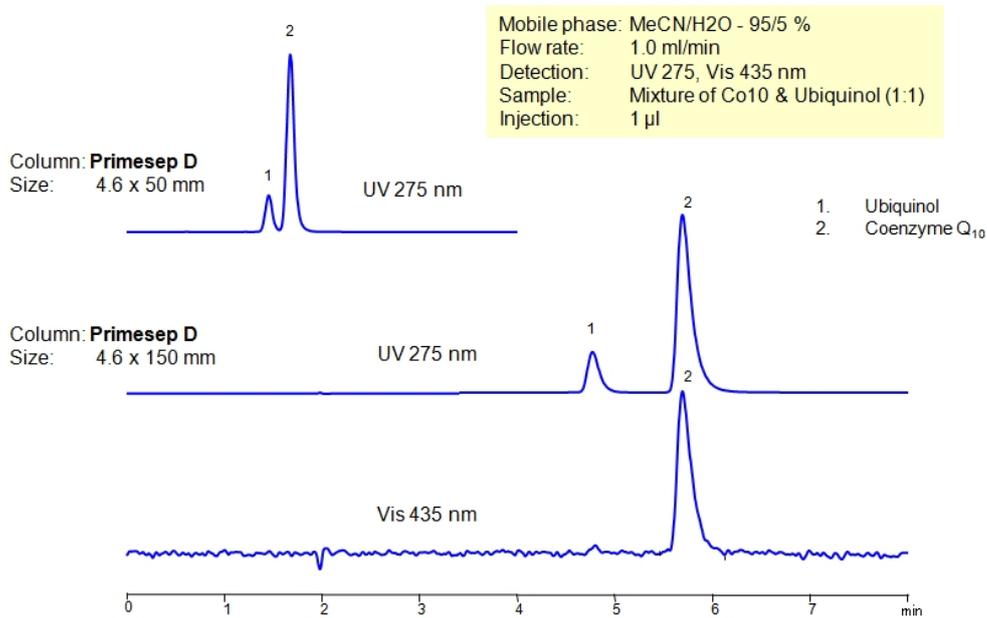


HPLC Determination of Coenzyme Q10 and Ubiquinol on Primesep D Column



HPLC Method for Coenzyme q10 , Ubiquinol on Primesep D by SIELC Technologies

High Performance Liquid Chromatography (HPLC) Method for Analysis of Coenzyme q10 , Ubiquinol .

Coenzyme Q10 , also known as ubiquinone , is an enzyme found in animals and is used as a dietary supplement with the chemical formula C₅₉H₉₀O₄ . It acts as a redox carrier, which means that it transfers electrons in the mitochondria. The production of ubiquinone depletes with age. Ubiquinol is a reduced form of coenzyme Q10.

The two compounds are similar in structure and can be difficult to separate in reverse-phase HPLC. Using mixed-mode Primesep D column and the mobile phase with acetonitrile (ACN) and water, without the need for buffer, CoQ10 and ubiquinol can be isocratically separated and UV detected at 275 nm.

Method Parameters

Column	Primesep D
Mobile Phase	MeCN/H ₂ O – 95/5%
Buffer	No
Flow Rate	1.0 mL/min
Detection	UV 275 nm, Vis 435 nm

Quelle: <https://sielc.com/hplc-determination-of-coenzyme-q10-and-ubiquinol-on-primesep-d-column>