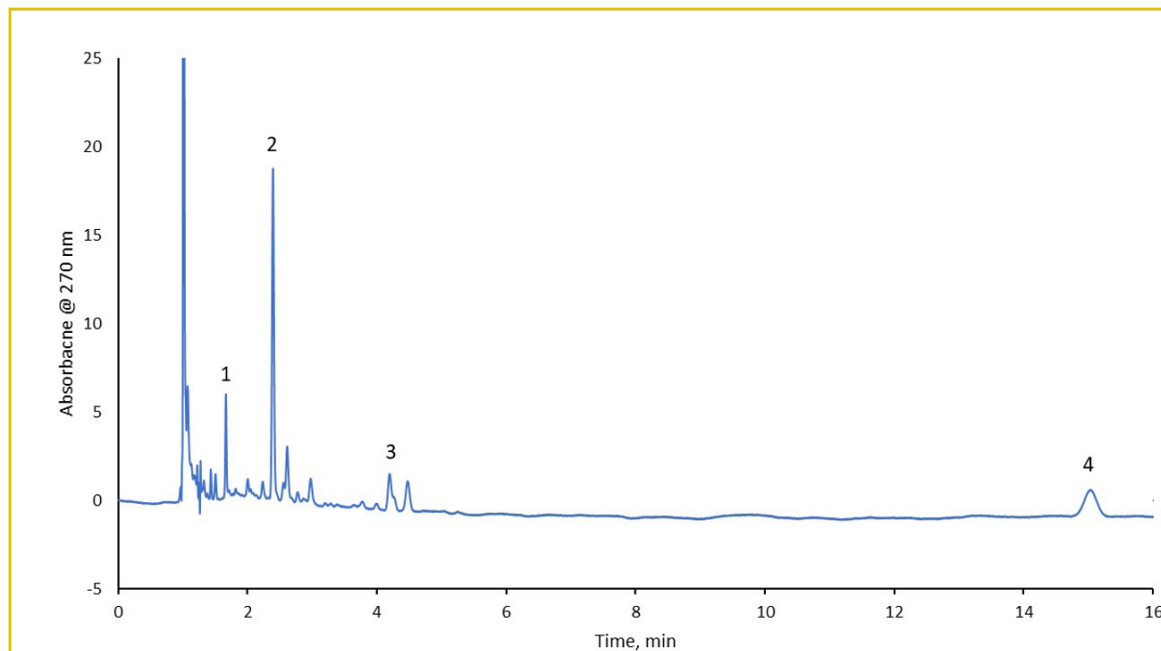




Analysis of Spinach

223-V



TEST CONDITIONS:

Analytical Column: Column: HALO 160 Å C30, 2.7 μm , 4.6 x 150 mm
Part Number: 92114-730
Mobile Phase: Methanol
Flow Rate: 1.5 mL/min
Pressure: 244 bar
Temperature: 30°C
Detection: UV, 270 nm
Injection Volume: 5.0 μl
Sample Solvent: hexane
Response Time: 0.025 sec.
Flow Cell: 1 μl
LC System: Shimadzu Nexera X2

PEAK IDENTITIES:

1. Retinyl acetate (Vitamin A)
2. Ergocalciferol (Vitamin D2)
3. 2, 3 - trans-phyloquinone (Vitamin K1)
4. β -carotene

Spinach is a common leafy green vegetable found all over the world and is one of the most nutritious to consume. A sample of spinach is dissolved in hexane and analyzed using a HALO® C30 column. Vitamin A, D2, and K1 were unable to be detected in the extract so the sample was spiked with each standard to show that several fat soluble vitamins are able to be separated using isocratic HPLC conditions.

