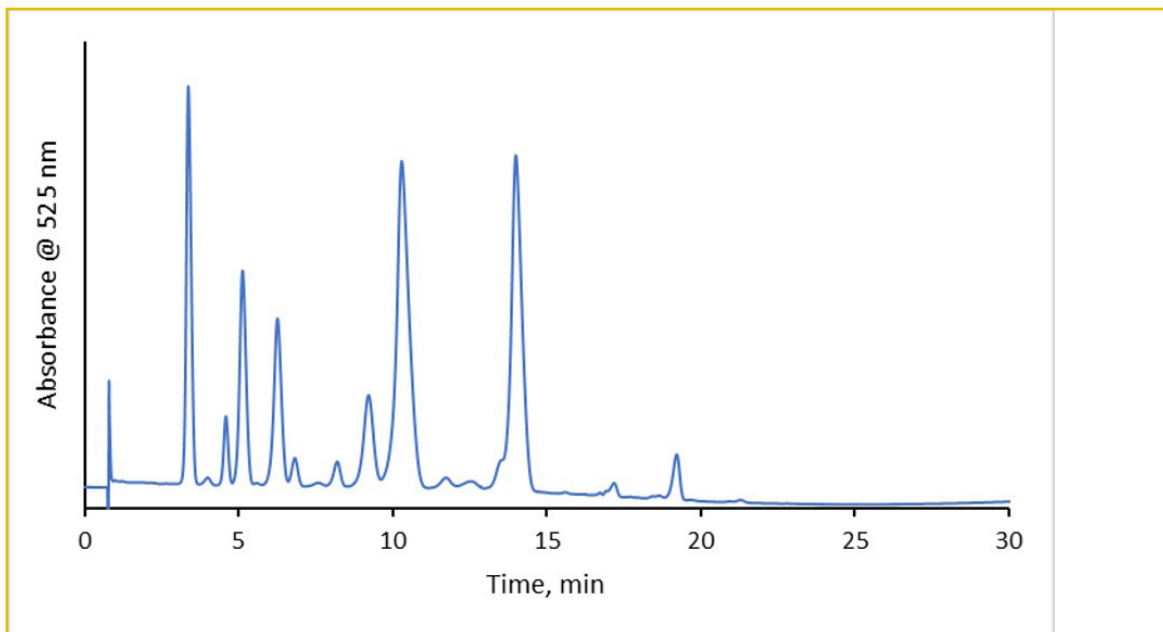




Separation of Anthocyanins in Blueberries

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TEST CONDITIONS:

Column: HALO 90 Å LPH-C18, 2.7 μm 2.1 x 100 mm

Part Number: 92822-616

Mobile Phase A: Water/ 3% Phosphoric Acid (pH: 1.4)

Mobile Phase B: Methanol

Gradient:	Time	%B
	0.0	23
	10.8	26
	29.8	60

Flow Rate: 0.27 mL/min

Pressure: 144 bar

Temperature: 30 °C

Detection: UV 525 nm, PDA

Injection Volume: 4.5 μL

Sample Solvent: Water

Data Rate: 100 Hz

Response Time: 0.025 sec.

Flow Cell: 1 μL

LC System: Shimadzu Nexera X2

Anthocyanins, a category of polyphenols, are a type of pigment found in plants that offer several health benefits. These flavonoids have antioxidant effects that can be found in a variety of different fruits and vegetables, including blueberries. A separation of anthocyanins is performed on a HALO 90 Å LPH-C18 column, which is ideal for the low pH conditions of this method. Blueberries were mixed with methanol, water, and formic acid followed by being spun down and filtered. Due to the sterically protected ligand, the LPH-C18 column can withstand these low pH conditions and maintain stable retention times while standard C18 columns will show retention loss over time.

