

Vitamin D tablet assay (Up & Up + 75 µg std add) on a Kinetex 2.6 µm Biphenyl, 150 x 4.6

Column: Kinetex® 2.6 µm Biphenyl 100 Å, LC Column 150 x 4.6 mm, Ea

Dimensions: 150 x 4.6 mm ID

Order No: 00F-4622-E0

Elution Type: Isocratic

Eluent A: 0.1% TFA

Eluent B: Acetonitrile

Gradient Profile:	Step No.	Time (min)	Pct A	Pct B
	1	0	35	65

Flow Rate: 1.75 mL/min

Col. Temp.: 40 °C

Detection: UV-Vis Abs.-Diode Array (PDA) @ 280 nm (ambient)

Analyst Note: Sample preparation: small tablets (<400 mg)

1. Grind tablet into powder and transfer to a 2 mL dSPE tube (KS0-8916)
2. Spike in 20 µL of triphenylene internal standard (1 mg/mL) and standard additions (if applicable)
3. Add 800 µL of water

4. Sonicate until dissolved (approx. 5 min)

5. Add 800 µL of acetonitrile

6. Shake for 10 min using mechanical shaker

7. Centrifuge at 15000 rpm for 3 min

8. Aspirate 100 µL of supernatant and transfer to an autosampler vial for analysis

Sample preparation: large tablets (>400 mg)

1. Grind tablet into powder and transfer to a 5 mL centrifuge tube

2. Spike in 20 µL of triphenylene internal standard (1 mg/mL) and standard additions (if applicable)

3. Add 2 mL of water

4. Sonicate until dissolved (approx. 5 min)

5. Add 400 mg of Quechers salt (AH0-9044)

6. Add 2 mL of acetonitrile

7. Shake for 10 min using mechanical shaker

8. Centrifuge at 6000 rpm for 3 min

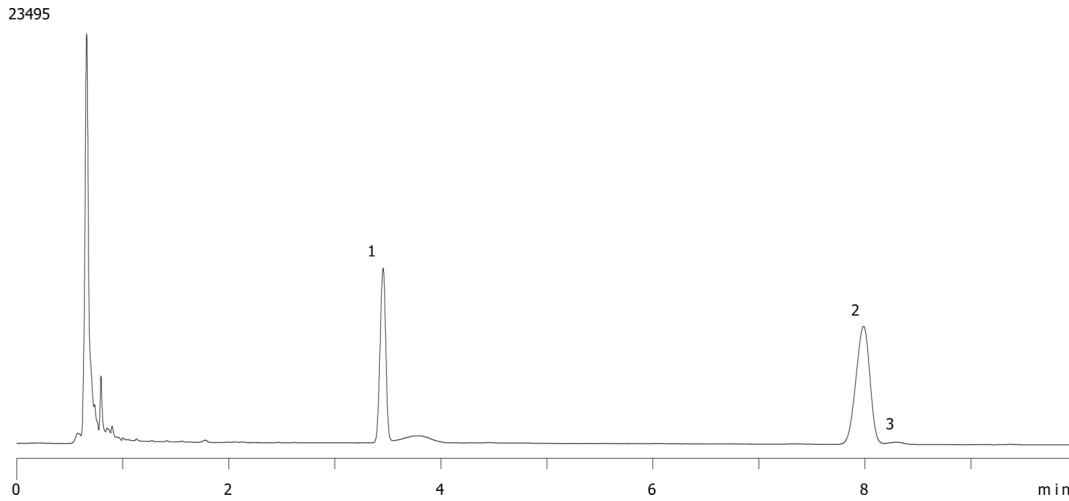
9. Aspirate 100 µL of supernatant and transfer to an autosampler vial for analysis



Products used in this application:



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ANALYTES:

- 1 Triphenylene (I.S.)
- 2 Vitamin D3

