



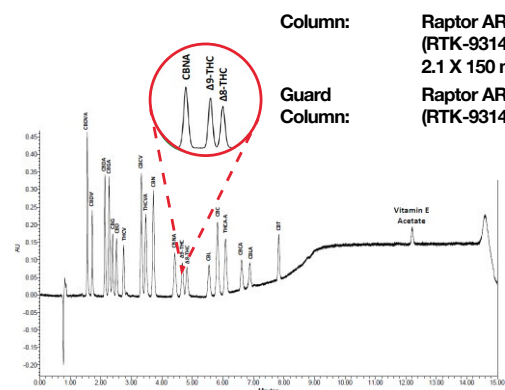
High-Throughput Analysis of Cannabinoids by LC-UV - Recently added Vitamin E Acetate

Restek recently revised their cannabinoid workflow, scientists have added Vitamin E acetate as part of a modified potency analysis on the Restek Raptor ARC-18 column. Restek is continuing to look at other methods for rapidly screening for Vitamin E Acetate as interest in this compound continues to develop.

While it appears that vitamin E acetate is associated with EVALI (e-cigarette, or vaping, product use associated lung injuries), evidence is not yet sufficient to rule out contribution of other chemicals of concern to EVALI. Many different substances and product sources are still under investigation, and it may be that there is more than one cause of this outbreak.



Analysis of 16 Cannabinoids Using Modified Aqueous Mobile Phase - Recently added Vitamin E Acetate



Column: Raptor ARC-18 2.7 μ m, (RTK-9314A62)
2.1 X 150 mm

Guard Column: Raptor ARC-18 EXP 2.7 μ m, (RTK-9314A0252)

Mobile Phase: A: 5mM Ammonium Formate, 0.1% Formic Acid in H₂O
B: 0.1% Formic Acid in ACN

Column Temp: 30 °C

Injection Vol: 2.0 μ L

Sample: 50 ppm in 50:50 Methanol:ACN

Gradient: 75% B, 0.00 min; 0.4 mL/min

75% B, 4.00 min; 0.4 mL/min

98% B, 8.00 min; 0.4 mL/min

98% B, 8.01 min; 0.8 mL/min

98% B, 13.00 min; 0.8 mL/min


75% B, 13.01 min; 0.4 mL/min

75% B, 15.00 min; 0.4 mL/min

1. Cannabidivarinic acid (CBDVA)
2. Cannabidivarin (CBDV)
3. Cannabidiolic acid (CBDA)
4. Cannabigerolic acid (CBGA)
5. Cannabigerol (CBG)
6. Cannabidiol (CBD)
7. Tetrahydrocannabivarin (THCV)
8. Tetrahydrocannabivarinic acid (THCVA)
9. Cannabinol (CBN)
10. Cannabinolic acid (CBNA)
11. Δ 9-Tetrahydrocannabinol (Δ 9-THC)
12. Δ 8-Tetrahydrocannabinol (Δ 8-THC)
13. Cannabicyclol (CBL)
14. Cannabichromene (CBC)
15. Tetrahydrocannabinolic acid A (THCA-A)
16. Cannabichromenic acid (CBCA)
17. Vitamin E Acetate

TECH TIP

Using popular mobile phases may lead to co-elution of cannabinolic acid and Δ 9 tetrahydrocannabinol (Δ 9 THC). In order to resolve CBNA from Δ 9 THC without compromising established separations, ammonium formate was added to the aqueous mobile phase to a concentration of 5 mM in solution.

 For a fast and easy method for cannabinoid-only analysis, view Restek's original cannabinoids method. No re-equilibration time required with the isocratic method. <https://cannabis.chromtech.com/blog>



RAPTOR COLUMNS & ACCESSORIES

PART NO	DESCRIPTION
RTK-9314A62	Raptor ARC-18 2.7 μ m, 2.1 x 150 mm, ea
RTK-9314A0252	Raptor ARC-18 2.7 μ m, EXP Guard cartridge 2.1 x 5 mm, 3/pk
RTK-25808	EXP Guard cartridge holder, includes fitting & ferrules
FV-3020EX	Filter Vial, 0.2 μ m EX-PVDF, slit cap, 100/pk

CANNABIS STANDARDS (1,000 μ g/mL, Volume is 1 mL/ampul)

PART NO	DESCRIPTION	PART NO	DESCRIPTION
RTK-34123	Cannabidivarin (CBDV)	RTK-34010	Cannabinol (CBN)
RTK-34094	Cannabidiolic Acid (CBDA)	RTK-34067	Δ 9-Tetrahydrocannabinol (Δ 9-THC)
RTK-34112	Cannabigerolic Acid (CBGA)	RTK-34090	Δ 8-Tetrahydrocannabinol (Δ 8-THC)
RTK-34091	Cannabigerol (CBG)	RTK-34092	Cannabichromene (CBC)
RTK-34011	Cannabidiol (CBD)	RTK-34093	Tetrahydrocannabinolic acid A (THCA-A)
RTK-34100	Tetrahydrocannabivarin		

Certified reference materials (CRMs) manufactured and QC-tested in ISO-accredited labs satisfy your ISO requirements. Commercial standards are available.



RTK-25808



FV-3020EX

