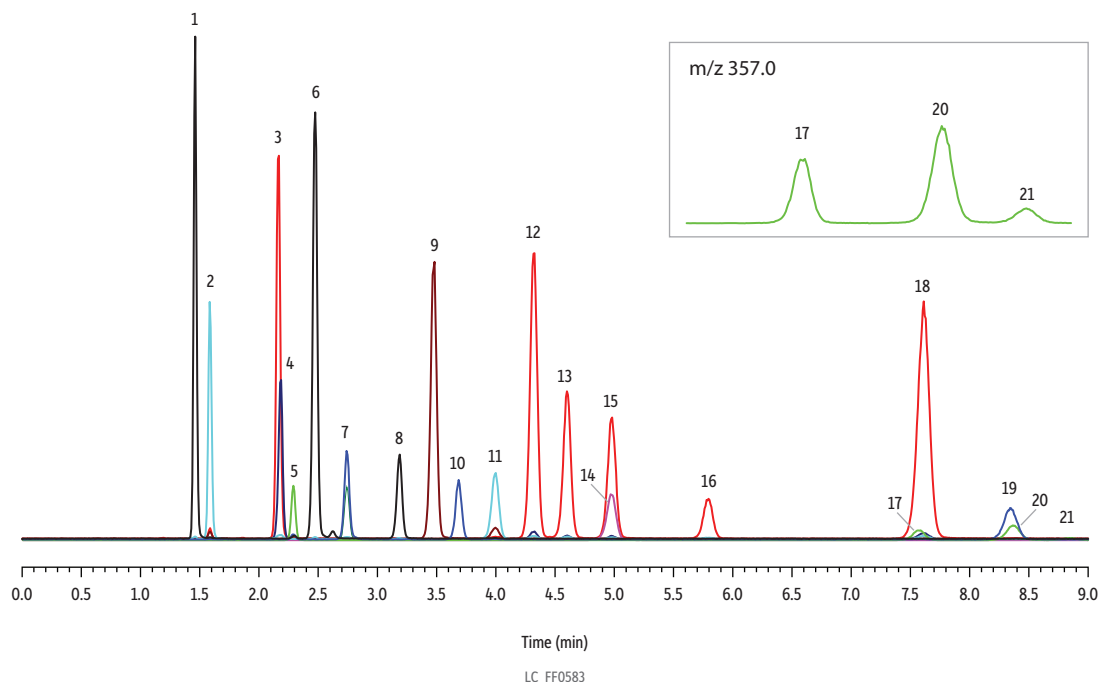


Analysis of 21 Cannabinoids on Raptor ARC-18 by LC-MS

- Lower limits of detection than LC-UV.
- Separation of isobars.
- Using a MS detector, more cannabinoids can be added as discovered.



Peaks	tr (min)	Conc. (ng/mL)	SIM	ESI
1. Cannabidiarin (CBDV)	1.44	500	287.0	+
2. Cannabidiarinic acid (CBDVA)	1.56	500	331.0	+
3. Cannabidiol (CBD)	2.14	500	315.0	+
4. Cannabigerol (CBG)	2.15	500	317.0	+
5. Cannabidiolic acid (CBDA)	2.26	500	357.0	-
6. Tetrahydrocannabivarin (THCV)	2.44	500	287.0	+
7. Cannabigerolic acid (CBGA)	2.70	500	359.0	-
8. Cannabichromevarin (CBCV)	3.15	500	287.0	+
9. Cannabinol (CBN)	3.43	500	311.0	+
10. Cannabidiphorol (CBDP)	3.62	500	343.5	+
11. Tetrahydrocannabivarinic acid (THCVA)	3.97	500	331.0	+
12. Δ9-Tetrahydrocannabinol (Δ9-THC)	4.25	500	315.0	+
13. Δ8-Tetrahydrocannabinol (Δ8-THC)	4.55	500	315.0	+
14. Cannabinolic acid (CBNA)	4.91	500	353.0	-
15. Cannabicyclol (CBL)	4.94	500	315.0	+
16. Cannabichromene (CBC)	5.73	500	315.0	+
17. Tetrahydrocannabinolic acid A (THCA-A)	7.52	500	357.0	-
18. Cannabicitran (CBT)	7.55	500	315.0	+
19. Tetrahydrocannabiphorol (THCP)	8.28	500	343.5	+
20. Cannabichromenic acid (CBCA)	8.31	500	357.0	-
21. Cannabicyclolic acid (CBLA)	8.79	500	357.0	-

Column	Raptor ARC-18 (cat.# 9314A62)
Dimensions:	150 mm x 2.1 mm ID
Particle Size:	2.7 μm
Pore Size:	90 Å
Guard Column:	Raptor ARC-18 EXP 5 mm, 2.1 mm ID, 2.7 μm (cat.# 9314A0252)
Temp.:	30 °C
Sample	Cannabidiarinic acid (cat.# 34134) Cannabidiarin (cat.# 34123) Cannabidiolic acid (cat.# 34094) Cannabigerolic acid (cat.# 34135) Cannabigerol (cat.# 34091) Cannabidiol (cat.# 34011) Tetrahydrocannabivarin (cat.# 34100) Cannabinol (cat.# 34010) d9-Tetrahydrocannabinol (cat.# 34067) d8-Tetrahydrocannabinol (cat.# 34090) Cannabicyclol (cat.# 34130) Cannabichromene (cat.# 34092) d9-Tetrahydrocannabinolic acid A (cat.# 34111)
Diluent:	Water:acetonitrile (20:80)
Conc.:	500 ppb ng/mL
Inj. Vol.:	2 μL
Mobile Phase	
A:	Water, 0.1% formic acid, 12 mM ammonium formate
B:	Acetonitrile:methanol (50:50), 0.1% formic acid

Time (min)	Flow (mL/min)	%A	%B
0.00	0.5	20	80
9	0.5	20	80

Detector	MS
Acquisition Type:	SIM
Interface:	ESI+
Instrument	UHPLC