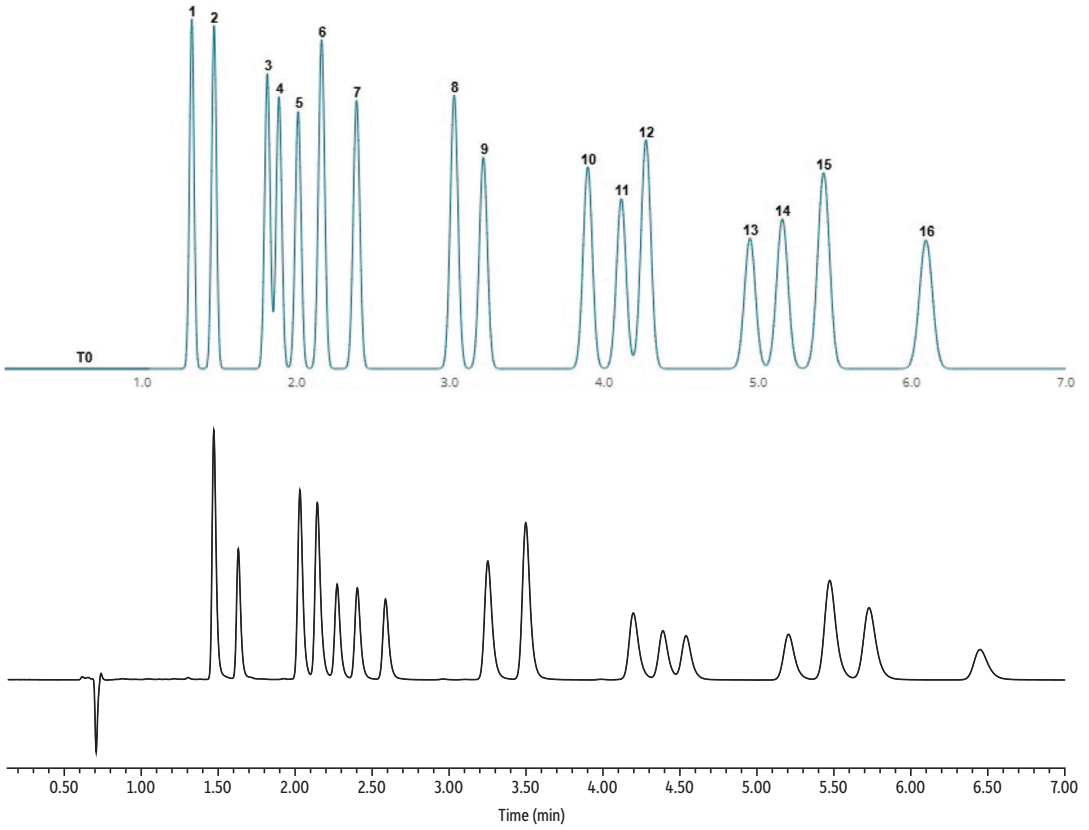
Pro *EZ*LC Comparison—DCC Method



LC_GN0705

Peaks	Experimental t_R	Modeled t_R	Difference (sec)	Run Time Difference (%)	USP Resolution
1. Cannabidivarinic acid (CBDVA)	1.47	1.32	9.12	2.2	
2. Cannabidivarin (CBDV)	1.63	1.46	10.26	2.4	3.2
3. Cannabidiolic acid (CBDA)	2.03	1.81	13.26	3.2	7.1
4. Cannabigerolic acid (CBGA)	2.14	1.89	15.24	3.6	1.7
5. Cannabigerol (CBG)	2.27	2.01	15.78	3.8	1.9
6. Cannabidiol (CBD)	2.40	2.16	14.64	3.5	1.9
7. Tetrahydrocannabivarin (THCV)	2.59	2.39	11.82	2.8	2.6
8. Tetrahydrocannabivarinic acid (THCVA)	3.25	3.02	13.92	3.3	8.1
9. Cannabinol (CBN)	3.50	3.21	17.28	4.1	2.6
10. Cannabinolic acid (CBNA)	4.20	3.89	18.42	4.4	6.6
11. Δ9-Tetrahydrocannabinol (Δ9-THC)	4.39	4.11	16.74	4.0	1.6
12. Δ8-Tetrahydrocannabinol (Δ8-THC)	4.54	4.27	16.20	3.9	1.3
13. Cannabicyclol (CBL)	5.21	4.95	15.30	3.6	5.2
14. Cannabichromene (CBC)	5.47	5.16	18.78	4.5	1.9
15. Tetrahydrocannabinolic acid A (THCA-A)	5.73	5.43	17.88	4.3	1.7
16. Cannabichromenic acid (CBCA)	6.45	6.09	21.54	5.1	4.4

Column Raptor ARC-18 (cat.# 9314A62)
Dimensions: 150 mm x 2.1 mm ID
Particle Size: 2.7 µm
Pore Size: 90 Å
Temp.: 35 °C
Standard/Sample
Cannabinoids acids 7 standard, 1000 µg/mL, acetonitrile with 1% DIPEA and 0.05% ascorbic acid (cat.# 34144)
Cannabinoids neutrals 9 standard, 1000 µg/mL, P&T methanol, 1 mL/ampul (cat.# 34132)
Diluent: Acetonitrile
Conc.: 50 ppm
Inj. Vol.: 2 µL
Mobile Phase
A: Water, 3 mM ammonium formate, 0.1 % formic acid
B: Acetonitrile, 0.1 % formic acid

Time (min)	Flow (mL/min)	%A	%B
0.00	0.4	25	75
7.00	0.4	25	75
7.01	0.4	0	100
9.00	0.4	0	100
9.01	0.4	25	75
12.00	0.4	25	75

Detector UV/Vis @ 228 nm
Flow Cell Size: 500 nL
Instrument Waters ACQUITY UPLC H-Class
Sample Preparation Working standard was prepared in a 2 mL, 9 mm amber vial (cat. 21142) by diluting 50 µL of each standard into 900 µL acetonitrile and capped with a 9 mm short screw cap (cat. 24497).