ChromaNik Technologies Inc.

カンナビノイドCBDとTHCの分離

Cannabidiol and δ-9-Tetrahydrocannabinol

SunShell C18 2.6 µm, 150 x 2.1 mm i.d.

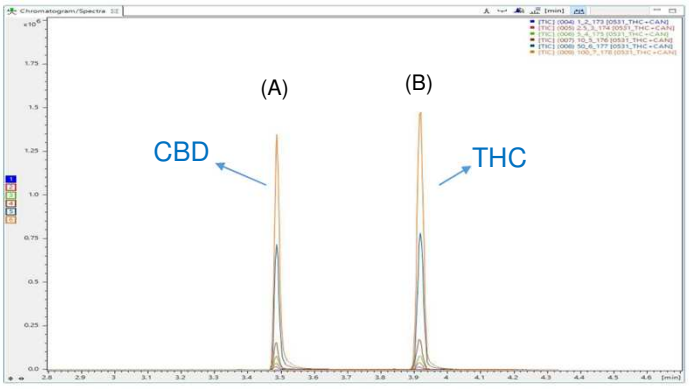


Fig 1. (A), (B) : 1, 2.5, 5, 10, 50, 100 ppb STD Overlay

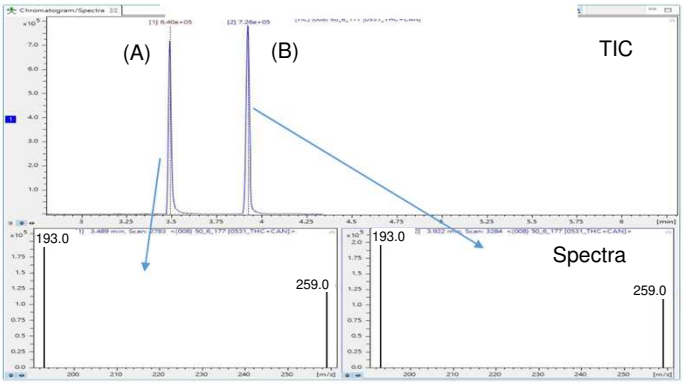


Fig 2. (A), (B) : TIC (Total Ion Chromatogram) / Spectra

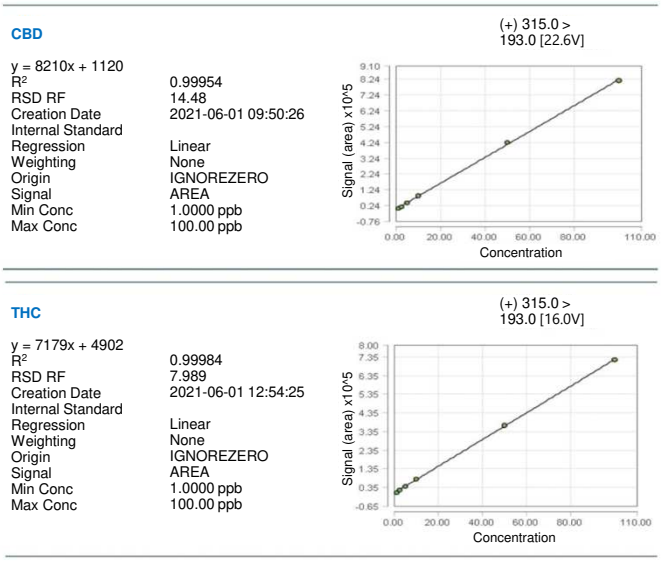
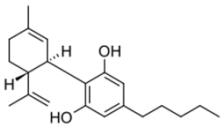
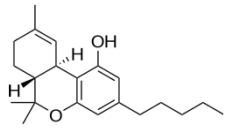


Fig 3. Verification of Calibration Curve (1 ~ 100ppb)



Cannabidiol (CBD)



δ-9-Tetrahydrocannabinol (THC)

CBD / THC MRM Transitions

Compound Name	R.T	Precursor ion	Product ion	CE (V)	Polarity
CBD	3.49	315	193	16.0	Positive
CBD	3.49	315	259	16.9	Positive
THC	3.92	315	193	22.6	Positive
THC	3.92	315	259	22.5	Positive

Measurement result of hempseed oil

	CBD	THC
Average (ppb)	44.2	3.0
Dilution	20	20
Calculation of concentration (ppb)	884 (n=10)	60

Column: SunShell C18 2.6 µm, 150 x 2.1 mm
Mobile phase:
A) 0.1% Formic acid in water
B) 0.1% Formic acid in acetonitrile

Time (min)	0	0.5	2.5	6	6.1	10
%B	30	30	80	80	30	30

Flow rate: 0.4 mL / min
Temperature: 40 °C
Injection Volume: 5 µL
Peaks: A = Cannabidiol (CBD, 1000 µg/mL)
B = δ-9-Tetrahydrocannabinol (THC, 10 µg/mL),
Sample, Hempseed oil

MS (ChroZen LC-TQD) conditions
Source type: HESI
Spray voltage: 4500 V (Positive)
Cone temperature: 250 °C
Cone gas pressure: 20 psi
Heated probe temperature: 300 °C
Probe gas pressure: 40 psi
Nebulizer gas pressure: 40 psi
Active exhaust: ON

Courtesy of Young In and Esporalab