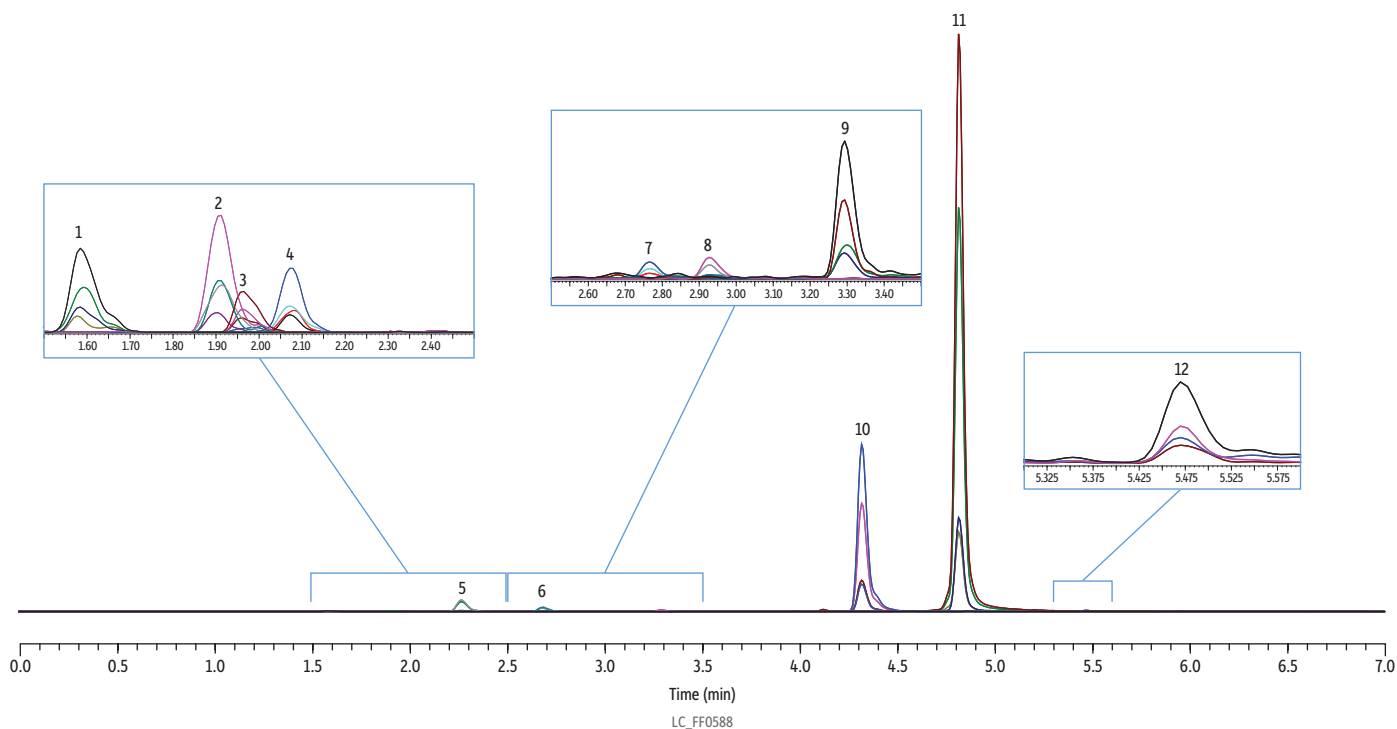


Flavonoids in CBD Hemp Flower on Raptor Biphenyl by LC-MS/MS



Peaks	tr (min)	Precursor Ion	Product Ion 1	Product Ion 2	Product Ion 3	Polarity
1. Orientin	1.469	449	329.1	299.1	431	+
2. Vitexin	1.827	433	313.1	283	415.1	+
3. Rutin	1.895	609.1	300.1	301	271	-
4. Quercetin-3-D-glycopyranoside	2.01	463.1	300	301	271	-
5. Luteolin-7-O-glucuronide	2.221	463	287.1	153.2	135.1	+
6. Apigenin-7-O-glucuronide	2.664	447	271.1	153.2	119.1	+
7. Quercetin	2.753	301	151	179	107	-
8. Luteolin	2.919	285	133	151	175	-
9. Apigenin	3.266	271	153	119	69.1	+
10. Cannflavin B	4.321	369.1	313	298	165	+
11. Cannflavin A	4.62	437.1	313.1	165	298.1	+
12. B-sitosterol	5.472	397.4	161.1	135.1	147.2	+

Column Raptor Biphenyl (cat.# 9309A12)
Dimensions: 100 mm x 2.1 mm ID
Particle Size: 2.7 µm
Pore Size: 90 Å
Guard Column: Raptor Biphenyl EXP guard column cartridge 5 mm, 2.1 mm ID, 2.7 µm (cat.# 9309A0252)
Temp.: 30 °C

Standard/Sample
Diluent: Water:methanol (60:40)
Inj. Vol.: 2 µL

Mobile Phase
A: Water, 0.1% formic acid
B: Methanol, 0.1% formic acid

Time (min)	Flow (mL/min)	%A	%B
0.00	0.5	60	40
4.00	0.5	0	100
5.50	0.5	0	100
5.51	0.5	60	40
7.00	0.5	60	40

Detector MS/MS
Ion Source: Electrospray
Ion Mode: ESI+/ESI-
Instrument UHPLC

Sample Preparation 500 mg of ground CBD hemp flower was weighed into a 50 mL centrifuge tube. 10 mL of methanol:water (80:20) was added prior to vortexing (5 seconds) and sonicating (15 minutes). The sample was then centrifuged for 5 minutes at 4200 rpm. The supernatant was diluted 50-fold in water:methanol (60:40), vortexed briefly, and filtered using a 0.2 µm Thomson SINGLE StEP standard filter vial (cat.#: 25893) prior to analysis.