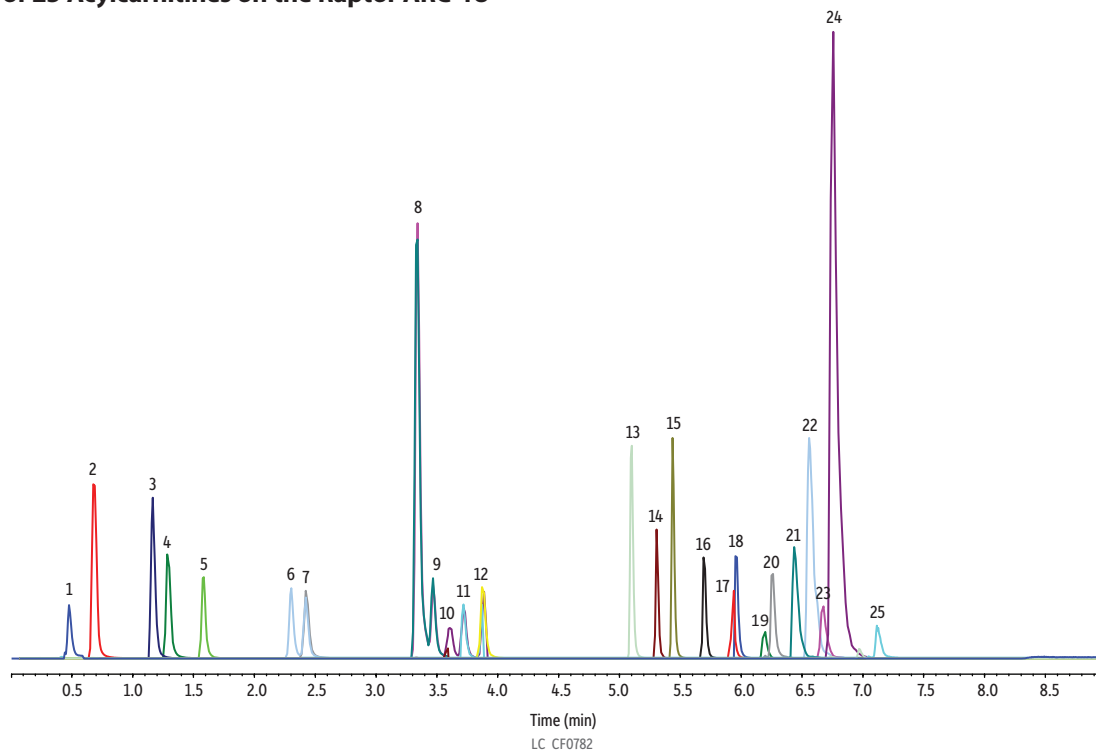


Separation of 25 Acylcarnitines on the Raptor ARC-18



Peaks	tr (min)	Precursor Ion	Product Ion	Peaks	tr (min)	Precursor Ion	Product Ion
1. C0-L-Carnitine	0.40	162.2	85.1	14. C7-Heptanoyl-L-carnitine	5.27	274.2	85.1
2. C2-Acetyl-L-carnitine	0.59	204.2	85.1	15. C8-Octanoyl-L-carnitine	5.41	288.4	85.1
3. Methyl-malonyl-L-carnitine	1.15	262.3	85.1	16. C10-Decanoyl-L-carnitine	5.67	316.3	85.1
4. C3-Propionyl-L-carnitine	1.29	218.1	85.1	17. C14:2-Tetradecadienoyl-L-carnitine	5.90	368.5	85.1
5. 3-Hydroxyisovaleryl-L-carnitine	1.60	262.4	85.1	18. C12-Lauroyl-L-carnitine	5.94	344.5	85.1
6. C4-Isobutyl-L-carnitine	2.31	232.1	85.1	19. C14:1-Tetradecanoyl-L-carnitine	6.17	369.8	85.1
7. C4-Butyl-L-carnitine	2.42	232.2	85.1	20. C14-Myristoyl-L-carnitine	6.25	372.4	85.1
8. 3-Methylcrotonyl-L-carnitine	3.31	244.1	85.1	21. C18:2 Linoleoyl-L-carnitine	6.42	424.1	85.1
9. C5:1-Tiglyl-L-carnitine	3.49	244.2	85.1	22. C16:1 Palmitoleyl-L-carnitine	6.58	398.4	85.1
10. 2-Methylbutyl-L-carnitine	3.61	246.1	85.1	23. C16-Palmitoyl-L-carnitine	6.69	400.5	85.1
11. C5-Isovaleryl-L-carnitine	3.71	246.1	85.1	24. C18:1 Oleoyl-L-carnitine	6.77	426.4	85.1
12. C5-Valeryl-L-carnitine	3.87	246.2	85.1	25. C18 - Stearoyl-L-carnitine	7.13	429.1	85.1
13. C6-Hexanoyl-L-carnitine	5.08	260.3	85.1				

Column Raptor ARC-18 (cat.# 9314A12)
Dimensions: 100 mm x 2.1 mm ID
Particle Size: 2.7 µm
Pore Size: 90 Å
Guard Column: Raptor ARC-18 EXP Guard Column Cartridge 5 mm, 2.1 mm ID, 2.7 µm (cat.# 9314A0252)
Temp.: 35 °C

Standard/Sample
Diluent: Water, 0.1% formic acid
Conc.: 100 ng/mL
Inj. Vol.: 3 µL

Mobile Phase
A: Water, 0.1% formic acid
B: 90:10 Acetonitrile:isopropanol, 0.1% formic acid

Time (min)	Flow (mL/min)	%A	%B
0.00	0.6	98	2
1.00	0.6	98	2
4.00	0.6	88	12
6.00	0.6	0	100
7.50	0.6	0	100
8.00	0.6	98	2
9.00	0.6	98	2

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

Sample Preparation A 100 ng/mL standard mix of all of the acylcarnitines was prepared in plasma. A 100 µL aliquot was taken from the standard and mixed with 300 µL of methanol, vortexed for 10 seconds, and then centrifuged for 10 minutes at 4000 rpm. 100 µL of the supernatant was added to a 2 mL vial (cat.# 24619) containing 900 µL of Mobile Phase A (0.1% formic acid in water), capped with a short screw cap (cat.# 24498), and injected for LC-MS/MS analysis.