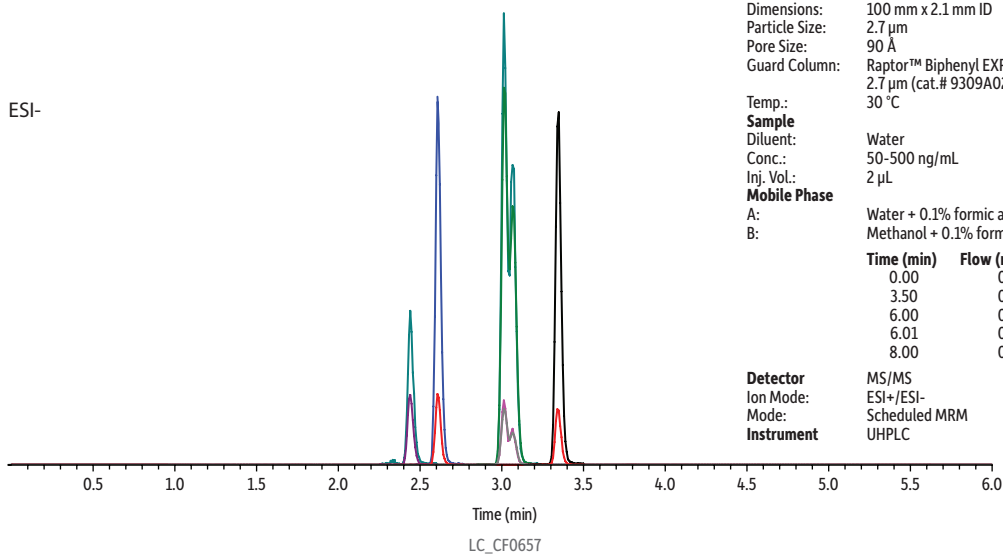
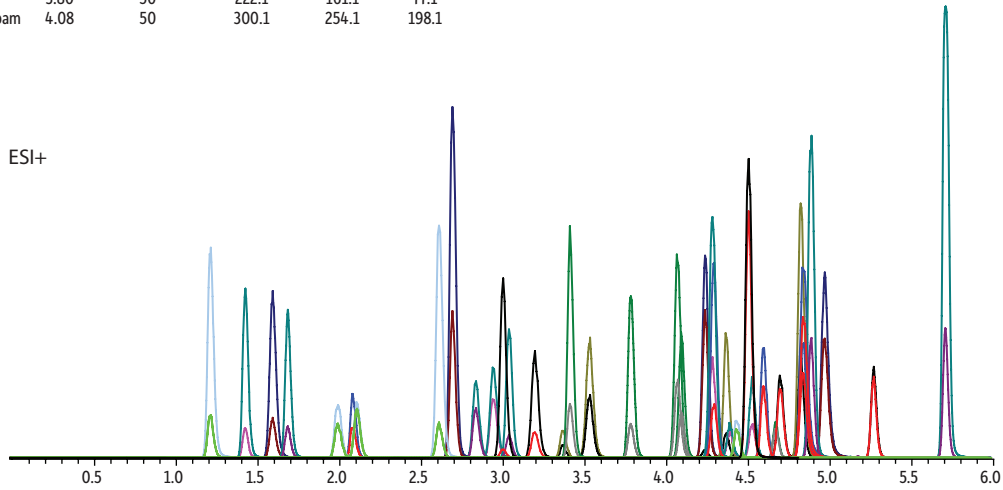


Combined Antianxiety Drugs and Barbiturates on Raptor™ Biphenyl by LC-MS/MS

Peaks	tr (min)	Conc. (ng/mL)	Precursor Ion	Product 1	Product 2	Peaks	tr (min)	Conc. (ng/mL)	Precursor Ion	Product 1	Product 2
1. 7-Aminonitrazepam	1.23	50	252.2	121.1	94.2	25. Lorazepam	4.11	50	321.1	275.0	229.0
2. Norketamine	1.44	50	224.1	125.0	89.1	26. Oxazepam	4.25	50	287.1	268.8	241.2
3. Zolpidem phenyl-4-carboxylic acid	1.61	50	338.2	265.1	219.0	27. Nitrazepam	4.30	50	282.1	180.1	235.9
4. Ketamine	1.70	50	238.1	125.1	89.1	28. Clonazepam	4.31	50	316.1	270.0	214.1
5. Zopiclone	2.01	50	389.2	245.0	217.2	29. Desalkylflurazepam	4.38	50	289.0	140.1	104.0
6. Meprobamate	2.10	50	219.1	158.2	97.0	30. α-Hydroxytriazolam	4.40	50	359.1	330.9	175.9
7. 7-Aminoclonazepam	2.12	50	286.1	121.2	250.1	31. 2-Hydroxyethylflurazepam	4.45	50	333.1	211.1	109.0
8. Phenobarbital*	2.44	500	230.9	187.8	85.0	32. Methaqualone	4.52	50	251.1	132.2	91.1
9. Butalbital*	2.61	500	223.0	180.0	84.9	33. α-Hydroxyalprazolam	4.54	50	325.1	297.0	216.2
10. Zolpidem	2.63	50	308.2	235.2	218.9	34. Nordiazepam	4.61	50	271.0	139.9	208.0
11. Diphenhydramine	2.71	50	256.1	167.0	152.1	35. Phenazepam	4.68	50	349.1	206.2	179.0
12. 7-Aminoflunitrazepam	2.85	50	284.1	135.0	227.1	36. Zaleplon	4.71	50	306.1	264.0	236.0
13. Chlordiazepoxide	2.96	50	300.1	227.0	282.0	37. Flunitrazepam	4.84	50	314.2	267.9	239.1
14. Flurazepam	3.02	50	388.2	315.2	183.0	38. Estazolam	4.85	50	295.1	266.9	205.1
15. Amobarbital*	3.02	500	225.0	182.0	84.8	39. Triazolam	4.86	50	343.1	307.9	315.0
16. Buspirone	3.05	50	386.3	122.1	95.0	40. Temazepam	4.90	50	301.1	255.1	282.9
17. Pentobarbital*	3.07	500	225.0	182.0	84.9	41. Alprazolam	4.98	50	309.1	280.9	204.9
18. Midazolam	3.21	50	326.2	291.1	248.9	42. Diazepam	5.28	50	285.1	153.9	192.9
19. Secobarbital*	3.35	500	237.0	193.9	84.8	43. Prirazepam	5.72	50	325.2	139.9	271.0
20. Carisoprodol	3.38	50	261.1	176.0	62.0						
21. Cyclobenzaprine	3.43	50	276.2	215.0	189.0						
22. α-Hydroxyimidazolam	3.54	50	342.2	324.1	202.9						
23. Metaxalone	3.80	50	222.1	161.1	77.1						
24. N-Desmethylflunitrazepam	4.08	50	300.1	254.1	198.1						

*Analysis performed in negative ion mode.



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
 2.7 µm (cat.# 9309A0252)
Temp.: 30 °C
Sample
Diluent: Water
Conc.: 50-500 ng/mL
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	0.6	65	35
3.50	0.6	30	70
6.00	0.6	0	100
6.01	0.6	65	35
8.00	0.6	65	35

Detector MS/MS
Ion Mode: ESI+/ESI-
Mode: Scheduled MRM
Instrument UHPLC