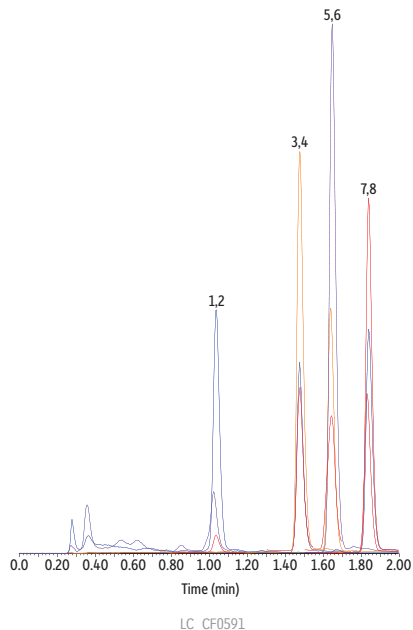


Fentanyl, Metabolite, and Analogues in Urine on Raptor™ Biphenyl by LC-MS/MS



Peaks	tr (min)	Conc. (ng/mL)	Q1	Q3 Quantifier	Q3 Qualifier
1. Norfentanyl	1.04	10	233.10	84.08	150.11
2. Norfentanyl-d5 (IS)	1.02	1	238.10	84.08	—
3. Acetyl fentanyl	1.48	10	323.29	188.18	105.10
4. Acetyl fentanyl-13C6	1.48	1	329.22	188.22	—
5. Fentanyl	1.65	10	337.29	188.22	105.09
6. Fentanyl-d5 (IS)	1.64	1	342.35	188.22	—
7. Sufentanil	1.84	10	387.35	238.18	111.07
8. Sufentanil-d5 (IS)	1.83	1	392.29	238.18	—

Column Raptor™ Biphenyl (cat.# 9309552)

Dimensions: 50 mm x 2.1 mm ID

Particle Size: 5 µm

Temp.: 30 °C

Sample

Conc.: A 10 ng/mL standard was prepared in urine. The internal standard was fortified to a final concentration of 1 ng/mL. An 80 µL aliquot of the 10 ng/mL urine standard was diluted with 320 µL of 70:30 water:methanol solution (5-fold dilution) prior to analysis.
5 µL

Inj. Vol.:

Mobile Phase

A: 0.1% Formic acid in water

B: 0.1% Formic acid in methanol

Time (min)	Flow (mL/min)	%A	%B
0.00	0.4	70	30
2.00	0.4	20	80
2.01	0.4	70	30
3.50	0.4	70	30

Detector MS/MS

Ion Mode: ESI+

Instrument HPLC