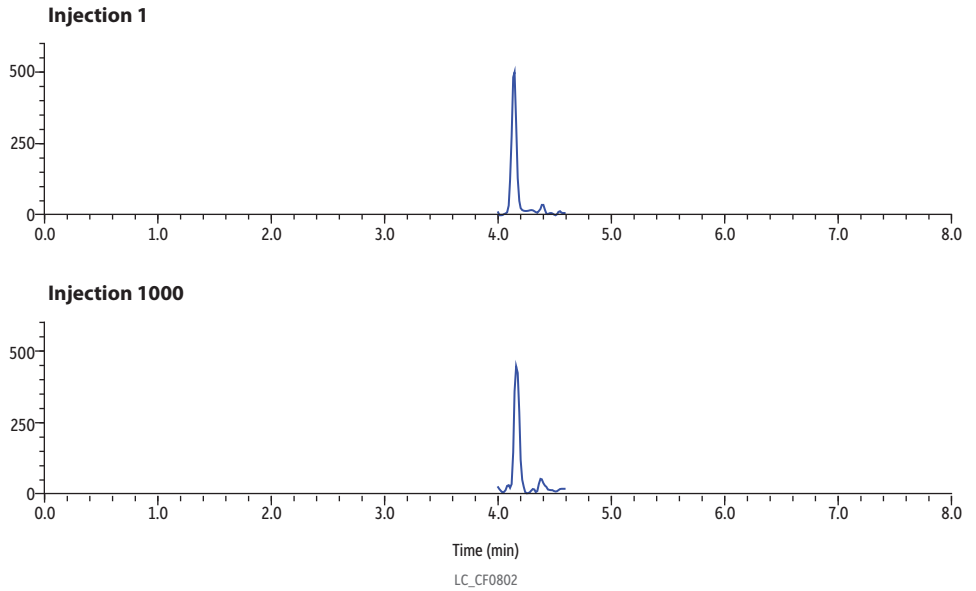
Buprenorphine on Raptor Biphenyl (Figure 5 Robustness Test for Biphenyl Advantage Article)



Peaks	t_R (min)	Precursor	Product Ion
1. Buprenorphine	4.15	468.3	414.2

Column	Raptor Biphenyl (cat.# 9309A52)
Dimensions:	50 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.:	45 °C
Standard/Sample	
Diluent:	90:10 Water:methanol containing 0.1% formic acid
Conc.:	2 ng/mL in urine, diluted 30-fold
Inj. Vol.:	5 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	90	10
6.00	0.6	25	75
7.00	0.6	0	100
8.00	0.6	0	100
8.01	0.6	90	10
9.00	0.6	90	10

Detector	Shimadzu 8060
Ion Source:	Electrospray
Ion Mode:	ESI+
Instrument	Shimadzu Nexera X2
Sample Preparation	Buprenorphine was spiked at 2 ng/mL into urine, hydrolyzed, diluted 30-fold, and centrifuged. The sample was aliquoted into 2 mL, screw-threat vials (cat.# 21143) and capped with short-cap, screw-vial closures (cat.# 24498).