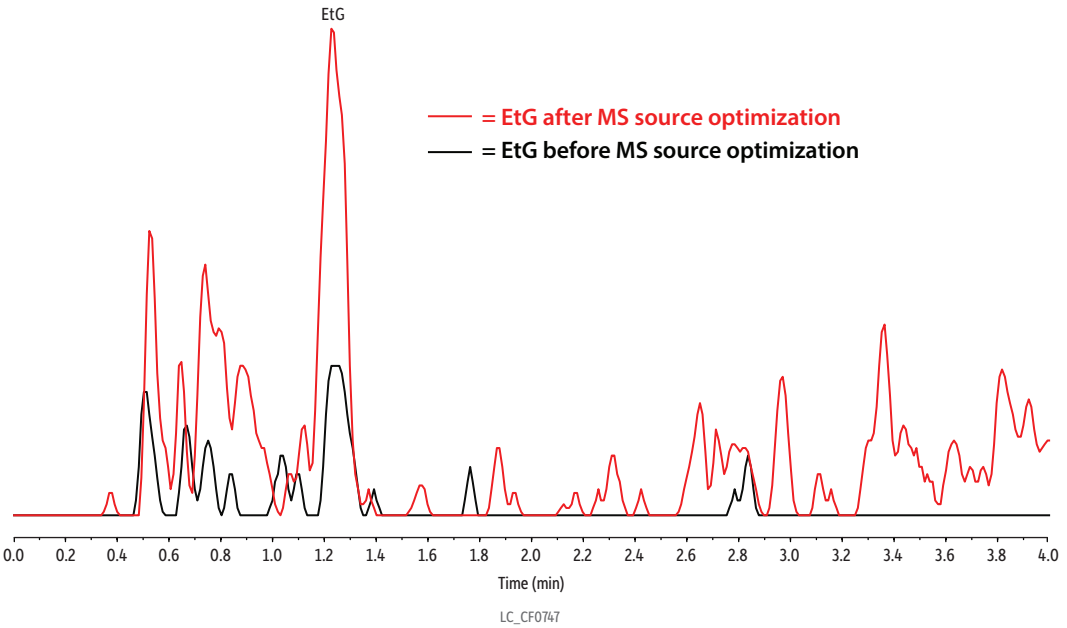
EtG Sensitivity Before and After Source Optimization



LC_CF0747

Peaks	tR (min)	Conc. (ng/mL)	Precursor Ion	Product Ion
1. Ethyl-β-D-glucuronide (EtG)	1.23	100	221.2	85.1

Column	Raptor EtG/EtS (cat.# 9325A12)
Dimensions:	100 mm x 2.1 mm ID
Particle Size:	2.7 µm
Pore Size:	90 Å
Guard Column:	UltraShield UHPLC precolumn filter, 0.2 µm frit (cat.# 25809)
Temp.:	35 °C
Standard/Sample	Ethyl-β-D-glucuronide (EtG) (cat.# 34101)
Diluent:	0.01% Formic acid in water
Conc.:	100 ng/mL (40x acetonitrile precipitation sample cleanup)
Inj. Vol.:	10 µL
Mobile Phase	
A:	0.01% Formic acid in water
B:	0.1% Formic acid in acetonitrile

Time (min)	Flow (mL/min)	%A	%B
0.00	0.5	95	5
3.5	0.5	65	35
3.51	0.5	95	5
4.5	0.5	95	5

Detector	MS/MS
Ion Source:	Electrospray
Ion Mode:	ESI-
Instrument	HPLC
Sample Preparation	Acetonitrile Precipitation: A 100 ng/mL standard was prepared in urine. A 50 µL aliquot of the standard solution was mixed with 10 µL of internal standard (20 µg/mL EtG-d5 and 5 µg/mL EtS-d5) and 150 µL of acetonitrile by vortexing at 3000 rpm for 10 seconds, followed by centrifugation at 4300 rpm for 10 minutes at 10 °C. After centrifugation, 100 µL of the supernatant was diluted with 900 µL (40x dilution) of 0.01% formic acid in water. The sample was then vortexed at 3000 rpm for 10 seconds and injected.