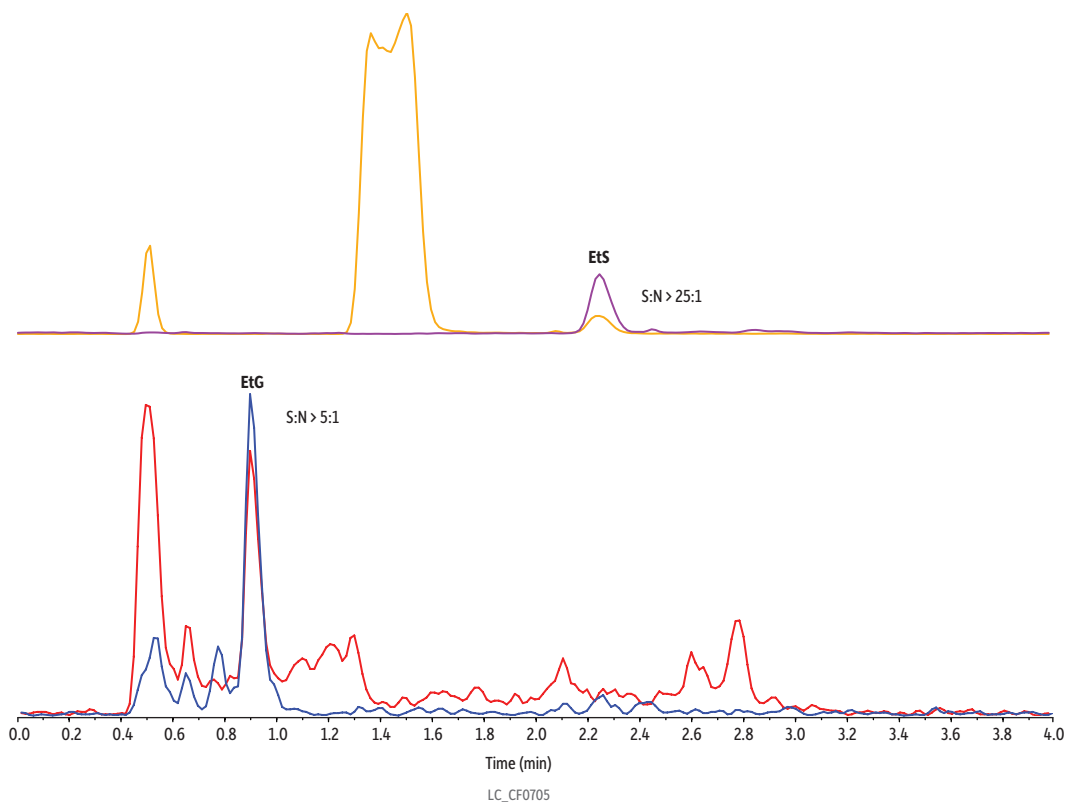


# Ethyl Glucuronide (EtG) and Ethyl Sulfate (EtS) LLOQ (50 ng/mL) in Urine on Raptor EtG/EtS



| Peaks                    | Precursor Ion | Product Ion | Product Ion |
|--------------------------|---------------|-------------|-------------|
| 1. Ethyl-β-D-glucuronide | 220.8         | 84.9        | 74.8        |
| 2. Ethyl sulfate         | 124.7         | 96.8        | 79.7        |

**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

**Sample**  
**Diluent:** 0.1% Formic acid in water  
**Conc.:** A 50 ng/mL standard was prepared in urine. 50 μL of the standard was diluted with 950 μL of a working internal standard (25 ng/mL EtS-d5/100 ng/mL EtG-d5 in 0.1% formic acid in water). The sample was vortexed at 3500 rpm for 10 seconds to mix. The sample was then centrifuged at 3000 rpm for 5 minutes at 10 °C. The autosampler needle was adjusted to inject from the supernatant.  
**Inj. Vol.:** 10 μL

**Mobile Phase**  
**A:** 0.1% Formic acid in water  
**B:** 0.1% Formic acid in acetonitrile

| Time (min) | Flow (mL/min) | %A | %B |
|------------|---------------|----|----|
| 0.00       | 0.5           | 95 | 5  |
| 2.50       | 0.5           | 65 | 35 |
| 2.51       | 0.5           | 95 | 5  |
| 4.00       | 0.5           | 95 | 5  |

**Detector** MS/MS  
**Ion Mode:** ESI-  
**Mode:** MRM  
**Instrument** HPLC

**Notes**  
**Reference Standards**  
 Ethyl-β-D-glucuronide (cat.# 34101)  
 Ethyl-β-D-glucuronide-d5 (cat.# 34102)  
 Ethyl sulfate sodium salt (cat.# 34103)  
 Ethyl sulfate-d5 sodium salt (cat.# 34104)