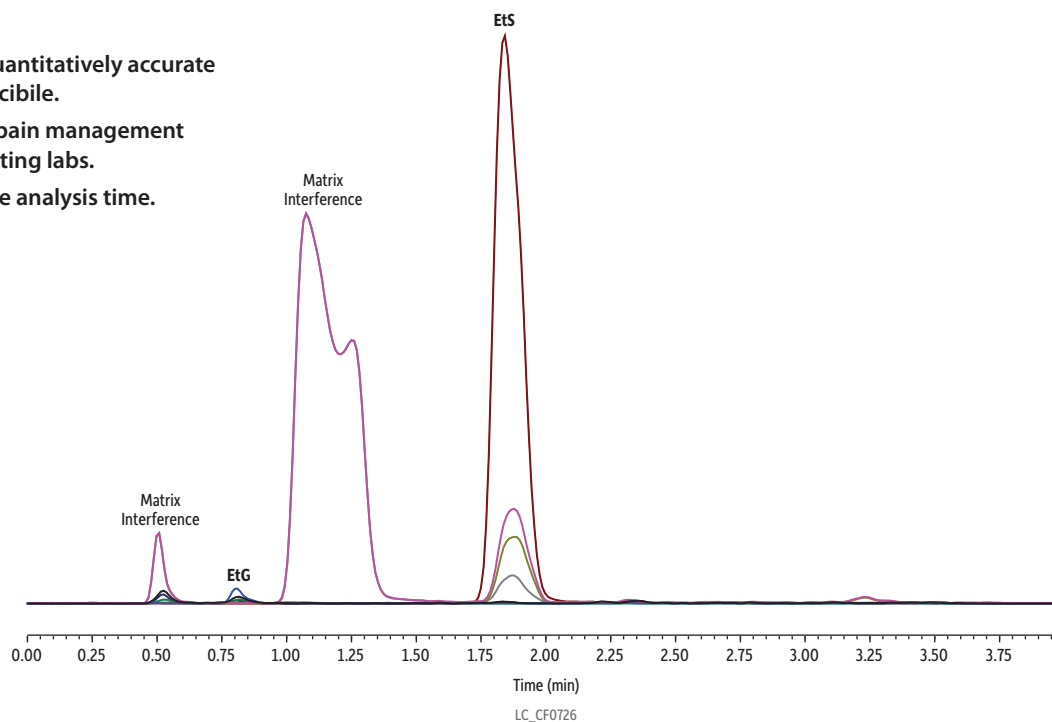


# EtG/EtS in UTAK EtG Plus Level 1 Urine Control on Raptor EtG/EtS by LC-MS/MS

- Method is quantitatively accurate and reproducible.
- Suitable for pain management and drug testing labs.
- Fast 4-minute analysis time.



Peaks	Conc.				
	ts (min)	(ng/mL)	Precursor Ion	Product Ion	Product Ion
1. Ethyl-β-D-glucuronide	0.81	500	221.20	75.1	85.1
2. Ethyl-β-D-glucuronide-d5	0.81	100	226.20	85.00	-
3. Ethyl sulfate-d5	1.84	100	130.10	98.05	-
4. Ethyl sulfate	1.87	200	125.10	97.10	80.00

**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-d5 (EtG-d5) (cat.# 34102)  
 Ethyl sulfate-d5 sodium salt (EtS-d5) (cat.# 34104)  
 Diluent: 0.1% Formic acid in water  
 Conc.: UTAK EtG Plus urine quality control (200 ng/mL EtS and 500 ng/mL EtG)  
 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 Source: Electrospray  
 Ion Mode: ESI-  
 Mode: MRM

**Instrument** HPLC  
**Sample Preparation**

UTAK EtG Plus Level 1 control contains EtG at 500 ng/mL and EtS at 200 ng/mL concentrations. A 50 μL aliquot was taken from the the Level 1 control and diluted 20 times with 950 μL of a working internal standard (100 ng/mL EtG-d5 and EtS-d5 in 0.1% formic acid in water). The sample was vortexed at 3000 rpm for 10 seconds to mix. The sample was then centrifuged at 3000 rpm for 10 minutes at 10 °C and 10 μL was injected for LC-MS/MS analysis.