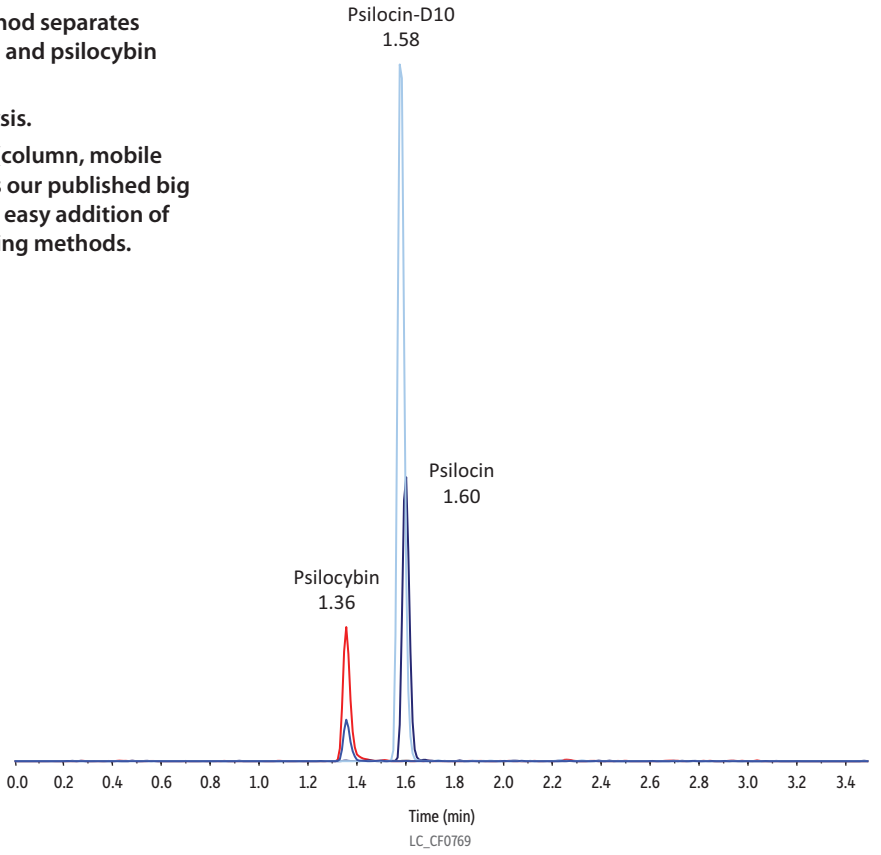
Psilocin and Psilocybin in Urine on Raptor Biphenyl by LC-MS/MS

- **Simple LC-MS/MS method separates and quantifies psilocin and psilocybin in human urine.**
- **Fast 3.50-minute analysis.**
- **Uses same conditions (column, mobile phases, and buffers) as our published big pain analysis, allowing easy addition of these analytes to existing methods.**



Peaks	t_R (min)	Conc. (ng/mL)	Precursor Ion	Product Ion 1	Product Ion 2
1. Psilocybin	1.36	500	285.1	205.1	240.0
2. Psilocin-D10	1.58	200	215.1	66.1	-
3. Psilocin	1.60	500	205.1	160.1	115.0

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 5.0 mm, 2.1 mm ID, 2.7 µm (cat.# 9309A0252)
Temp.: 35 °C

Sample
Diluent: Water, 0.1% formic acid + 2 mM ammonium formate
Conc.: 500 ng/mL
Inj. Vol.: 5 µL

Mobile Phase
A: Water, 0.1% formic acid + 2 mM ammonium formate
B: Methanol, 0.1% formic acid + 2 mM ammonium formate

Time (min)	Flow (mL/min)	%A	%B
0.00	0.5	95	5
0.20	0.5	95	5
2.50	0.5	5	95
2.51	0.5	95	5
3.50	0.5	95	5

Detector MS/MS
Ion Source: Electrospray
Ion Mode: ESI+
Mode: MRM
Instrument HPLC
Notes A 500 ng/mL standard mix of psilocin and psilocybin was prepared in pooled urine. A 50 µL aliquot was taken from the standard and mixed with 10 µL of internal standard (psilocin-D10, 20 µg/mL) and 100 µL of methanol. The mixture was vortexed at 3000 rpm for 10 seconds and then centrifuged at 4300 rpm for 10 minutes at 10 °C. After centrifugation, 100 µL of the supernatant was diluted with 900 µL (20-fold dilution) of water containing 0.1% formic acid and 2 mM ammonium formate (mobile phase A) and injected for LC-MS/MS analysis.