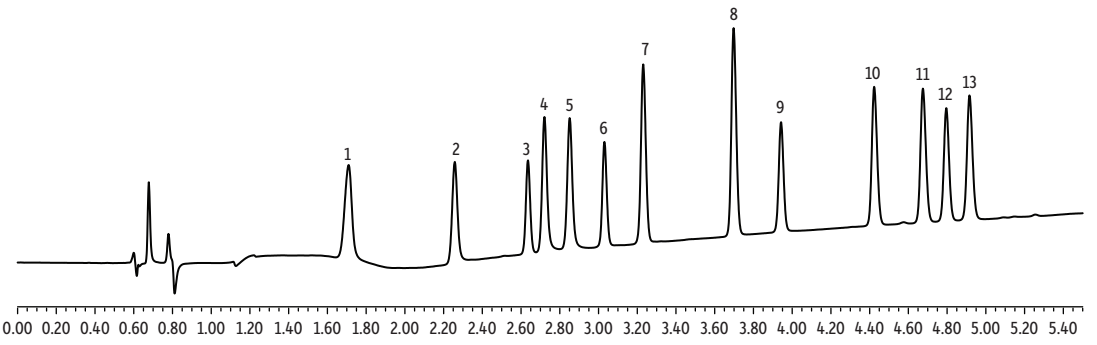
Analysis of 13 Alkaloids Found in Psychedelic Mushrooms Using Force Biphenyl by HPLC-UV

- **Rapid 9-minute cycle time**
- **Full resolution of all 13 analytes**



LC_GN0689

	Peaks	t_R (min)
1.	N,N-desmethyl Psilocybin (Norbaeocystin)	1.710
2.	N-desmethyl Psilocybin (Baeocystin)	2.258
3.	5-hydroxy-N-Methyltryptamine (5-hydroxy NMT)	2.636
4.	Aeruginascin	2.721
5.	Psilocybin	2.851
6.	5-hydroxy-N,N-Dimethyltryptamine (Bufotenine)	3.031
7.	4-hydroxy-N-Methyltryptamine (Norpsilocin)	3.231
8.	4-hydroxy-N,N-Dimethyltryptamine (Psilocin)	3.698
9.	4-hydroxy-N,N,N-Trimethyltryptamine (4-hydroxy TMT)	3.942
10.	5-methoxy-N-Methyltryptamine (5-methoxy NMT)	4.424
11.	5-methoxy-a-Methyltryptamine (5-methoxy AMT)	4.675
12.	4-acetoxy-N,N-Dimethyltryptamine (Psilacetin)	4.796
13.	N,N-Dimethyltryptamine N-oxide (N,N-DMT N-oxide)	4.916

Column Force Biphenyl (cat.# 962931E)
Dimensions: 100 mm x 3.0 mm ID
Particle Size: 3 µm
Pore Size: 100 Å
Guard Column: Force Biphenyl EXP Guard Cartridge 5 mm, 3.0 mm ID (cat.# 962950253)
Temp.: 60 °C

Standard/Sample
Diluent: Water
Conc.: 50 ppm
Inj. Vol.: 1 µL

Mobile Phase
A: Water, 10 mM ammonium formate, 0.1% formic acid
B: Methanol, 0.1% formic acid

Time (min)	Flow (mL/min)	%A	%B
0.00	0.8	100	0
5.00	0.8	55	45
5.01	0.8	5	95
6.00	0.8	5	95
6.01	0.8	100	0
9.00	0.8	100	0

Detector UV/Vis @ 222 nm
Flow Cell Size: 500 nL
Instrument Waters ACQUITY UPLC H-Class
Sample Preparation Standards were prepared in a 2.0 mL amber, short-cap vial (cat.# 21142) with a 250 µL glass insert (cat.# 24518) and capped with a 9 mm short cap (cat.# 24497).

Notes System and column were passivated using LC Passivation Solution (cat.# 32475). The outlined method conditions were used to perform five injections of passivation solution (5 µL) on column, diverting to waste. Five warm-up injections were completed prior to analysis.

Storage Conditions: Flush column using acetonitrile with 0.1% formic acid for 5 min.