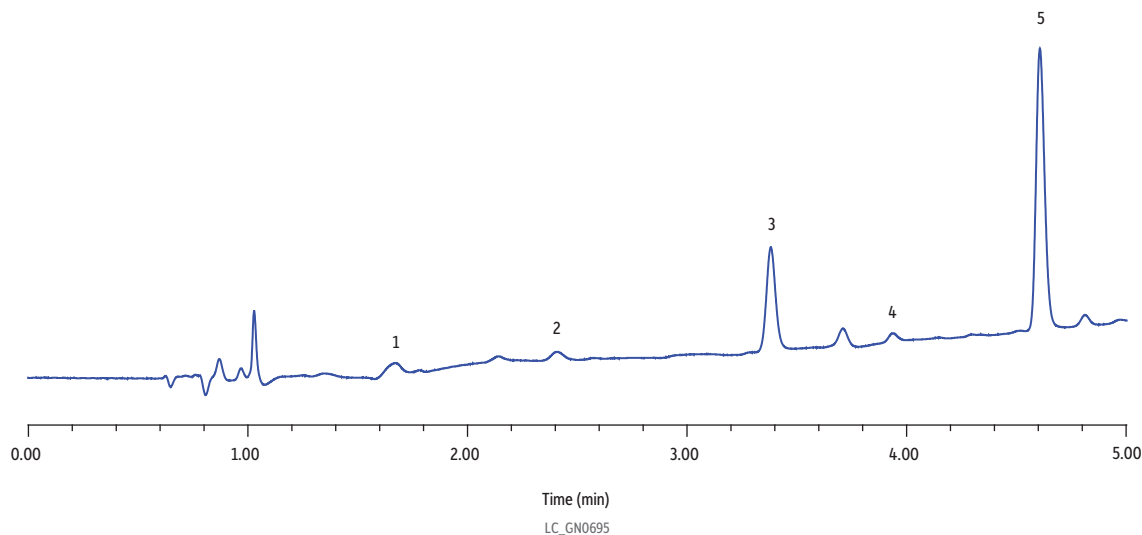


# Analysis of Alkaloids in Psilocybin Extract by HPLC-UV



Peaks	$t_R$ (min)
1. N,N-desmethyl Psilocybin (Norbaeocystin)	1.671
2. N-desmethyl Psilocybin (Baeocystin)	2.408
3. Psilocybin	3.381
4. 4-hydroxy-N-Methyltryptamine (Norpsilocin)	3.937
5. 4-hydroxy-N,N-Dimethyltryptamine (Psilocin)	4.607

**Column** Force Biphenyl (cat.# 962931E)  
**Dimensions:** 100 mm x 3.0 mm ID  
**Particle Size:** 3.0  $\mu$ m  
**Pore Size:** 100 Å  
**Guard Column:** Force Biphenyl EXP Guard Cartridge 5.0 mm, 3.0 mm ID (cat.# 962950253)  
**Temp.:** 50 °C

**Standard/Sample**

**Diluent:** Water  
**Inj. Vol.:** 3  $\mu$ L

**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	95	5
4.00	0.8	65	35
4.01	0.8	5	95
5.00	0.8	5	95
5.01	1.0	95	5
7.50	1.0	95	5

**Detector** UV/Vis @ 222 nm  
**Instrument** Agilent 1100

**Sample Preparation** Extract was diluted 5x with HPLC grade water into a 2.0 mL amber short-cap vial (cat.# 21142) and capped with a 9 mm short cap (cat.#24497)

**Notes**

Guard cartridge was equipped with an UltraShield precolumn filter, 0.22  $\mu$ m (cat.# 25809).

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  $\mu$ L) 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.

**Acknowledgement**

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