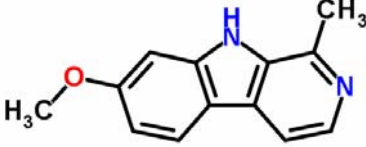


Certificate of Analysis

Product Name	Harmine/ 去氫駱駝蓬鹼	
Catalog Number	1048	
Lot Number	10481	

Chemical Name	Harmine
Chemical Formula	C ₁₃ H ₁₂ N ₂ O
Chemical Family	Alkaloid
Molecular Weight	212.25
CAS Number	442-51-3
Appearance (Color)	White
Appearance (Form)	Powder

Analytical Test

Test	Result
Identity by LC/MS Analysis	Consistent with structure
Purity by HPLC/DAD Analysis	≥ 98.0%

Storage Conditions:

Storage:	Refer to label
Before use:	Keep container tightly closed

TLCM certifies that this standard meets the specifications stated in this certificate and warrants this product to meet the stated criteria. Warranty does not apply after opening.

Date of Certificate: 11/06/2013

Product Analysis Report

Analytical Test

Test	Results
Identity by LC/MS Analysis	Consistent with structure
Purity by HPLC/DAD Analysis	≥ 98.0%

Spectral and Physical Data

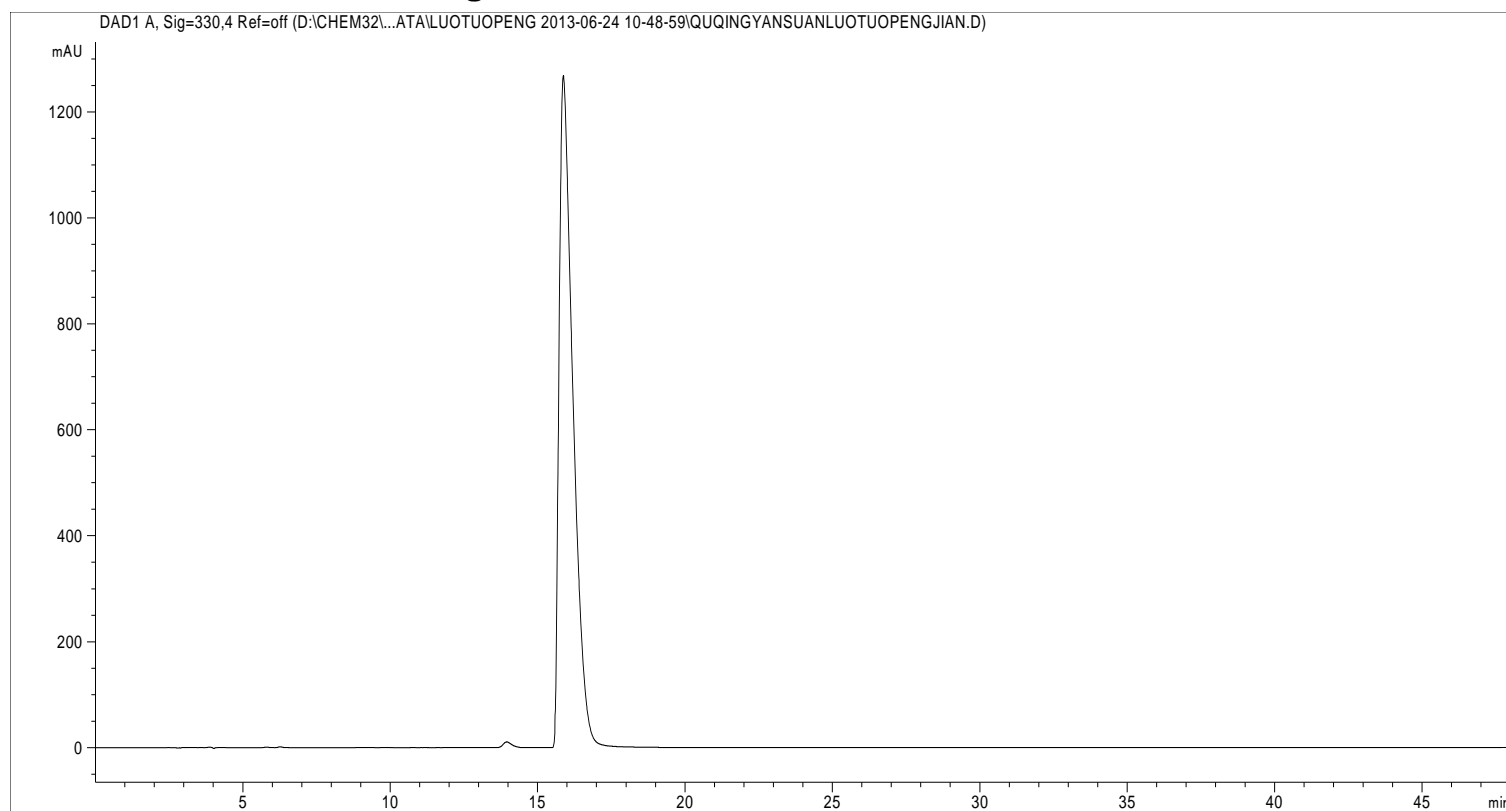
HPLC

HPLC system : Agilent Technologies 1200 Series
Column : Inertsil ODS-4 column, 4.6 x 250 mm, 5 μm
Injection volume : 10 μl
Detector : DAD
Detector wavelength : 300 nm
Flow rate : 1.0 mL/min
Mobile phase :

Time (min)	% 3.4g Ammonium acetate + 3ml Acetic acid + 500ml H ₂ O	% ACN	Flow rate (mL/min)
0 → 60	79	21	1.0

Date File Name : A2-D:\Chem32\2\purity test\data
Operator : DUAN Ran
Sample Lot Number : 10481
Method File : D:\Chem32\2\method\HARMINE HYDROCHLORIDE +
HARMINE
Acquired : 2013-06-11

I. HPLC chromatogram



Product	RT (min)	Area (mAu*s)	Relative Area %
Harmin	15.88	41554.6	99.14