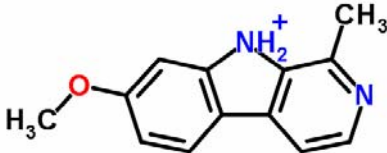


## Certificate of Analysis

Product Name	Harmine hydrochloride/ 鹽酸去氫駱駝蓬鹼	<p style="text-align: center;">cī</p> 
Catalog Number	1047	
Lot Number	10471	

Chemical Name	Harmine hydrochloride
Chemical Formula	C <sub>13</sub> H <sub>13</sub> ClN <sub>2</sub> O
Chemical Family	Alkaloid
Molecular Weight	248.71
CAS Number	343-27-1
Appearance (Color)	Yellow
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

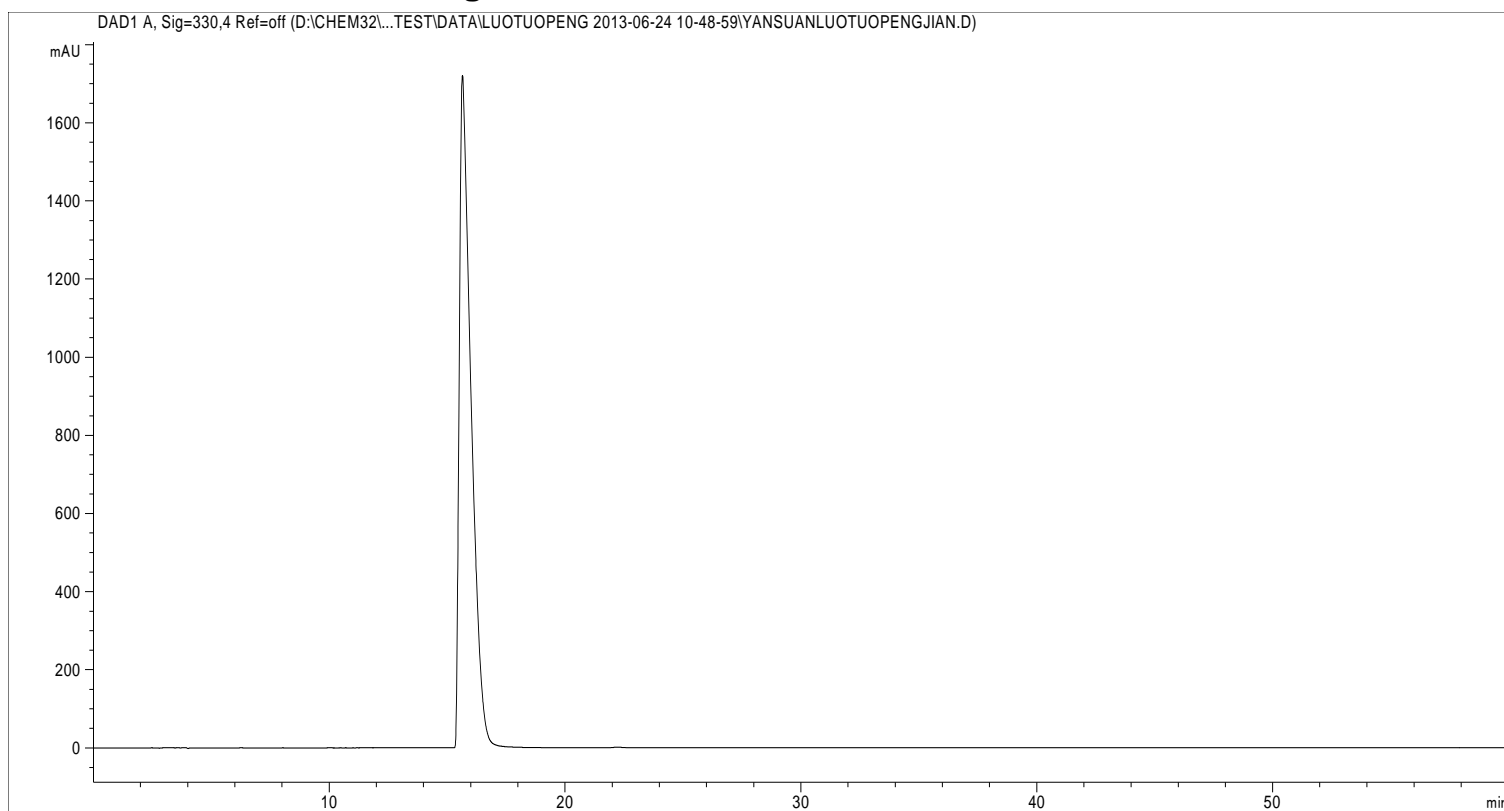
#### HPLC

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 <sub>2</sub> 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 : 10471  
Method File : D:\Chem32\2\method\HARMINE HYDROCHLORIDE +  
HARMINE  
Acquired : 2013-06-11

### I. HPLC chromatogram



<b>Product</b>	<b>RT (min)</b>	<b>Area (mAu*s)</b>	<b>Relative Area %</b>
Harmine hydrochloride	15.65	59578.1	99.73