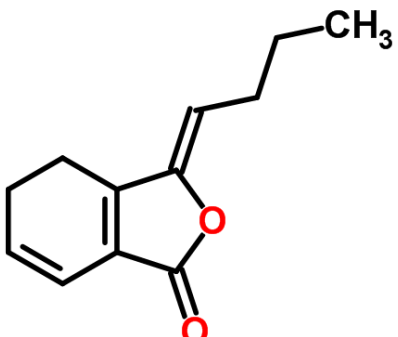


Certificate of Analysis

Product Name	Z-Ligustilide/藁本内酯	
Catalog Number	11057	
Lot Number	1105710	

Chemical Name	Z-Ligustilide
Chemical Formula	C ₁₂ H ₁₄ O ₂
Chemical Family	Terpenoids
Molecular Weight	190.24
CAS Number	4431-01-0
Appearance (Color)	Yellow
Appearance (Form)	Oil

Analytical Test

Test	Result
Identity by LC/MS Analysis	Consistent with structure
Purity by HPLC/PDA 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: 15/01/2014

Product Analysis Report

Analytical Test

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

Spectral and Physical Data

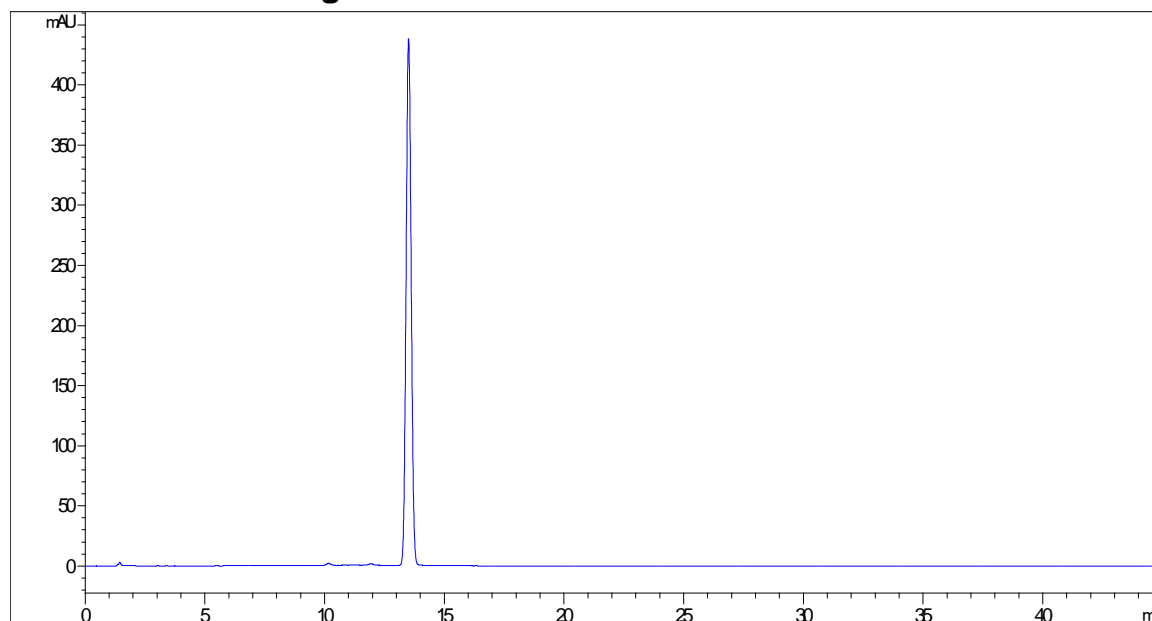
HPLC

HPLC system : Agilent Technologies 1260 Series
Column : Inertsil, C18, 4.6 x 250 mm, 5 µm or equivalent
Injection volume : 10 µl
Detector : DAD
Detector wavelength : 350 nm
Flow rate : 1.0 mL/min
Mobile phase :

Time (min)	% H ₂ O	% ACN	Flow rate (mL/min)
0 → 45	40	60	1.0

Date File Name : A5-BrowseProject-DUAN_MARKER-Injections-Z-Ligustilide
Operator : DUAN Ran
Sample Lot Number : 1105710
Method File : Ligustilide.M
Acquired : 03/01/2014

I. HPLC chromatogram



Product	RT (min)	Area (mAu*s)	Relative Area %
Z-Ligustilide	13.512	6482.1	99.05