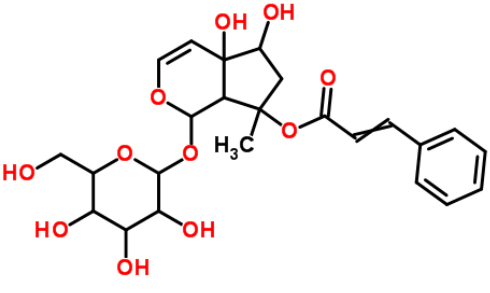


Certificate of Analysis

Product Name	Harpagoside / 哈巴俄昔	
Catalog Number	11019	
Lot Number	110191	

Chemical Name	Harpagoside
Chemical Formula	C ₂₄ H ₃₀ O ₁₁
Chemical Family	Terpenoids
Molecular Weight	494.49
CAS Number	19210-12-9
Appearance (Color)	White
Appearance (Form)	Crystal

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: 04/03/2013

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

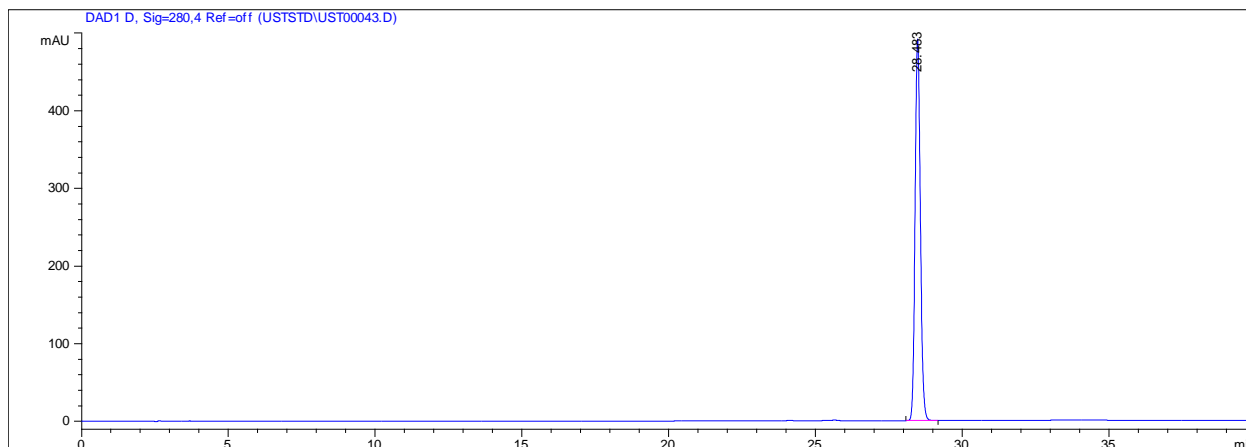
HPLC

HPLC system : Agilent 1100 series
Column : Grace Alltima C18 column, 4.6 mm × 250 mm, 5-μm
Injection volume : 10 μL
Detector : Diode array detector
Detector wavelength : 280 nm
Flow rate : 1.0 mL/min
Mobile phase :

Time (min)	% MeOH	% 0.1% (v/v) H ₃ PO ₄	Flow rate (mL/min)
0→10	40	60	1.0
10→40	40→70	60→30	1.0

Date File Name : C:\CHEM\1\DATA\USTSTD\UST00043.D
Operator : Kiki
Sample Lot Number : 110191
Method File : C:\CHEM\1\METHODS\C0504.M
Acquired : 14/12/2012

I. HPLC chromatogram



Product	RT (min)	Area (mAu*s)	Relative Area %
Harpagoside	28.483	6123.3	100.0