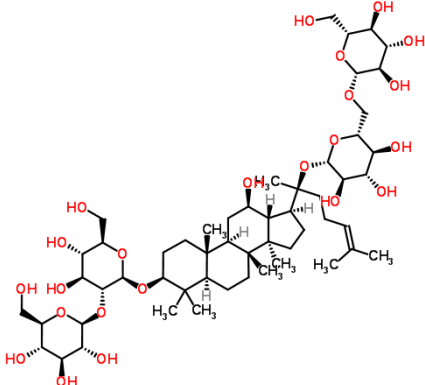


Certificate of Analysis

Product Name	Ginsenoside Rb ₁ / 人參皂昔 Rb ₁	
Catalog Number	10007	
Lot Number	100078	

Chemical Name	Ginsenoside Rb ₁
Chemical Formula	C ₅₄ H ₉₂ O ₂₃
Chemical Family	Saponins
Molecular Weight	1109.29
CAS Number	41753-43-9
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 dose not apply after opening.

Date of Certificate: 02/12/2013

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

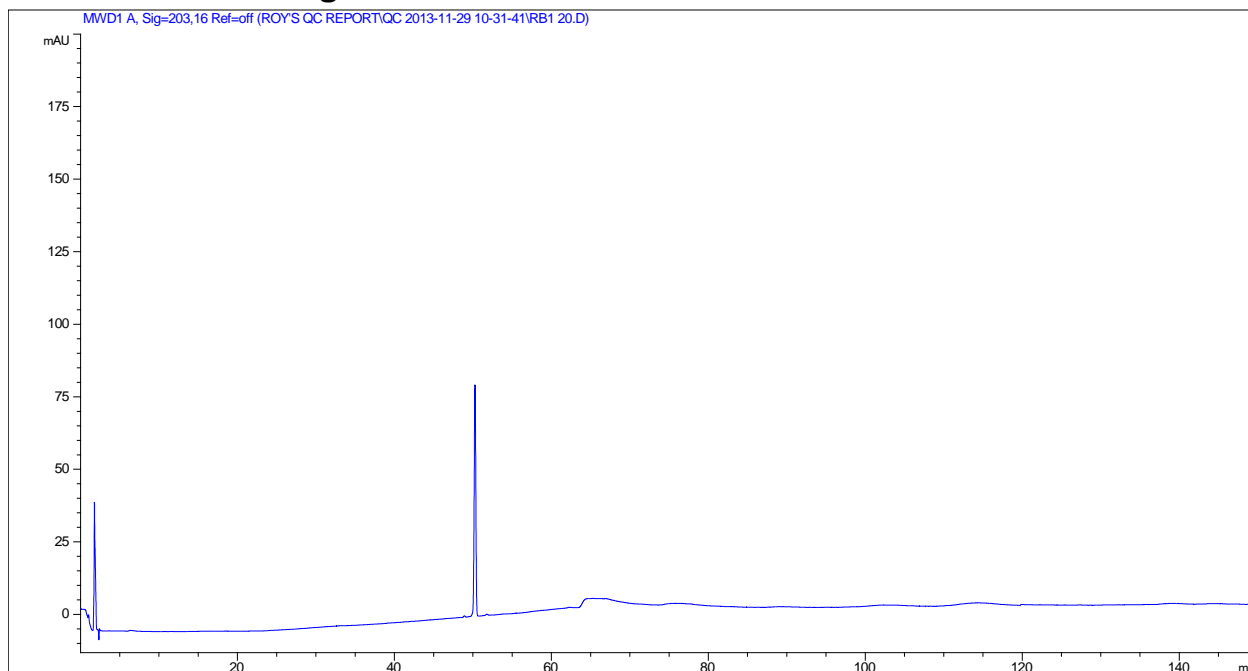
HPLC

HPLC system : Agilent Technologies 1200 Series
Column : Phenomenex Luna, C18, 4.6 x 250 mm, 5 μm or equivalent
Injection volume : 20 μl
Detector : DAD
Detector wavelength : 203 nm
Flow rate : 1.6 mL/min
Mobile phase :

Time (min)	% H ₂ O	% ACN	Flow rate (mL/min)
0 → 20	80	20	1.6
20 → 60	80 → 60	20 → 40	1.6
60 → 150	60	40	1.6

Date File Name : A3-C:\CHEM32\1\DATA\ROY'S QC REPORT\QC
2013-11-29 10-31-41\RB1 20.D
Operator : DUAN Ran
Sample Lot Number : 100078
Method File : RB1
Acquired : 02/12/2013

I. HPLC chromatogram



Product	RT (min)	Area (mAu*s)	Relative Area %
Ginsenoside Rb ₁	50.27	1160.2	100.000