

**Supplementary Materials: A novel flavonoid glucoside from the
fruits of *Lycium ruthenicum***

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Cheng

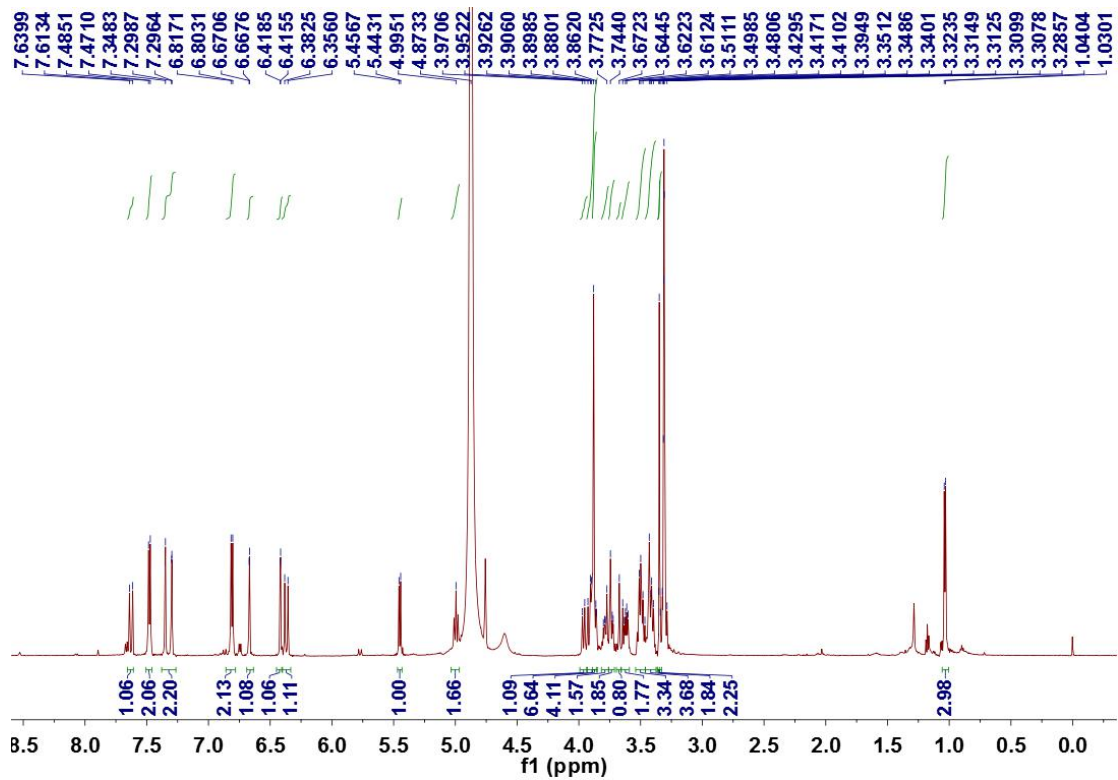


Figure S1. ¹H NMR spectrum of **1** in methanol-*d*₄

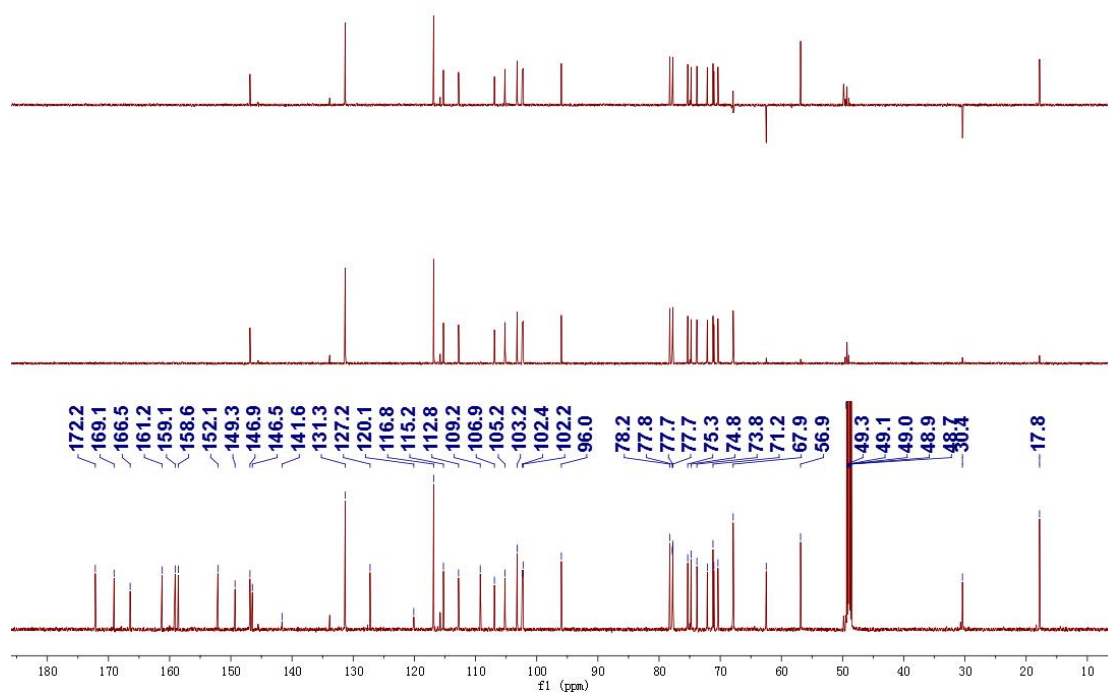


Figure S2. ^{13}C NMR and DEPT spectra of **1** in methanol- d_4

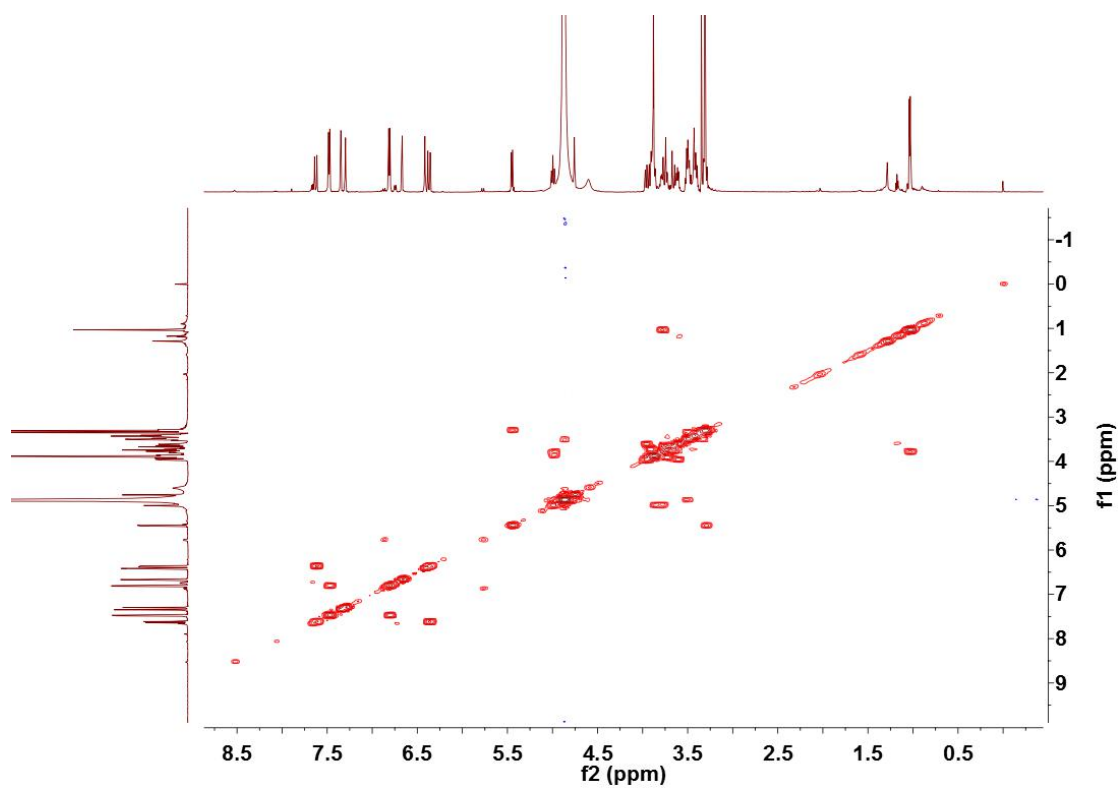


Figure S3. ^1H - ^1H COSY spectrum of **1** in methanol- d_4

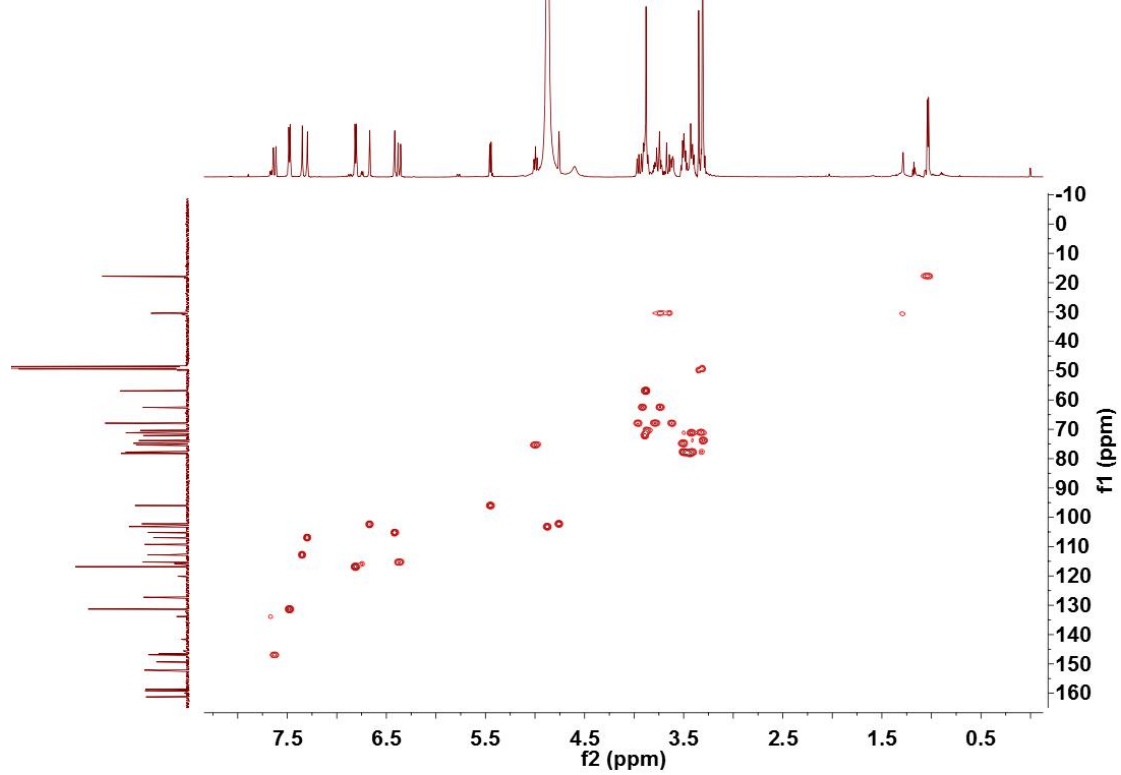


Figure S4. HSQC spectrum of **1** in methanol-*d*₄

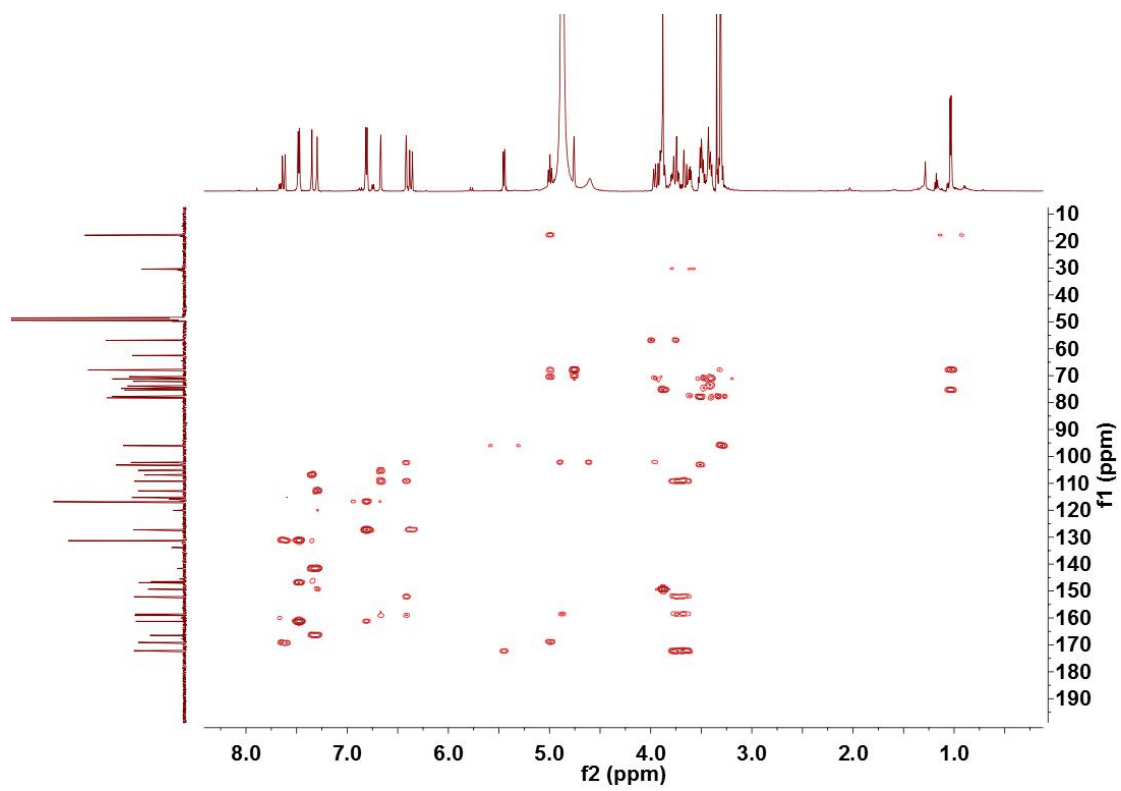


Figure S5. HMBC spectrum of **1** in methanol-*d*₄

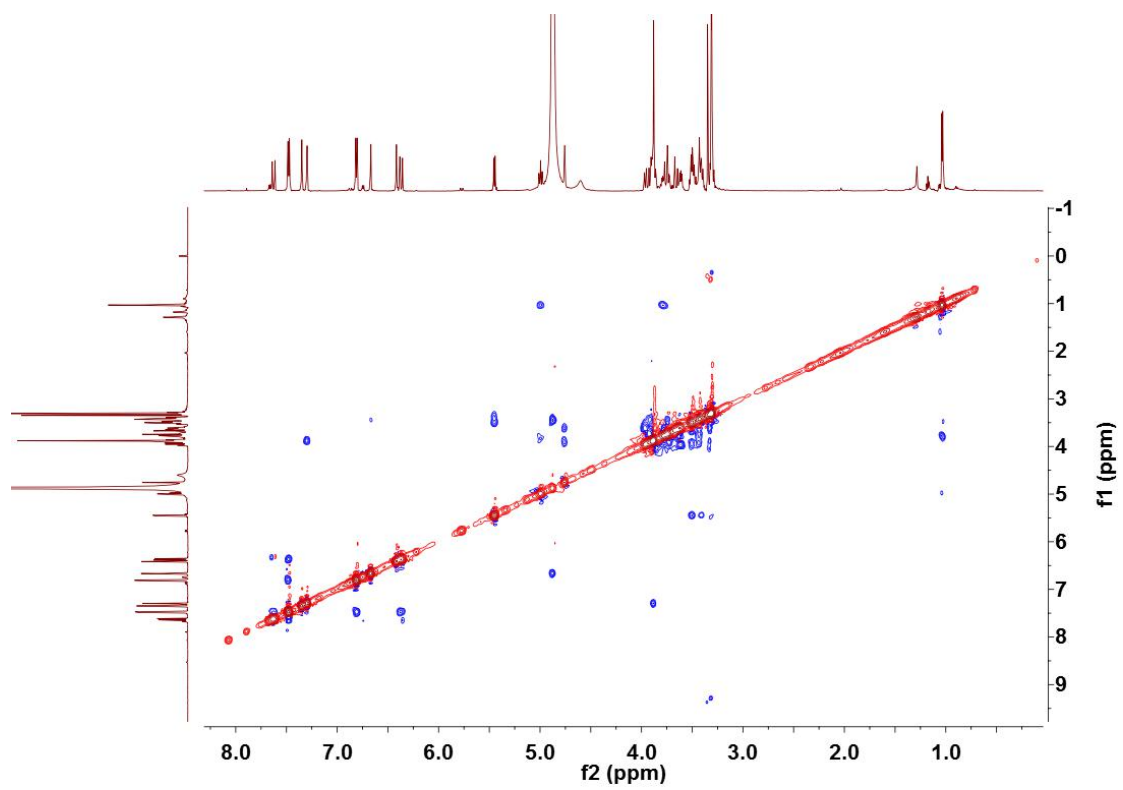


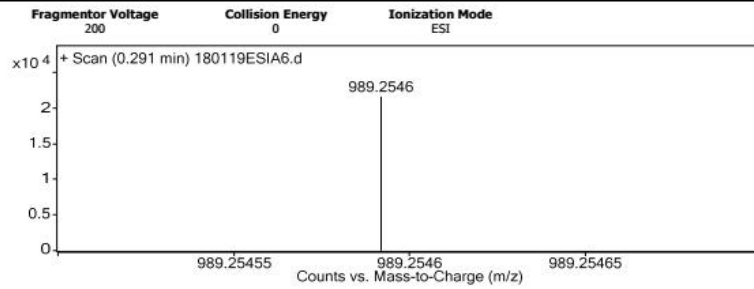
Figure S6. ROESY spectrum of **1** in methanol-*d*₄

Qualitative Analysis Report

Data Filename	180119ESIA6.d	Sample Name	Qg-6a
Sample Type	Sample	Position	
Instrument Name	Agilent G6230 TOF MS	User Name	KIB
Acq Method	ESI.m	Acquired Time	1/19/2018 10:53:59 AM
IRM Calibration Status	Success	DA Method	ESI.m
Comment			

Sample Group	Info.
Acquisition SW	6200 series TOF/6500 series
Version	Q-TOF B.05.01 (B5125.2)

User Spectra



Peak List

m/z	z	Abund	Formula	Ion
119.0611	1	5677.25		
123.0922	1	14247.06		
212.119	1	68231		
213.1217	1	8095.68		
368.4261	1	8469.51		
437.2303	1	8291.43		
495.1488	1	11115.65		
549.1225	1	6741		
989.2546	1	21570.55	C43 H50 Na O25	M+
990.2571	1	8602.18	C43 H50 Na O25	M+

Formula Calculator Element Limits

Element	Min	Max
C	0	200
H	0	400
O	21	29
Na	1	1

Formula Calculator Results

Formula	CalculatedMass	Mz	Diff. (mDa)	Diff. (ppm)	DBE
C43 H50 Na O25	989.2539	989.2546	-0.7	0.7	18.5

--- End Of Report ---

Figure S7. HRESIMS spectrum of 1

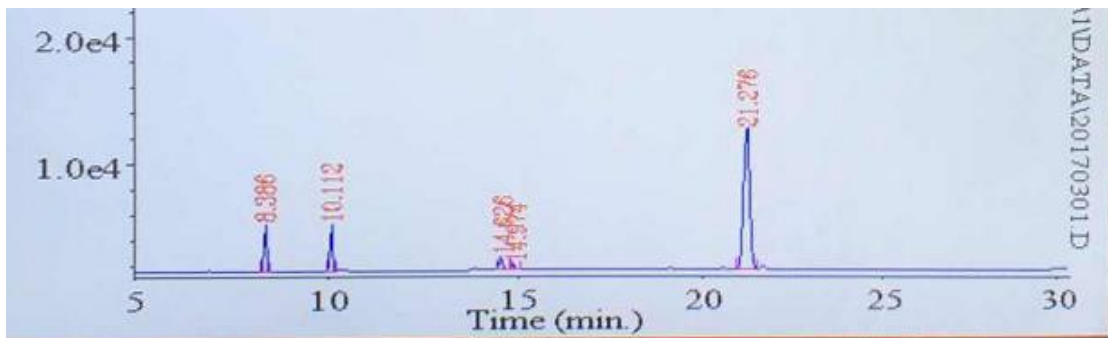


Figure S8. GC analysis of the derivative of D-glucose

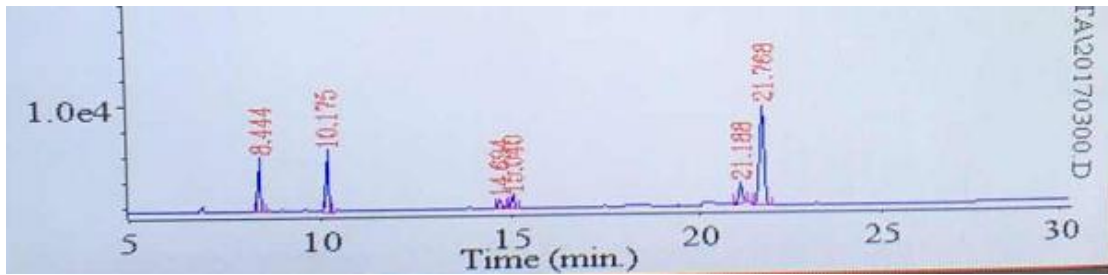


Figure S9. GC analysis of the derivative of L-glucose

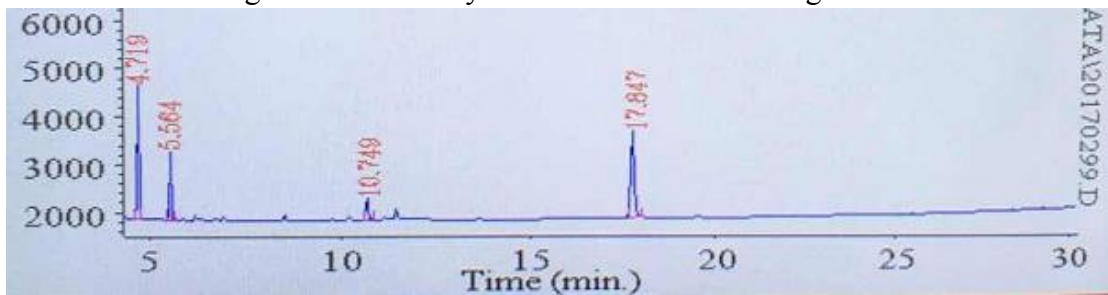


Figure S10. GC analysis of the derivative of L-rhamnose

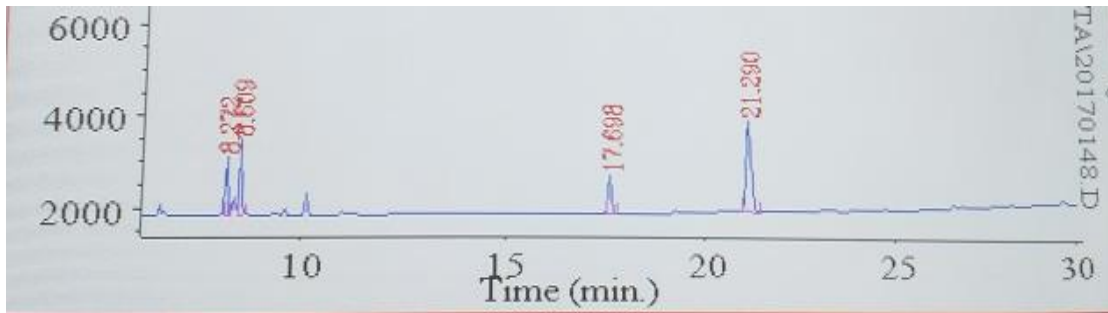


Figure S11. GC analysis of the derivative of compound 1 after hydrolysis

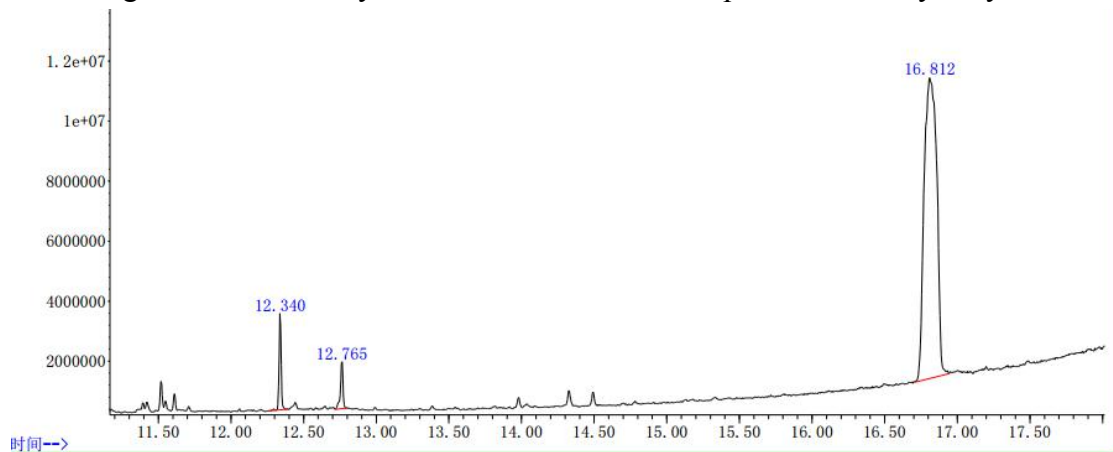


Figure S12. GC/MS analysis of the derivative of L-rhamnose

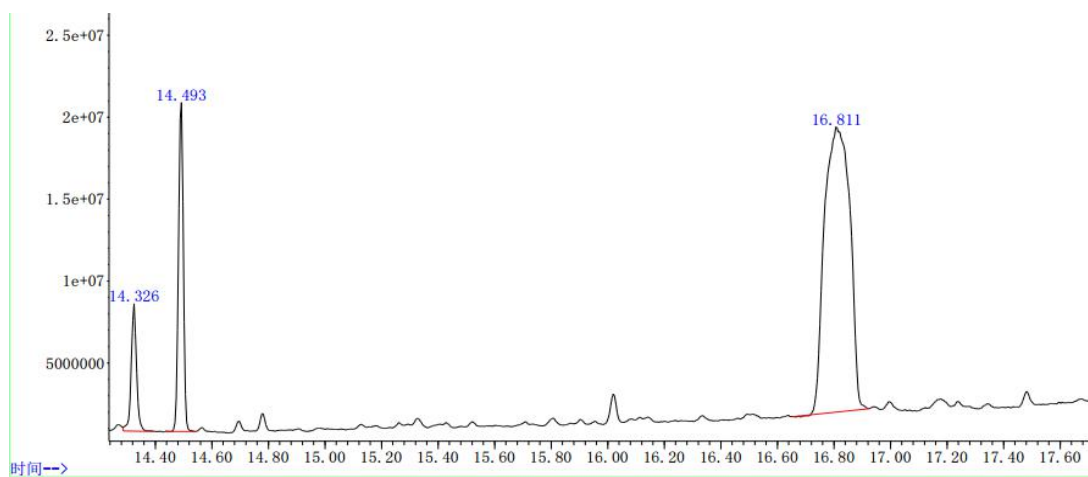


Figure S13. GC/MS analysis of the derivative of compound **1** after hydrolysis

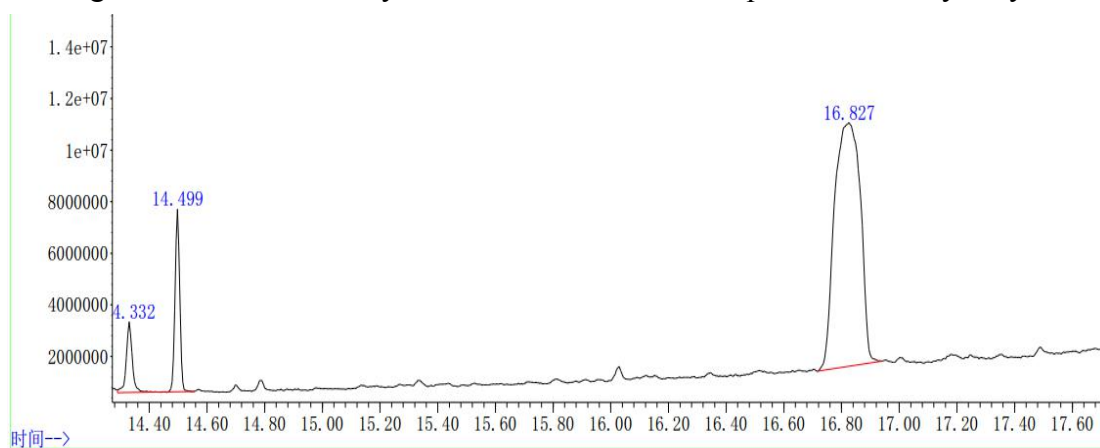


Figure S14. GC/MS analysis of the mixture of L-rhamnose with **1** after hydrolysis