

Supporting Information

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A New Iridoid Glycoside from Wine-Processed Corni fructus

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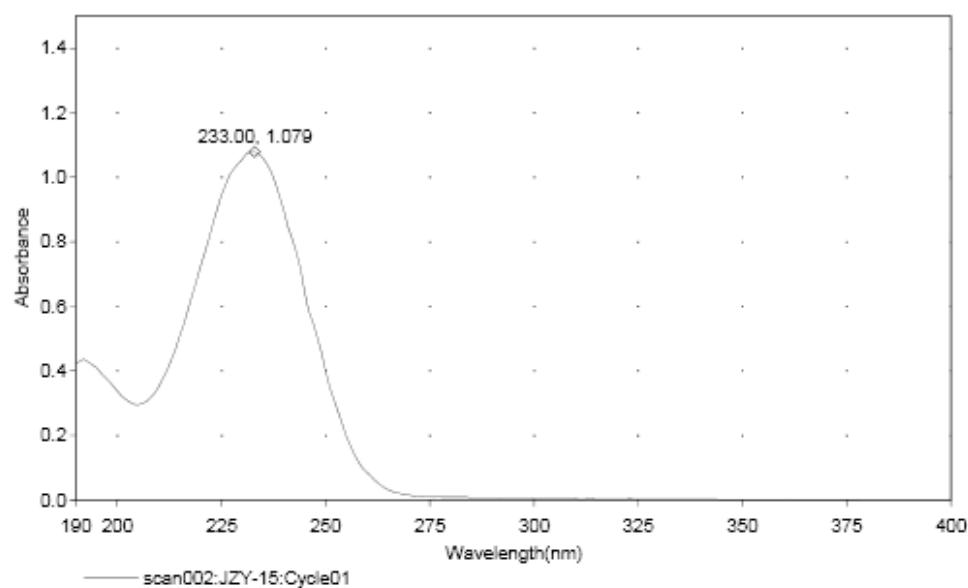
These authors contributed to this work equally.

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Operator Name (None Entered) Date of Report 2021/4/16
Department (None Entered) Time of Report 23:59:13下午
Organization (None Entered)
Information (None Entered)

Scan Graph



Results Table - scan002,JZY-15,Cycle01

nm	A	Manual Method
233.00	1.079	Report Values at 1 Wavelength 233.00 nm Sort By Wavelength

Figure S1: UV spectrum of Spectrum of **1** (cornusglucoside I)

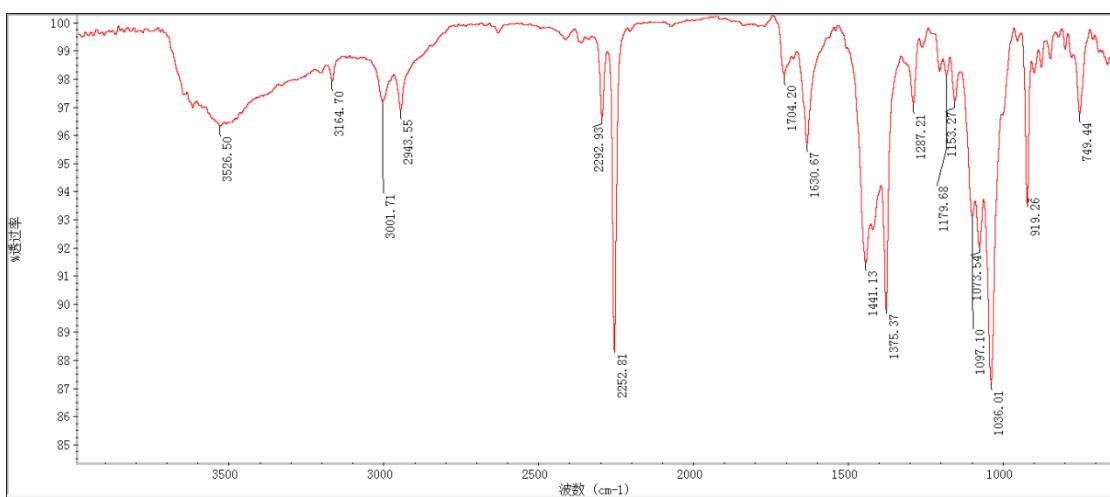


Figure S2: IR spectrum of Spectrum of **1** (cornusglucoside I)

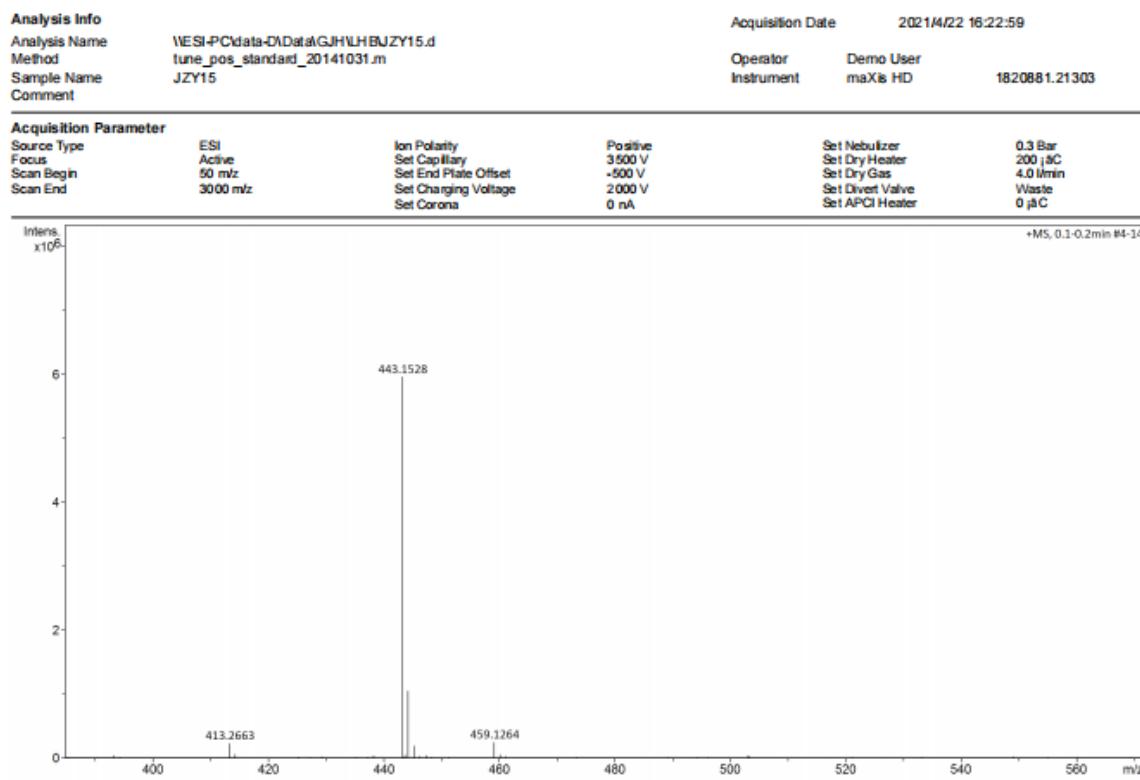
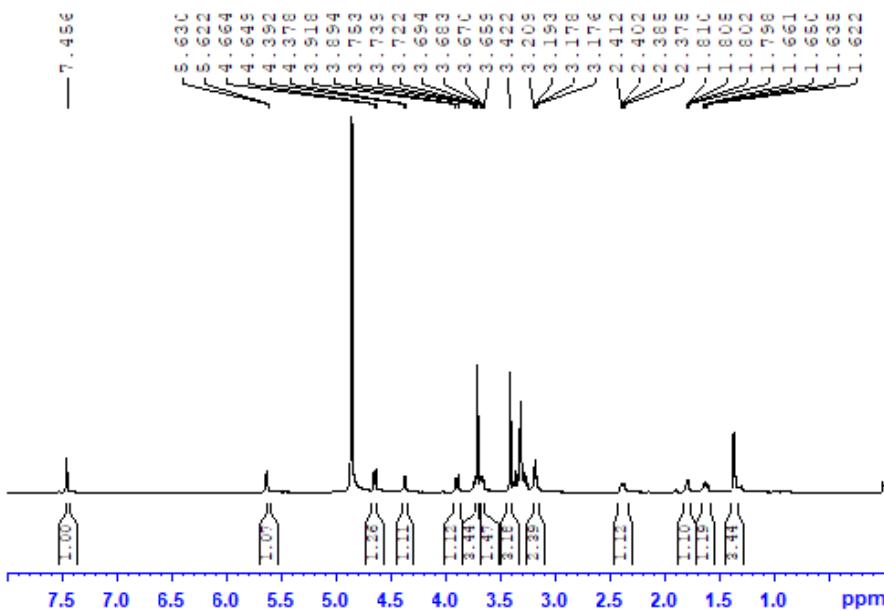


Figure S3: HR-ESI-MS Spectrum of **1** (cornusglucoside I)

JZY-15 H
MeOD



NAME JZY-15
EXPNO 1
PROCNO 1
Date 20200807
Time 11.04 h
INSTRUM spect
PROBHD Z119470_0014 (zg30
PULPROG zg30
TD 65536
SOLVENT MeOD
NS 16
DS 2
SWH 10000.000 Hz
FIDRES 0.305176 Hz
AQ 3.2768500 sec
RG 101.26
DW 50.000 usec
DE 6.50 usec
TE 298.2 K
D1 1.0000000 sec
TD0 1
SFO1 500.1930887 MHz
NUC1 1H
P1 12.00 usec
SI 65536
SF 500.1900022 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

Figure S4: ¹H-NMR (500 MHz, methanol-*d*₄) Spectrum of **1** (cornusglucoside I)

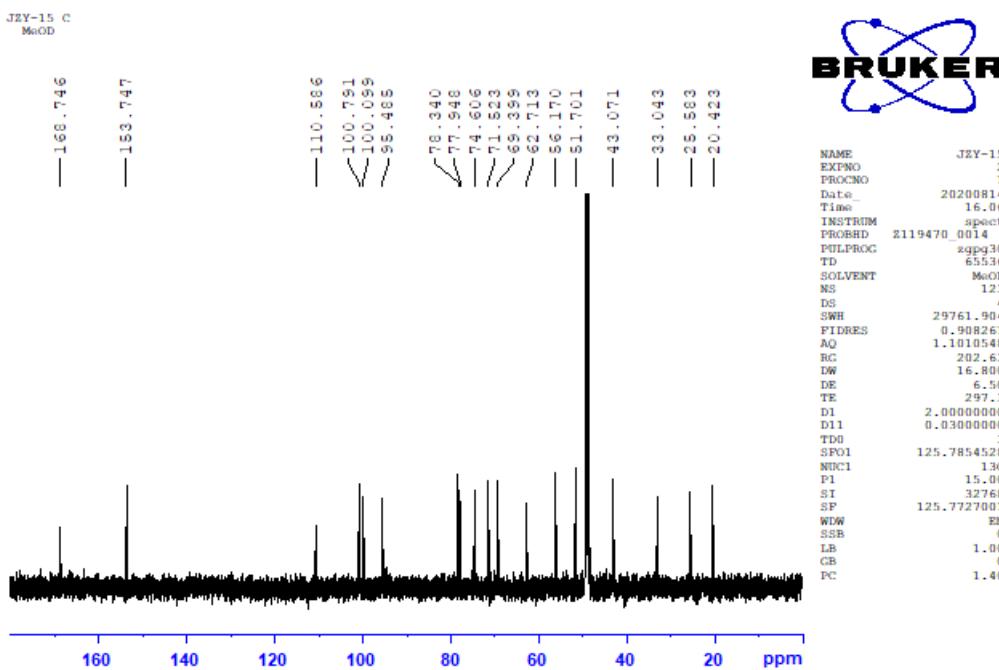


Figure S5: ^{13}C -NMR (125 MHz, methanol- d_4) Spectrum of **1** (cornusglucoside I)

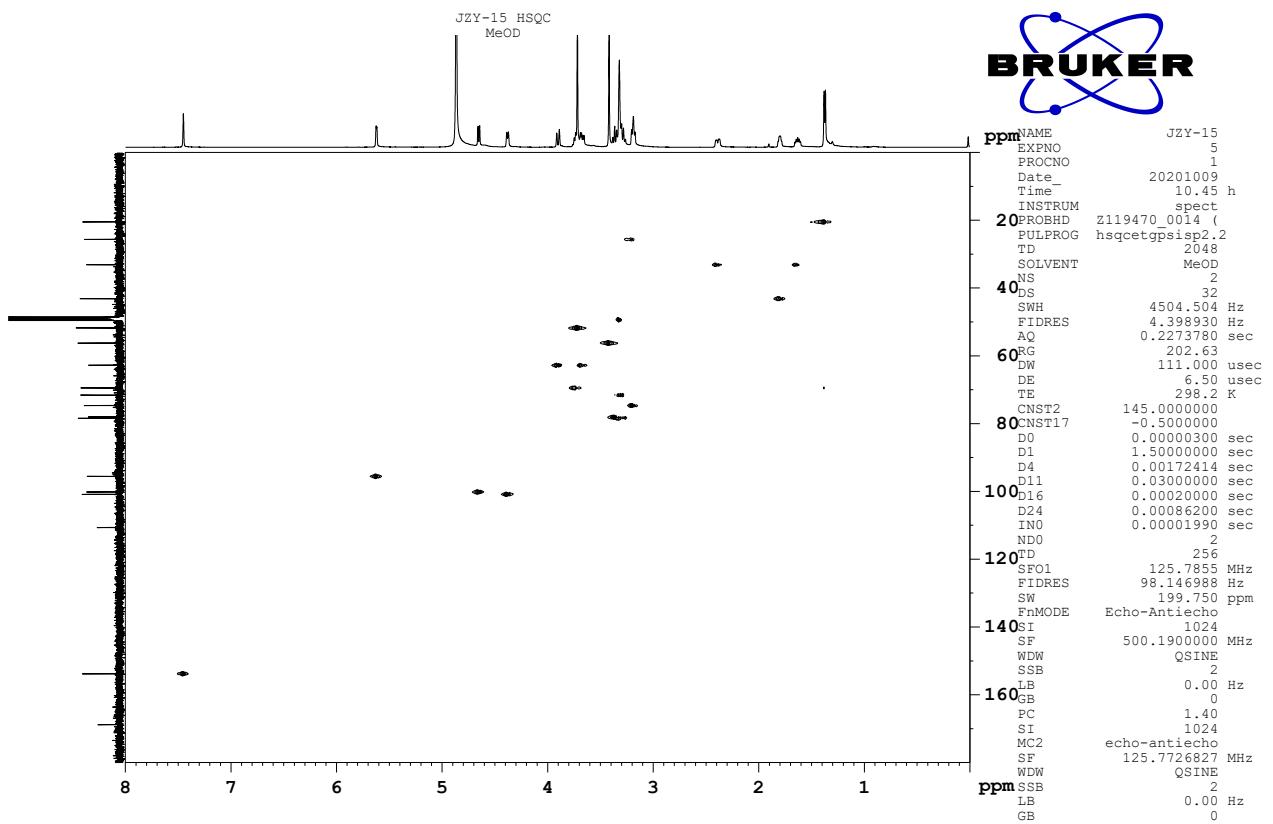


Figure S6: HSQC Spectrum of **1** (cornusglucoside I)

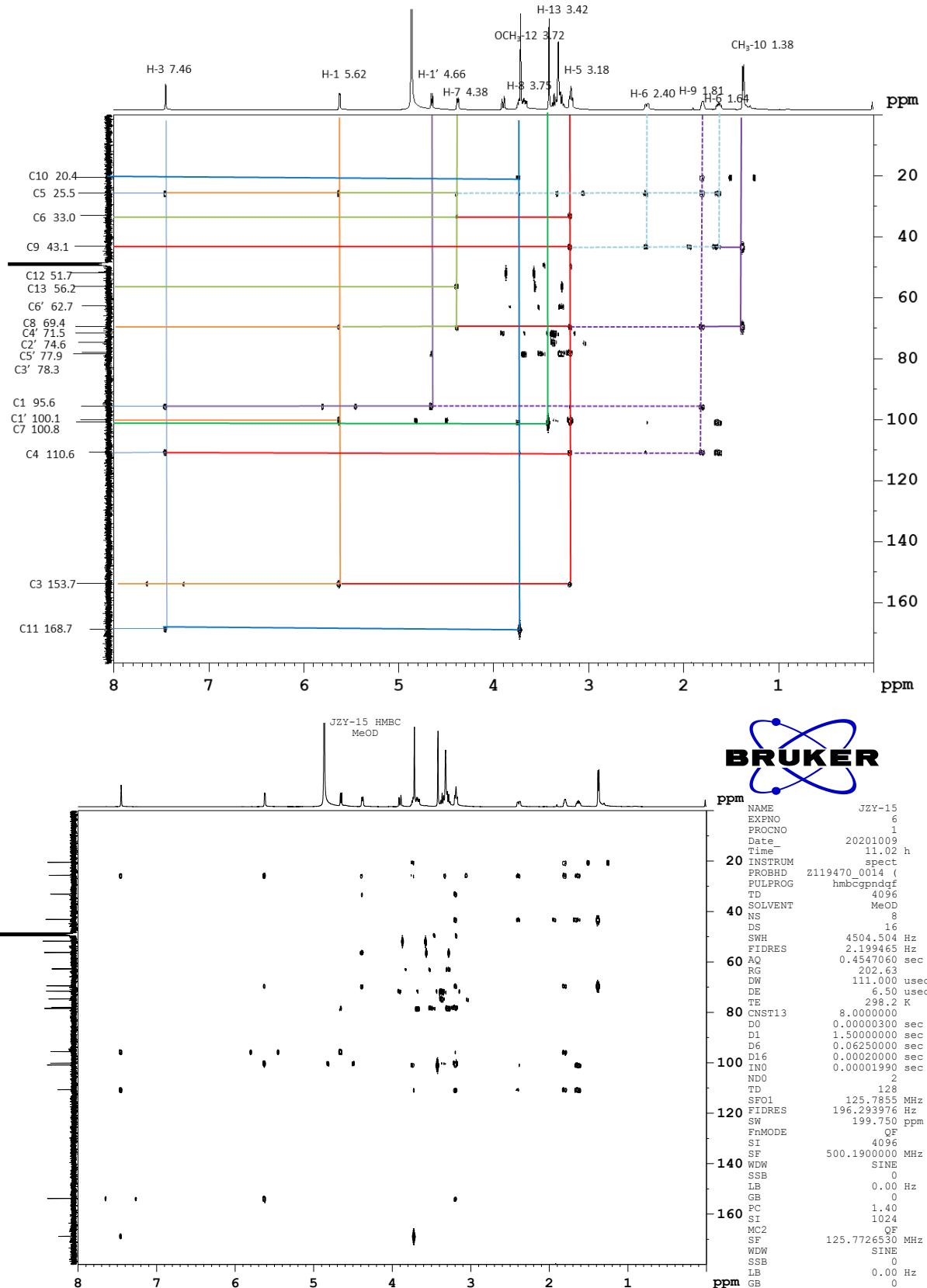


Figure S7: HMBC Spectrum of 1 (cornusglucoside I)

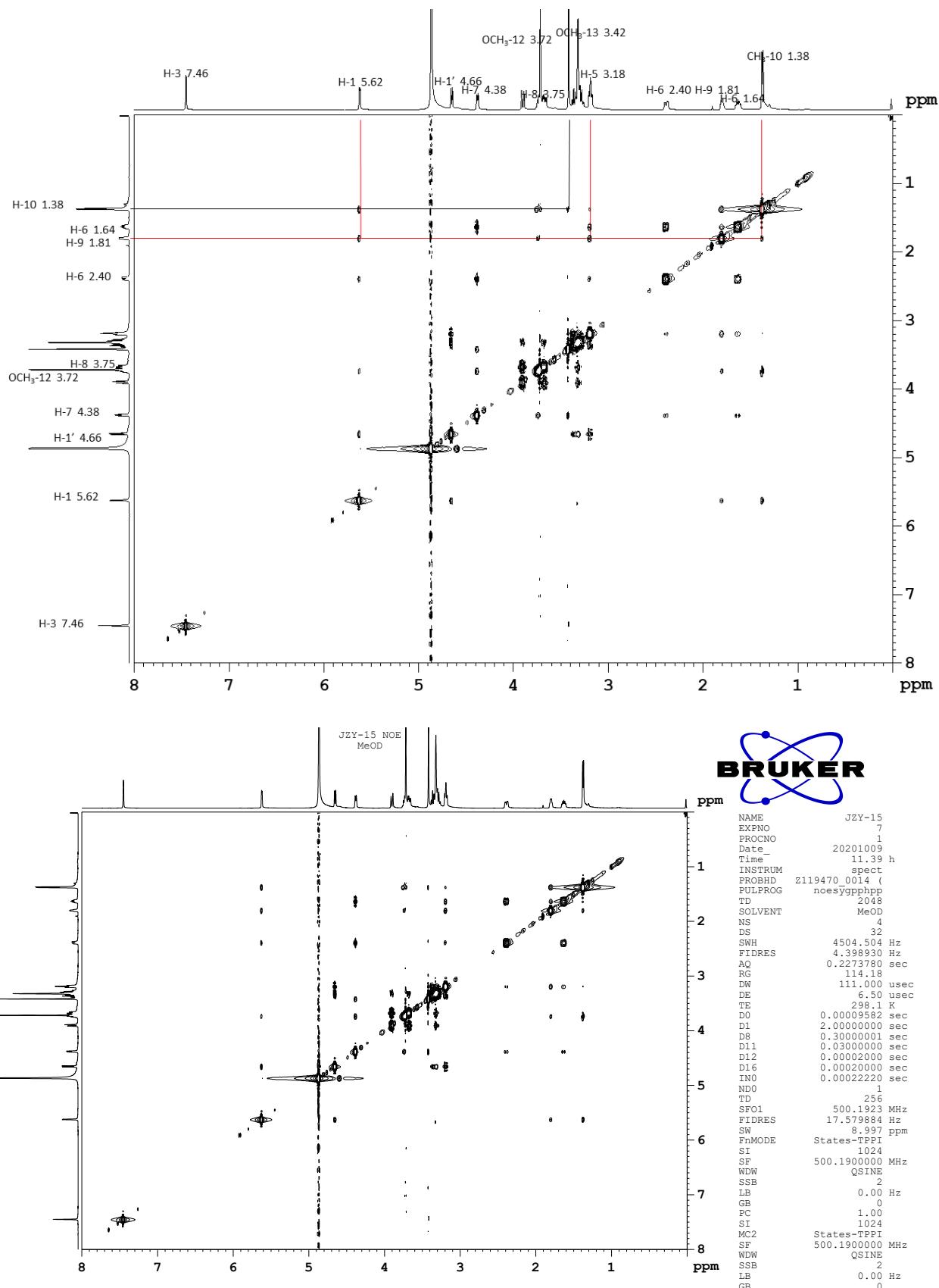
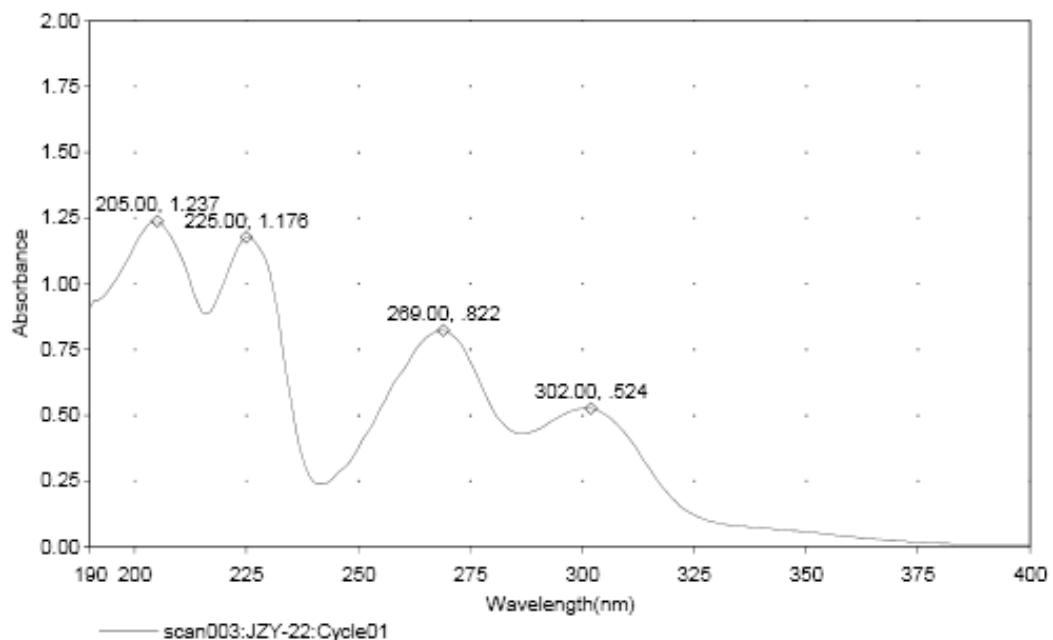


Figure S8: NOESY Spectrum of **1** (cornusglucoside I)

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Operator Name (None Entered) Date of Report 2021/4/17
Department (None Entered) Time of Report 0:09:00 上午
Organization (None Entered)
Information (None Entered)

Scan Graph



Results Table - scan003,JZY-22,Cycle01

nm	A	Manual Method
205.00	1.237	Report Values at 4 Wavelengths
225.00	1.176	205.00 nm 225.00 nm 269.00 nm 302.00 nm
269.00	.822	Sort By Wavelength
302.00	.524	

Figure S9: UV spectrum of Spectrum of **2** (methyl 4-(3',4'-dihydroxyphenyl)-4-oxobutanoate)

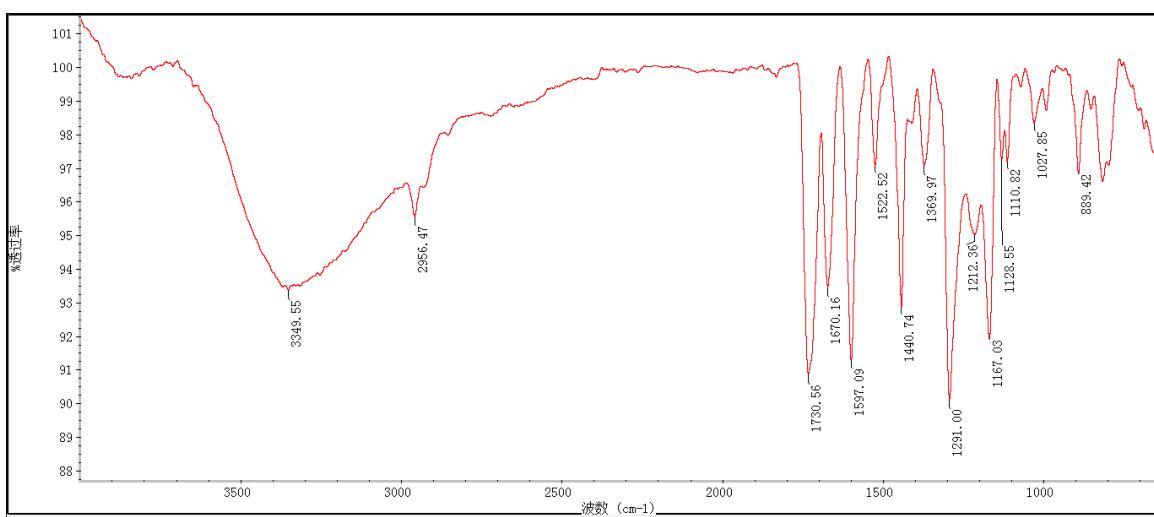


Figure S10: IR spectrum of Spectrum of **2** (methyl 4-(3',4'-dihydroxyphenyl)-4-oxobutanoate)

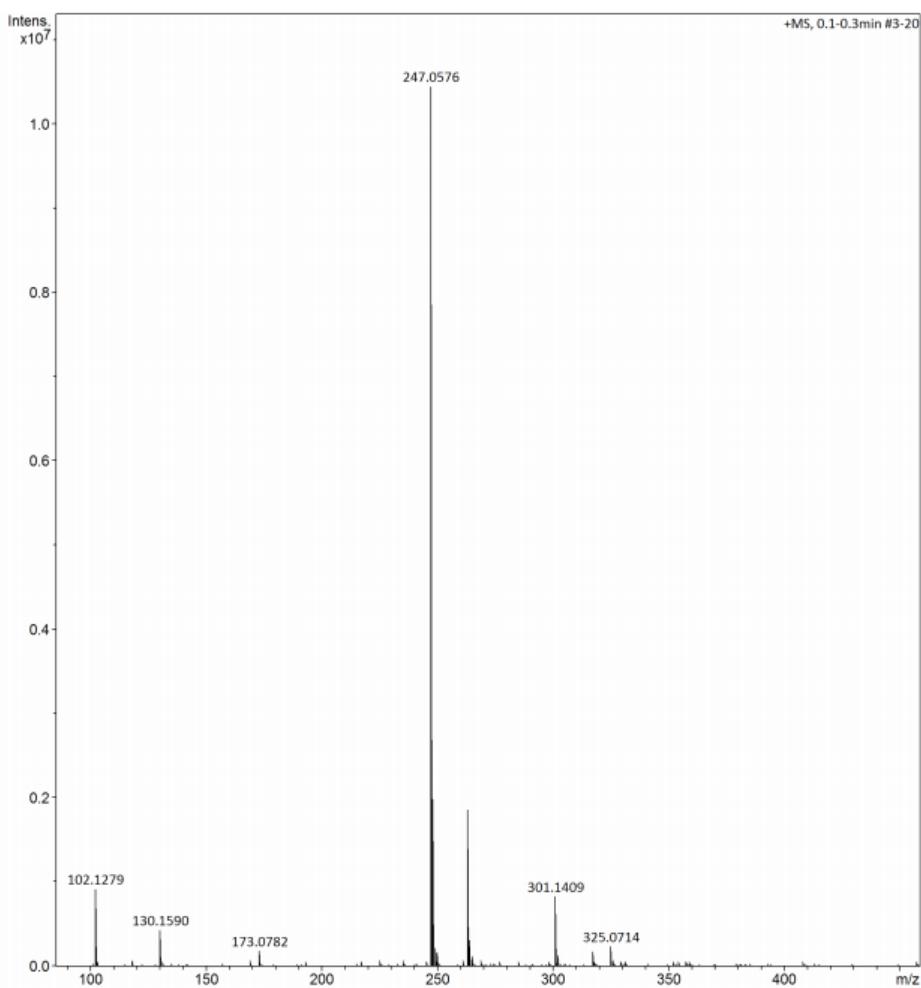


Figure S11: HR-ESI-MS Spectrum of **2** (methyl 4-(3',4'-dihydroxyphenyl)-4-oxobutanoate)

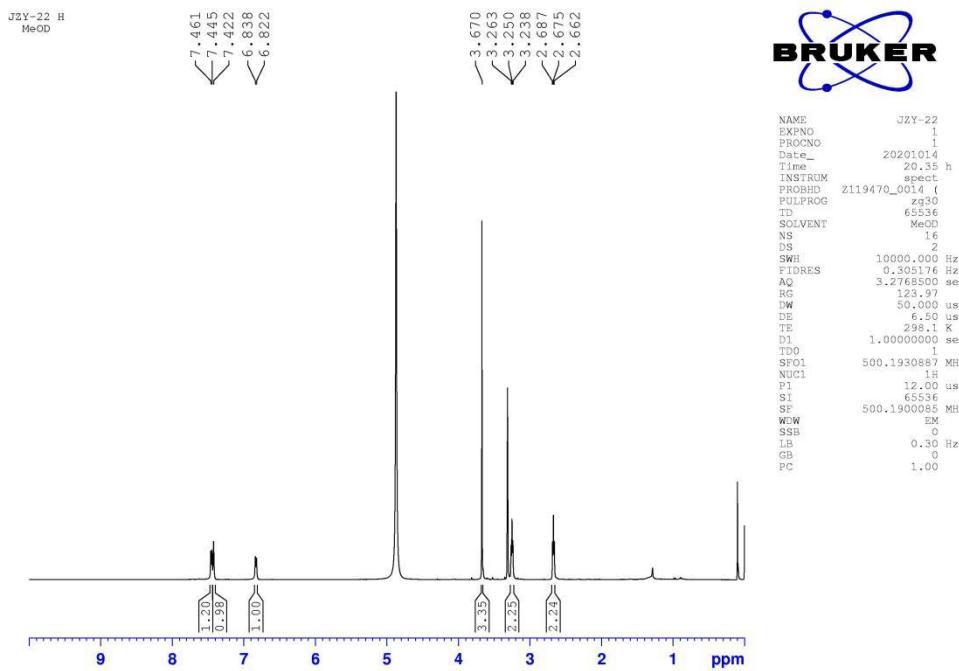


Figure S12: ^1H -NMR (500 MHz, methanol- d_4) Spectrum of **2** (methyl 4-(3',4'-dihydroxyphenyl)-4-oxobutanoate)

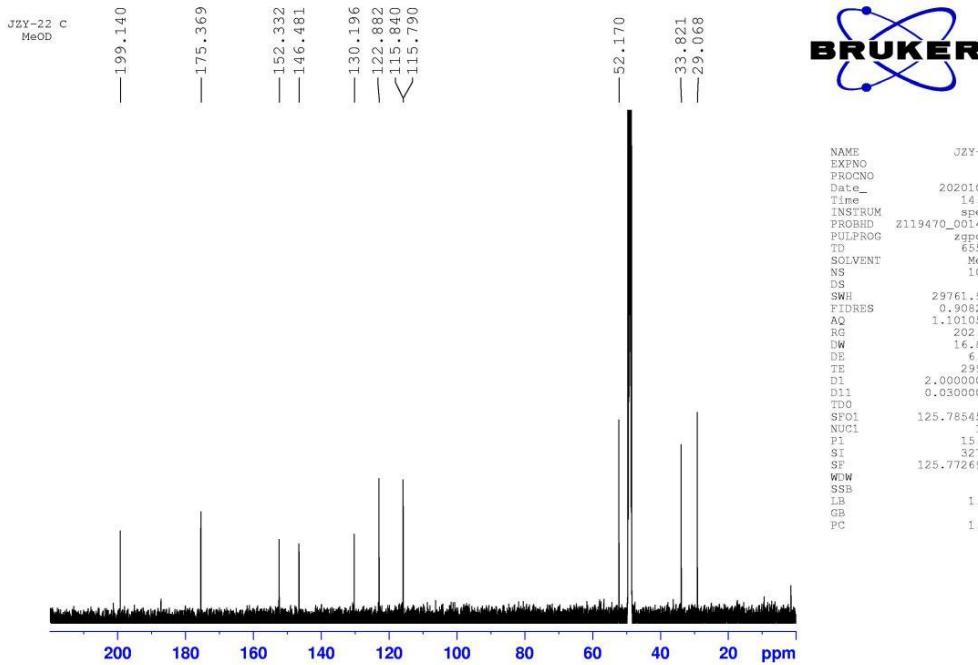


Figure S13: ^{13}C -NMR (125 MHz, methanol- d_4) Spectrum of **2** (methyl 4-(3',4'-dihydroxyphenyl)-4-oxobutanoate)

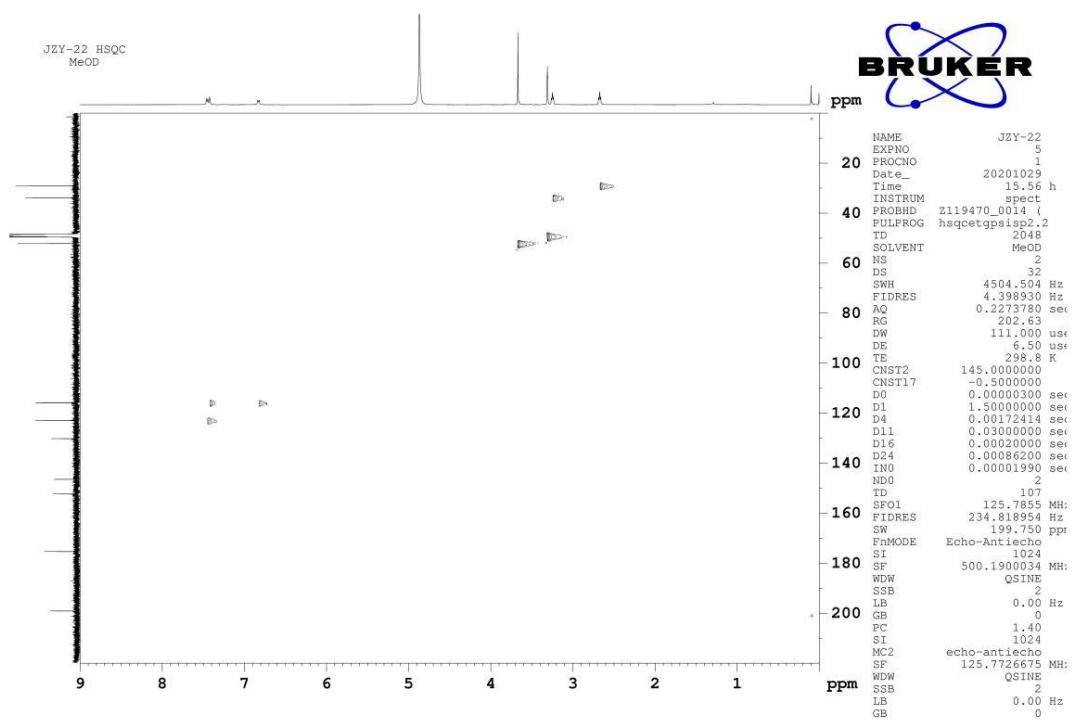


Figure S14: HSQC Spectrum of **2** (methyl 4-(3',4'-dihydroxyphenyl)-4-oxobutanoate)

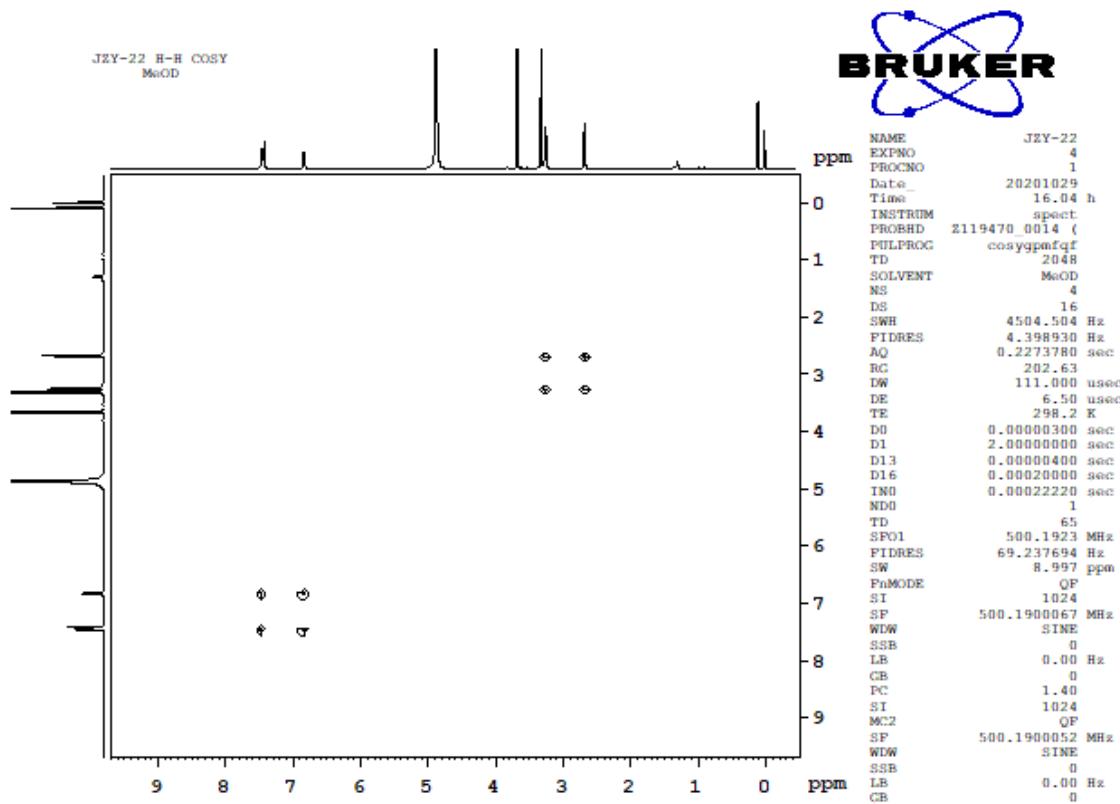


Figure S15: $\text{H}^1\text{-}\text{H}^1$ COSY Spectrum of **2** (methyl 4-(3',4'-dihydroxyphenyl)-4-oxobutanoate)

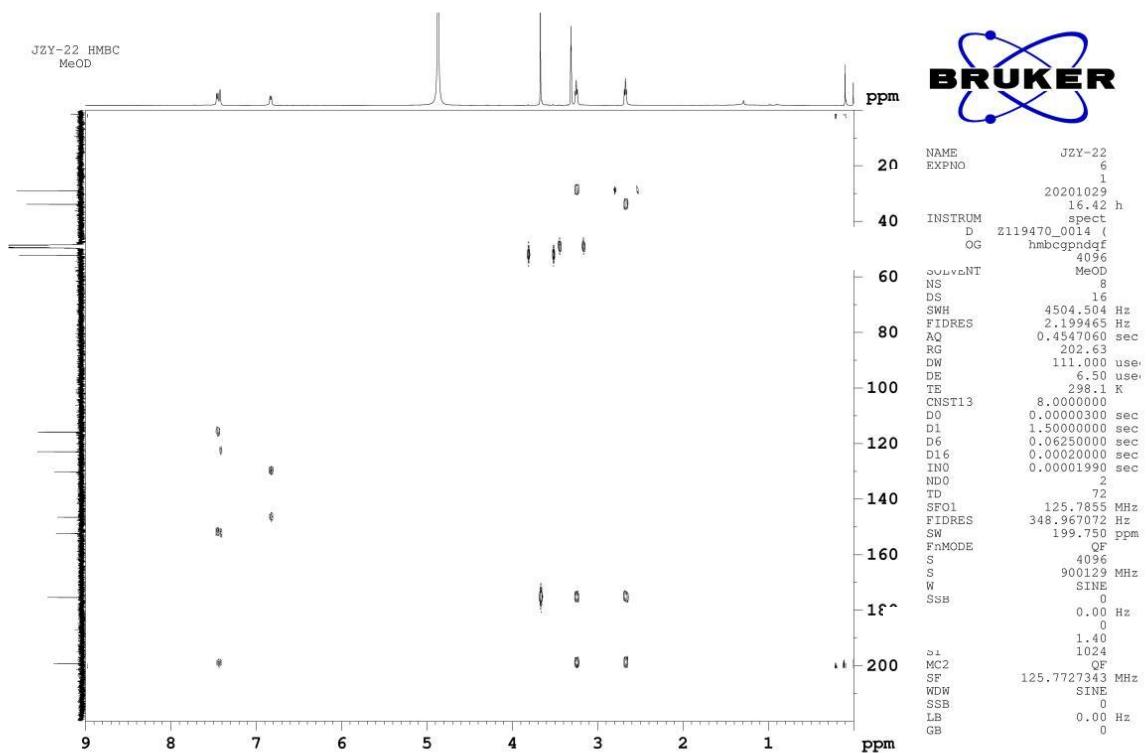


Figure S16: HMBC Spectrum of **2** (methyl 4-(3',4'-dihydroxyphenyl)-4-oxobutanoate)

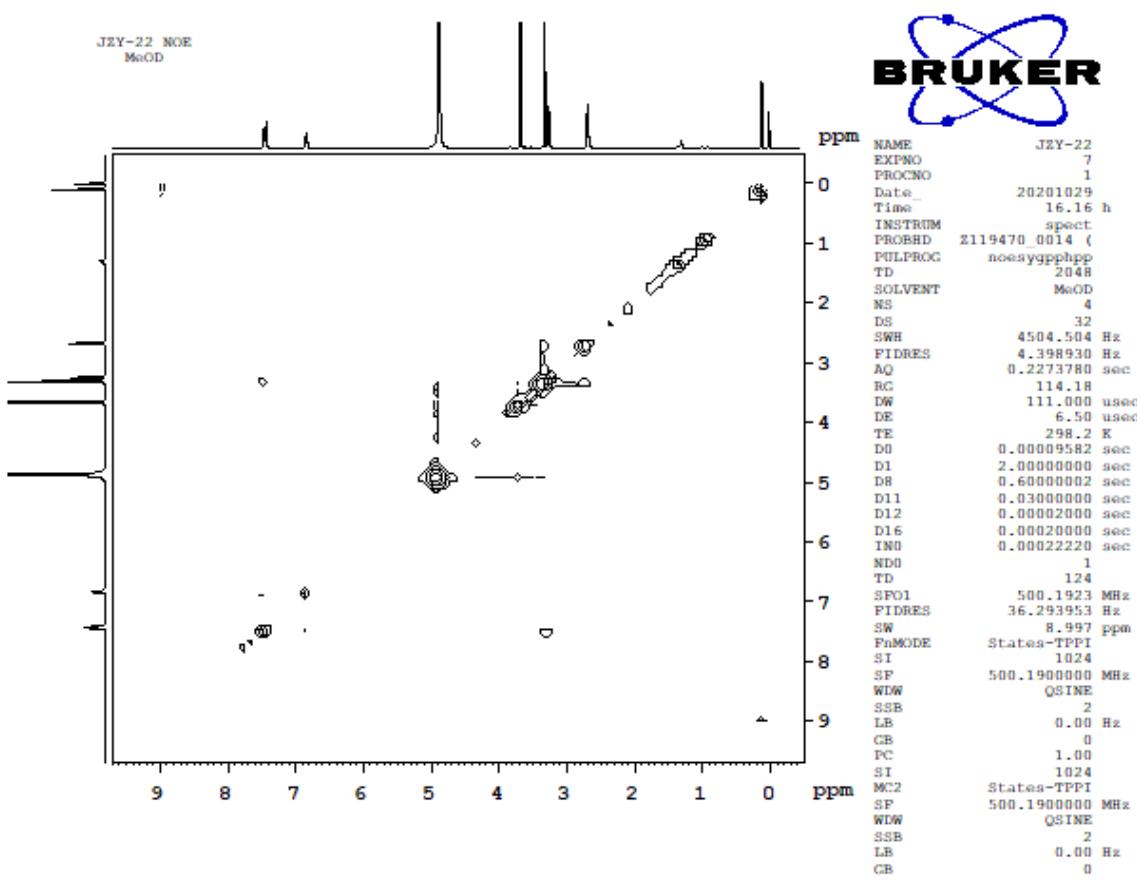


Figure S17: NOESY Spectrum of **2** (methyl 4-(3',4'-dihydroxyphenyl)-4-oxobutanoate)

Table 1. ^1H and ^{13}C NMR spectra data (CD_3OD , 500/125 MHz) for compounds **2** and the ^1H NMR in literature .

Position	2		
	δ_{H}	δ_{C}	LIT $\delta_{\text{H}}^{[16]}$
1		199.1	
2	3.25 (2H, t, 6.2)	33.8	3.25 (2H, t, 6.4)
3	2.67 (2H, t, 6.2)	29.1	2.67 (2H, t, 6.4)
4		175.4	
5	3.67 (3H, s)	52.2	3.67 (3H, s)
1'		130.2	
2'	7.42 (1H, s)	115.8	7.42 (1H, d, 2.1)
3'		146.5	
4'		152.3	
5'	6.83 (1H, d, 8.0)	115.9	6.83 (1H, d, 8.3)
6'	7.45 (1H, d, 8.0)	122.9	7.45 (1H, dd, 8.2, 2.1)

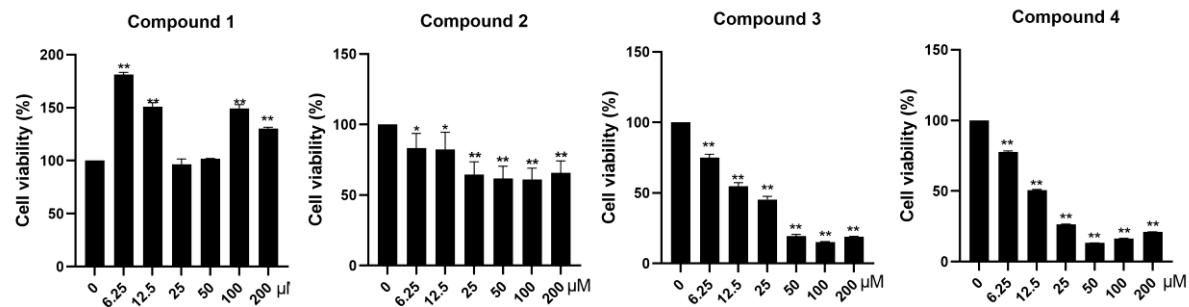


Figure S18: Cell viabilities of RAW 264.7 cells in present of compounds **1–4**. * $P < 0.05$, ** $P < 0.001$, compared with the control group.

S1 :New Compounds Search Eeport of SciFinder

SAVED SEARCHES

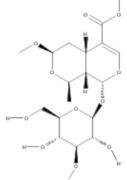
Saved Answer Sets
Keep Me Posted
History

Session began October 28, 2021 at 9:55 PM

October 28, 2021 9:55 PM

Explore substances by substructure: structure initiated, resulting in 2 candidates

Query



Explore complete

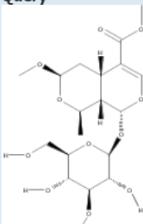
Candidates Selected
Stereo in answer structure
No stereo in answer structure

Explore results
Answer set 2 created with 53 answers from REGISTRY

October 28, 2021 9:55 PM

Explore substances by exact: structure initiated, resulting in 1 candidate

Query



Explore complete

Candidates Selected
Stereo in answer structure

Explore results
Answer set 4 created with 3 answers from REGISTRY

October 28, 2021 9:57 PM

Explore substances by similarity: structure initiated, resulting in 9 candidates

Query



Explore complete

Candidates Selected
≥ 99 (most similar)
95-98

Explore results
Answer set 6 created with 31 answers from REGISTRY

<p>Score: ≥ 99</p> <p><input type="checkbox"/> 1. 41679-97-4 </p> <p>~15 ~1 </p> <p>Absolute stereochemistry.</p> <p>C₁₈H₂₈O₁₁ 1<i>H</i>,3<i>H</i>-Pyrano[3,4-<i>c</i>]pyran-5-carboxylic acid, 8-(β-D-glucopyranosyloxy)-4,4<i>a</i>,8,8<i>a</i>-tetrahydro-3-methoxy-1-methyl-, methyl ester, (1<i>S</i>,4<i>a</i>,8<i>S</i>,8<i>a</i>5)-</p> <p>► Key Physical Properties</p>	<p>Score: ≥ 99</p> <p><input type="checkbox"/> 2. 119943-45-2 </p> <p>~19 ~1 </p> <p>Rotation (-), Absolute stereochemistry.</p> <p>C₁₈H₂₈O₁₁ 1<i>H</i>,3<i>H</i>-Pyrano[3,4-<i>c</i>]pyran-5-carboxylic acid, 8-(β-D-glucopyranosyloxy)-4,4<i>a</i>,8,8<i>a</i>-tetrahydro-3-methoxy-1-methyl-, methyl ester, (1<i>S</i>,3<i>R</i>,4<i>a</i>,8<i>S</i>,8<i>a</i>5)-</p> <p>► Key Physical Properties</p>	<p>Score: ≥ 99</p> <p><input type="checkbox"/> 3. 119943-46-3 </p> <p>~20 ~15 </p> <p>Rotation (-), Absolute stereochemistry.</p> <p>C₁₈H₂₈O₁₁ 1<i>H</i>,3<i>H</i>-Pyrano[3,4-<i>c</i>]pyran-5-carboxylic acid, 8-(β-D-glucopyranosyloxy)-4,4<i>a</i>,8,8<i>a</i>-tetrahydro-3-methoxy-1-methyl-, methyl ester, (1<i>S</i>,3<i>R</i>,4<i>a</i>,8<i>S</i>,8<i>a</i>5)-</p> <p>► Key Physical Properties</p>
<p>Score: ≥ 99</p> <p><input type="checkbox"/> 4. 2172997-11-2 </p> <p>~1 </p> <p>Absolute stereochemistry., Rotation (-).</p> <p>C₁₈H₂₈O₁₁ INDEX NAME NOT YET ASSIGNED</p> <p>► Key Physical Properties</p>	<p>Score: ≥ 99</p> <p><input type="checkbox"/> 5. 2172997-12-3 </p> <p>~1 </p> <p>Absolute stereochemistry., Rotation (-).</p> <p>C₁₈H₂₈O₁₁ INDEX NAME NOT YET ASSIGNED</p> <p>► Key Physical Properties</p>	<p>Score: 98</p> <p><input type="checkbox"/> 6. 25406-64-8 </p> <p>~450 ~63 </p> <p>Absolute stereochemistry.</p> <p>C₁₇H₂₆O₁₁ 1<i>H</i>,3<i>H</i>-Pyrano[3,4-<i>c</i>]pyran-5-carboxylic acid, 8-(β-D-glucopyranosyloxy)-4,4<i>a</i>,8,8<i>a</i>-tetrahydro-3-hydroxy-1-methyl-, methyl ester, (1<i>S</i>,3<i>R</i>,4<i>a</i>,8<i>S</i>,8<i>a</i>5)-</p> <p>► Key Physical Properties Regulatory Information Spectra</p>
<p>Score: 98</p> <p><input type="checkbox"/> 7. 52691-03-9 </p> <p>~1 ~2 </p> <p>Absolute stereochemistry.</p> <p>C₁₇H₂₆O₁₁ 1<i>H</i>,3<i>H</i>-Pyrano[3,4-<i>c</i>]pyran-5-carboxylic acid, 8-(α-D-glucopyranosyloxy)-4,4<i>a</i>,8,8<i>a</i>-tetrahydro-3-hydroxy-1-methyl-, methyl ester (9CI)</p> <p>► Key Physical Properties Spectra</p>	<p>Score: 98</p> <p><input type="checkbox"/> 8. 61849-88-5 </p> <p>~24 ~1 </p> <p>Absolute stereochemistry.</p> <p>C₁₇H₂₆O₁₁ 1<i>H</i>,3<i>H</i>-Pyrano[3,4-<i>c</i>]pyran-5-carboxylic acid, 8-(β-D-glucopyranosyloxy)-4,4<i>a</i>,8,8<i>a</i>-tetrahydro-3-hydroxy-1-methyl-, methyl ester, (1<i>S</i>,3<i>S</i>,4<i>a</i>,8<i>S</i>,8<i>a</i>5)-</p> <p>► Key Physical Properties Spectra</p>	<p>Score: 98</p> <p><input type="checkbox"/> 9. 94516-24-2 </p> <p>~3 </p> <p>Absolute stereochemistry.</p> <p>C₁₇H₂₆O₁₂ 1<i>H</i>,3<i>H</i>-Pyrano[3,4-<i>c</i>]pyran-5-carboxylic acid, 8-(β-D-glucopyranosyloxy)-4,4<i>a</i>,8,8<i>a</i>-tetrahydro-3-hydroxy-1-(hydroxymethyl)-, methyl ester, (1<i>R</i>,3<i>S</i>,4<i>a</i>,8<i>S</i>,8<i>a</i>5)-</p> <p>► Key Physical Properties</p>
<p>Score: 98</p> <p><input type="checkbox"/> 10. 945721-10-8 </p> <p>~19 ~33 </p> <p>Absolute stereochemistry.</p> <p>C₁₉H₃₀O₁₁ 1<i>H</i>,3<i>H</i>-Pyrano[3,4-<i>c</i>]pyran-5-carboxylic acid, 3-ethoxy-8-(β-D-glucopyranosyloxy)-4,4<i>a</i>,8,8<i>a</i>-tetrahydro-1-methyl-, methyl ester, (1<i>S</i>,3<i>R</i>,4<i>a</i>,8<i>S</i>,8<i>a</i>5)-</p> <p>► Key Physical Properties</p>	<p>Score: 98</p> <p><input type="checkbox"/> 11. 1116650-29-3 </p> <p>~6 </p> <p>Absolute stereochemistry.</p> <p>C₁₉H₃₀O₁₁ 1<i>H</i>,3<i>H</i>-Pyrano[3,4-<i>c</i>]pyran-5-carboxylic acid, 3-ethoxy-8-(β-D-glucopyranosyloxy)-4,4<i>a</i>,8,8<i>a</i>-tetrahydro-1-methyl-, methyl ester, (1<i>S</i>,3<i>S</i>,4<i>a</i>,8<i>S</i>,8<i>a</i>5)-</p> <p>► Key Physical Properties</p>	<p>Score: 98</p> <p><input type="checkbox"/> 12. 2160597-75-9 </p> <p>~1 </p> <p>Absolute stereochemistry.</p> <p>C₁₉H₃₀O₁₁ 1<i>H</i>,3<i>H</i>-Pyrano[3,4-<i>c</i>]pyran-5-carboxylic acid, 3-ethoxy-8-(β-D-glucopyranosyloxy)-4,4<i>a</i>,8,8<i>a</i>-tetrahydro-1-methyl-, methyl ester, (1<i>R</i>,3<i>R</i>,4<i>a</i>,8<i>S</i>,8<i>a</i>5)-</p> <p>► Key Physical Properties</p>

