

Supporting Information

Rec. Nat. Prod. 10:1 (2016) 113-116

A new 8',9'-dinor 8,4'-oxyneolignan Glucoside from *Dendrobium Aurantiacum* var. *Denneanum*

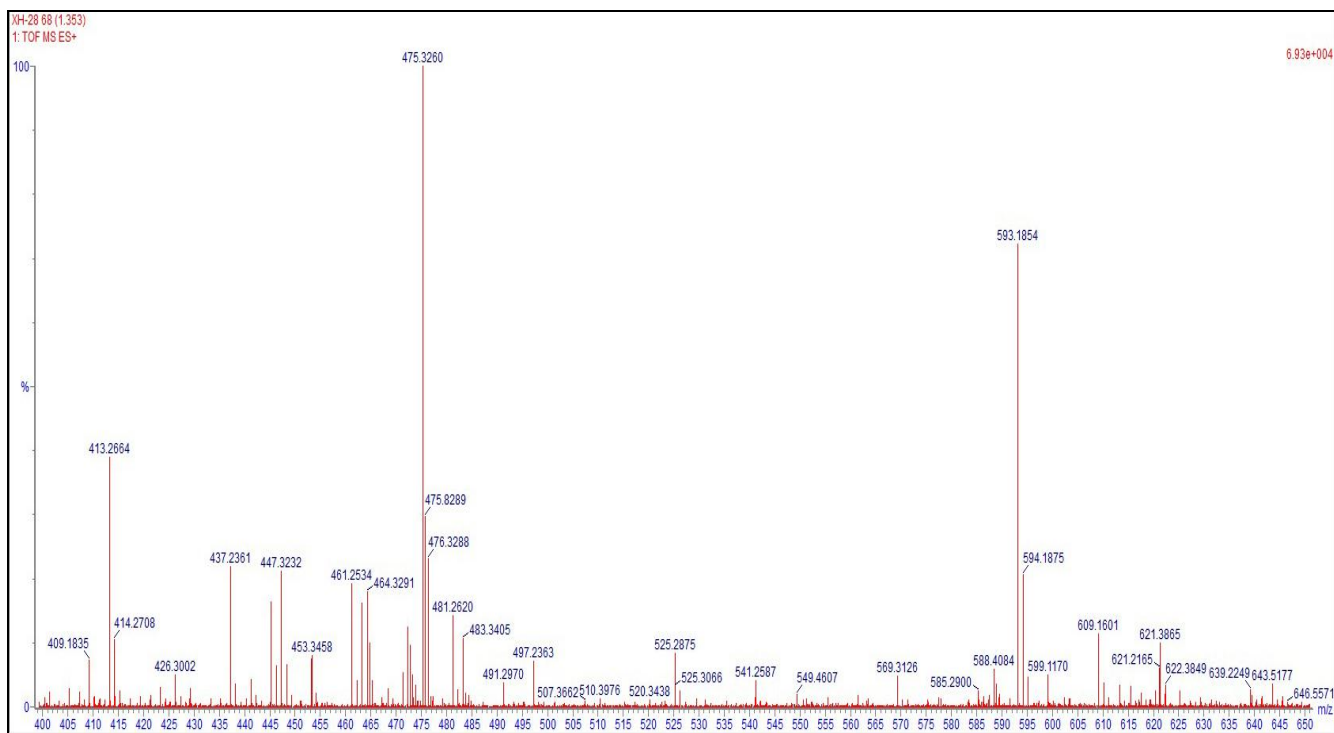
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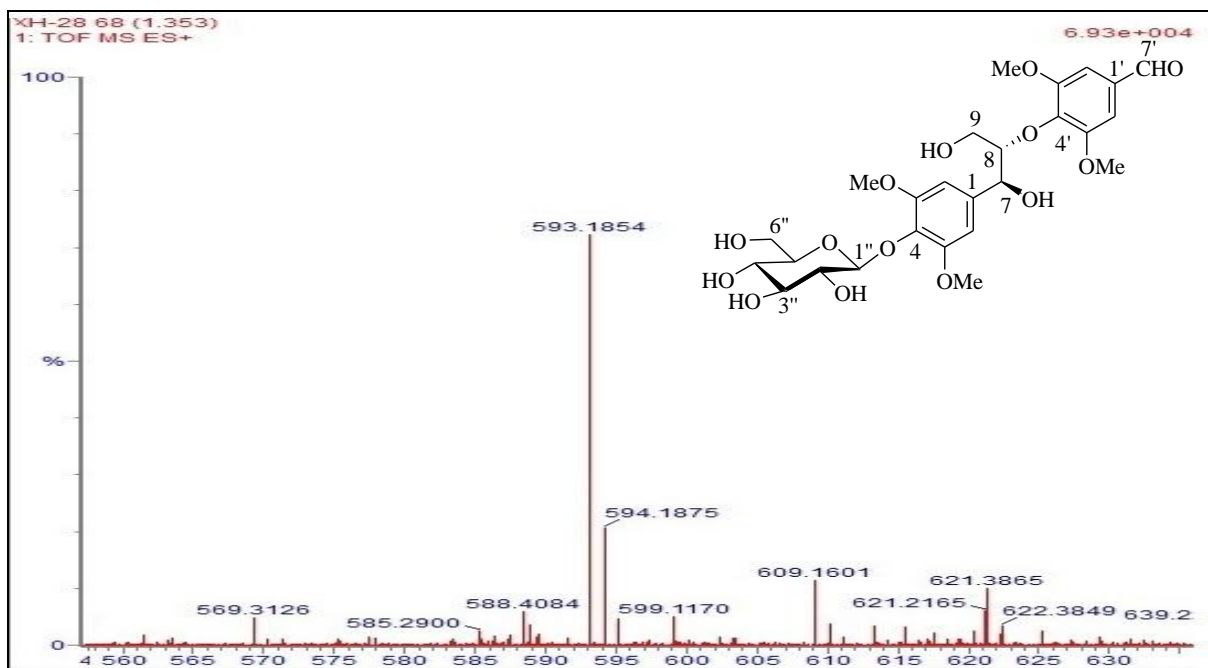
² School of Pharmacy, Chengdu University of Traditional Chinese Medicine, Chengdu, P. R. China

³ Sichuan Wan'an Dendrobe Industry Development Co., Ltd, Chengdu, P. R. China

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S1: HRESI-MS Spectrum of Compound **1** ((-)-(7*S*,8*S*)-4-Hydroxy-3,3',5,5'-tetramethoxy-8',9'-dinor-8,4'-oxyneoligna-7,9-diol-7'-al 4-O- β -D-glucopyranoside)



Single Mass Analysis

Tolerance = 1.0 mDa / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

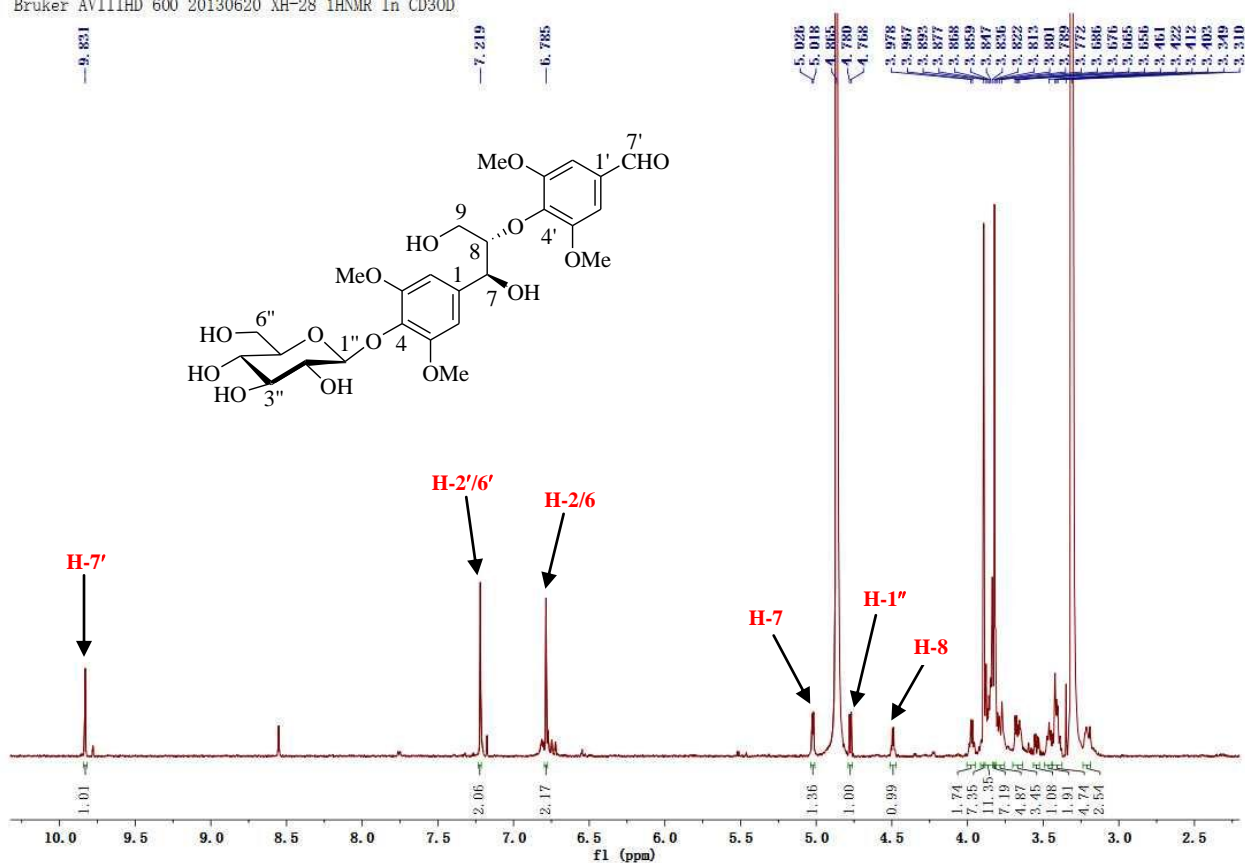
247 formula(e) evaluated with 1 results within limits (up to 100 closest results for each mass)

Elements Used:

Mass	Calc. Mass	mDa	PPM	DBE	Formula	i-FIT	i-FIT Norm	Fit Conf %	C	H	O	Na
593.1854	593.1846	0.8	1.3	9.5	C ₂₆ H ₃₄ O ₁₄ Na	308.1	n/a	n/a	26	34	14	1

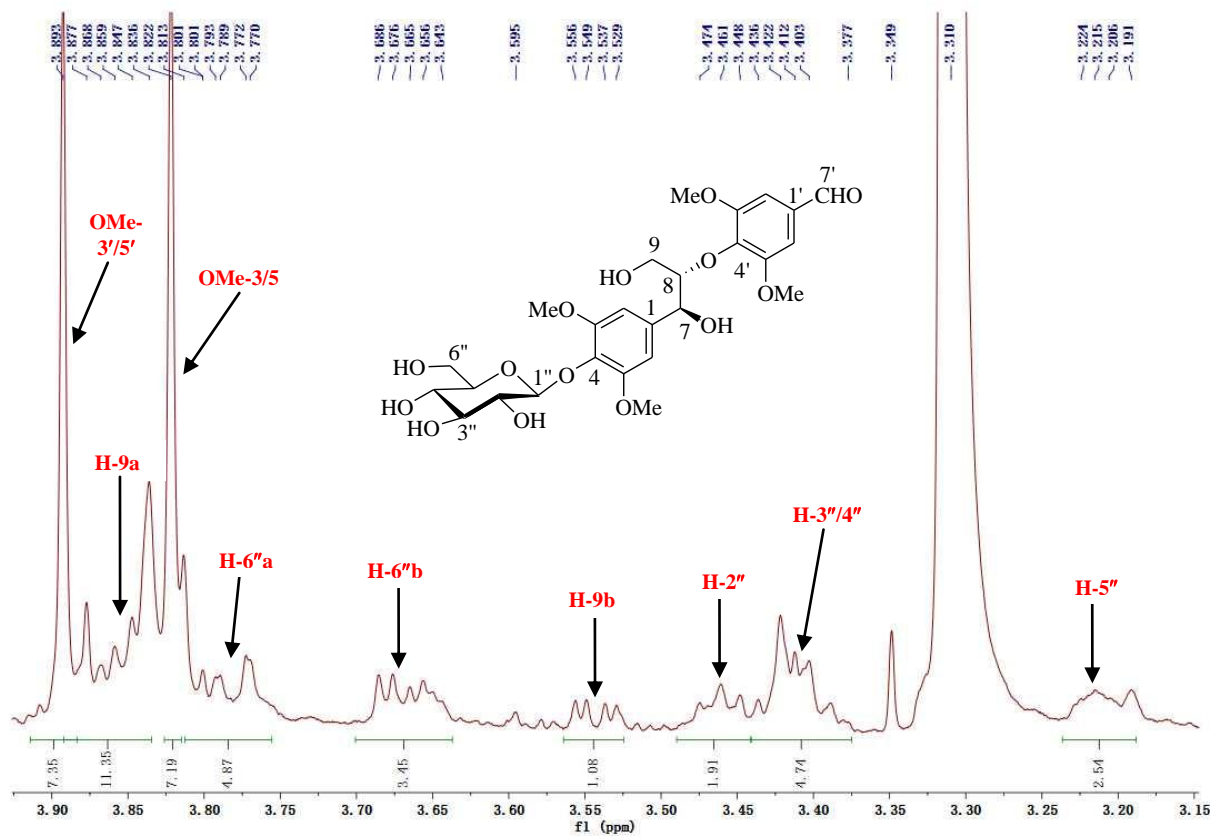
S2: Expansion of HRESI-MS Spectrum of Compound 1

Bruker AVIIIHD 600 20130620 XH-28 1HNMR In CD3OD



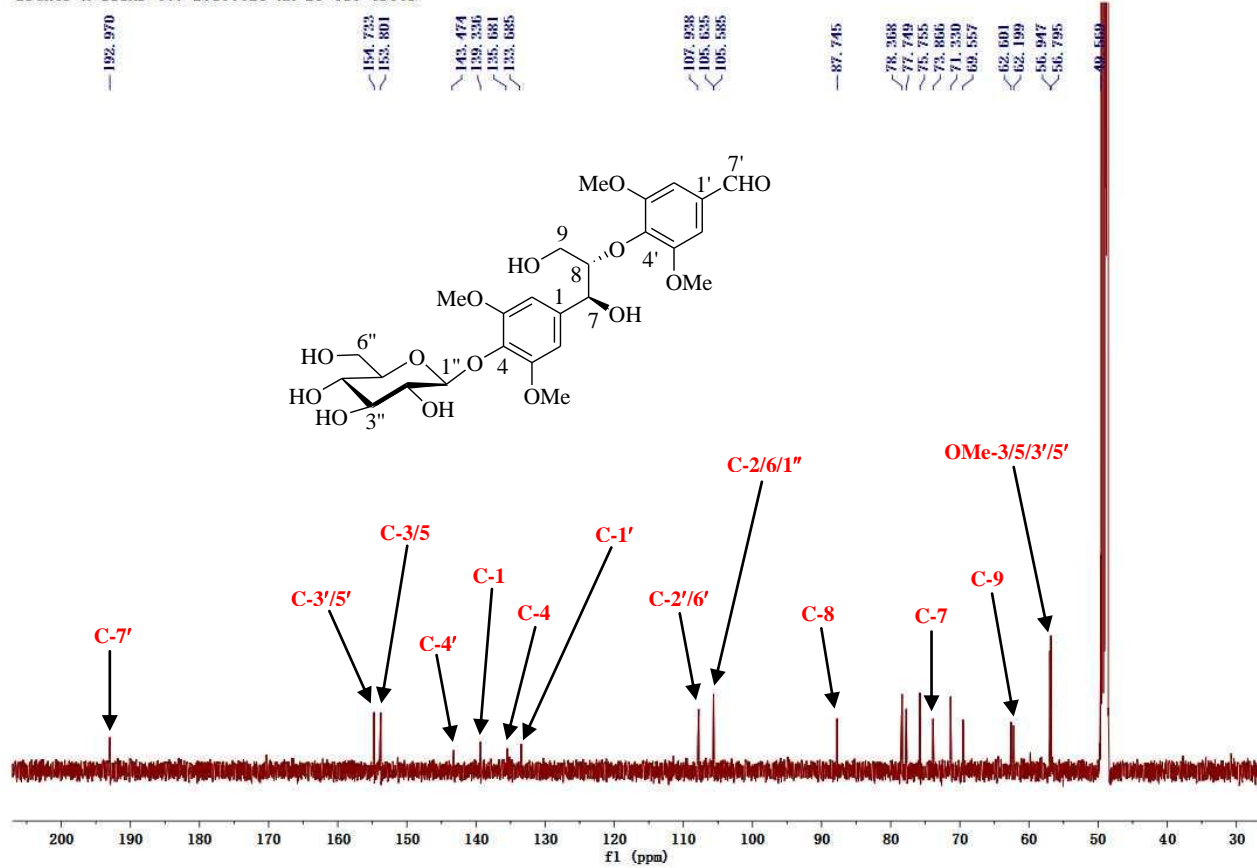
S3: $^1\text{H-NMR}$ (600 MHz, CD_3OD) Spectrum of Compound **1**

(-)-(7*S*,8*S*)-4-Hydroxy-3,3',5,5'-tetramethoxy-8',9'-dinor-8,4'-oxyneoligna-7,9-diol-7'-al 4-*O*- β -D-glucopyranoside (**1**): Colorless gum. $[\alpha]_{\text{D}}^{20} = -31.2$ ($c = 0.04$, MeOH). IR ν_{max} (KBr): 3359, 2923, 2853, 1596, 1503, 1461, 1422, 1332, 1123, 1057, 875, 799, 713 cm^{-1} . $^1\text{H-NMR}$ (CD_3OD , 600 MHz), δ : 9.83 (1H, s, H-7'), 7.22 (2H, s, H-2'/6'), 6.69 (2H, s, H-2/6), 5.02 (1H, d, H-7), 4.77 (1H, d, H-1''), 4.49 (1H, m, H-8), 3.89 (6H, s, OMe-3'/5'), 3.84 (1H, m, H-9a), 3.82 (6H, s, OMe-3/5), 3.78 (1H, dd, H-6''a), 3.67 (1H, dd, H-6''b), 3.54 (1H, dd, H-9b), 3.46 (1H, m, H-2''), 3.41 (2H, m, H-3''/4''), 3.20 (1H, m, H-5''). $^{13}\text{C-NMR}$ (CD_3OD , 150 MHz), δ : 193.0 (C-7'), 154.7 (C-3'/5'), 153.8 (C-3/5), 143.5 (C-4'), 139.3 (C-1), 135.7 (C-4), 133.7 (C-1'), 107.9 (C-2'/6'), 105.6 (C-2/6/1''), 87.7 (C-8), 78.4 (C-5''), 77.7 (C-3''), 75.8 (C-2''), 73.9 (C-7), 71.3 (C-4''), 62.6 (C-6''), 62.2 (C-9), 56.9 (OMe-3/5), 56.8 (OMe-3'/5'). HRESIMS: m/z 593.1854 $[\text{M}+\text{Na}]^+$ (calcd. for $\text{C}_{26}\text{H}_{34}\text{O}_{14}\text{Na}$, 593.1846).

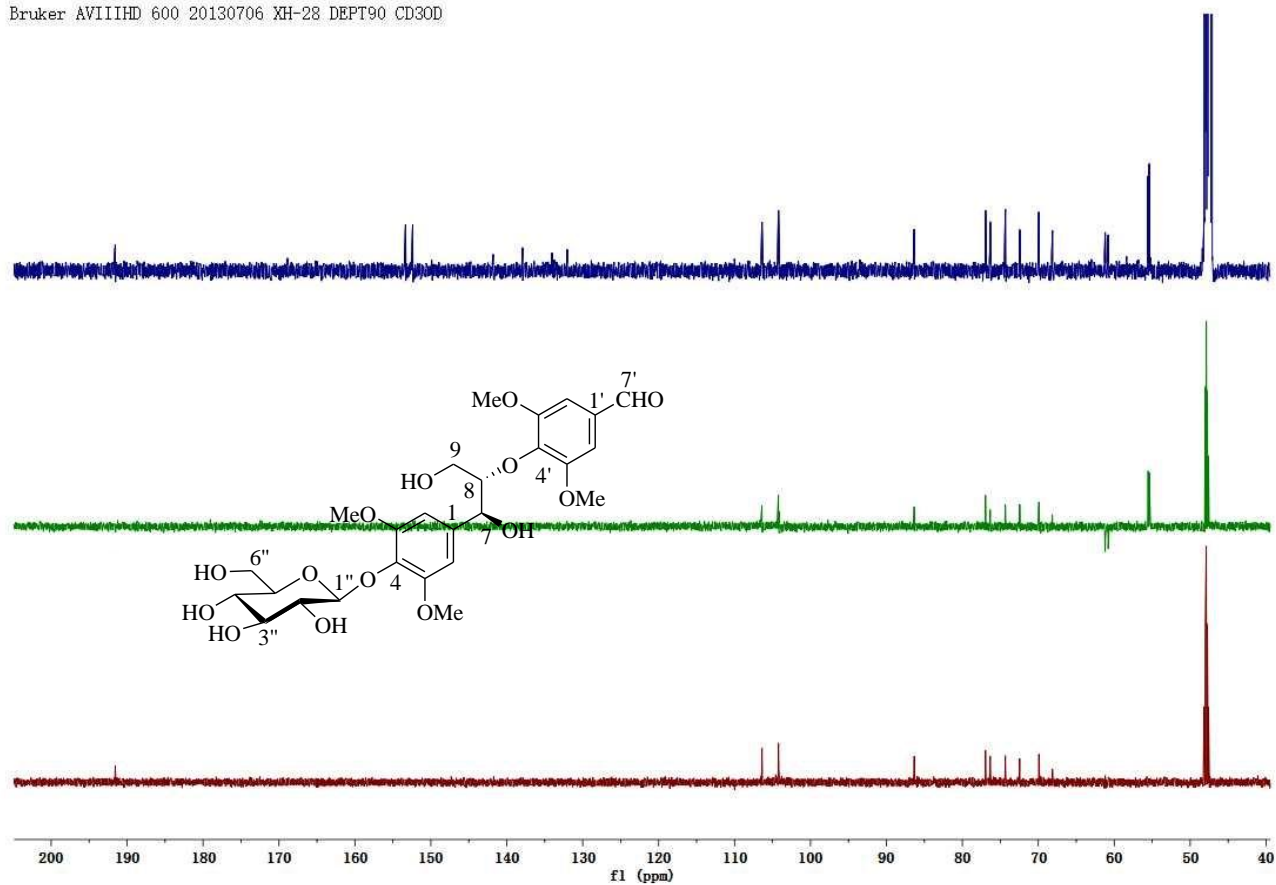


S4: Expansion of the ¹H-NMR Spectrum of Compound **1** (From 3.15 to 3.95 ppm)

Bruker AVIIIHD 600 20130628 XH-28 C13 CD3OD

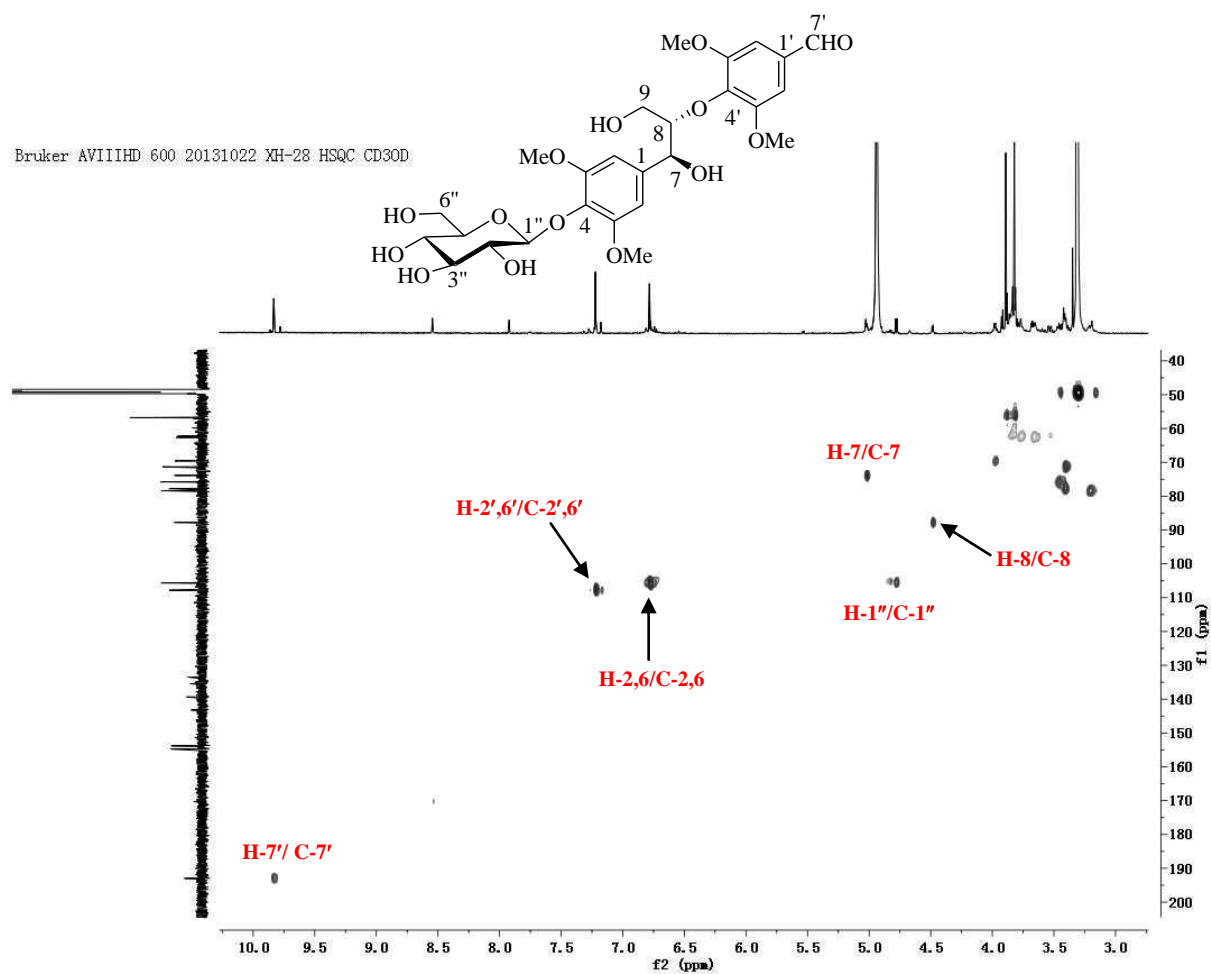


S5: ¹³C-NMR (150 MHz, CD₃OD) Spectrum of Compound 1

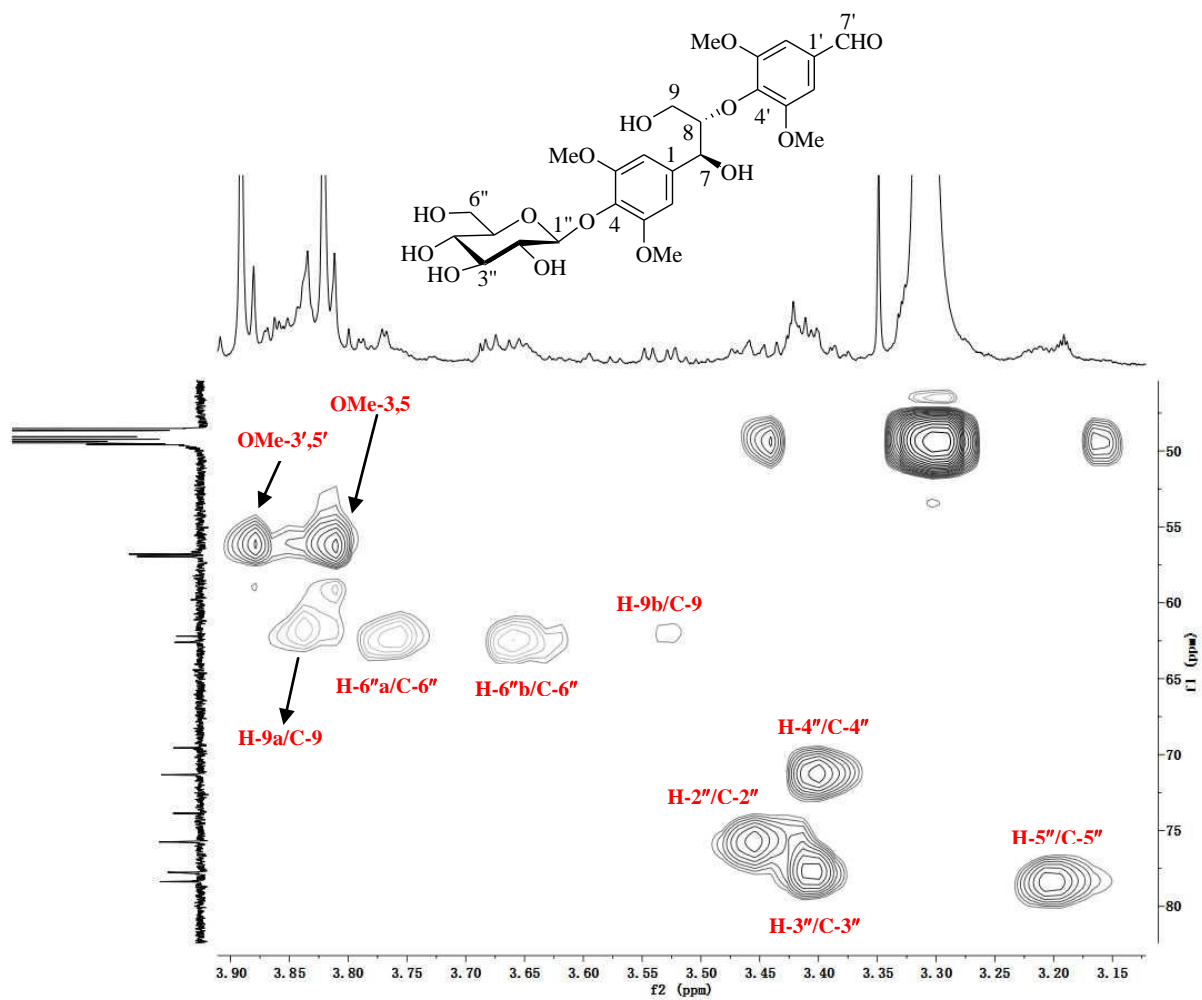


S6: DEPT Spectrum of Compound 1

Bruker AVIIIHD 600 20131022 XH-28 HSQC CD30D

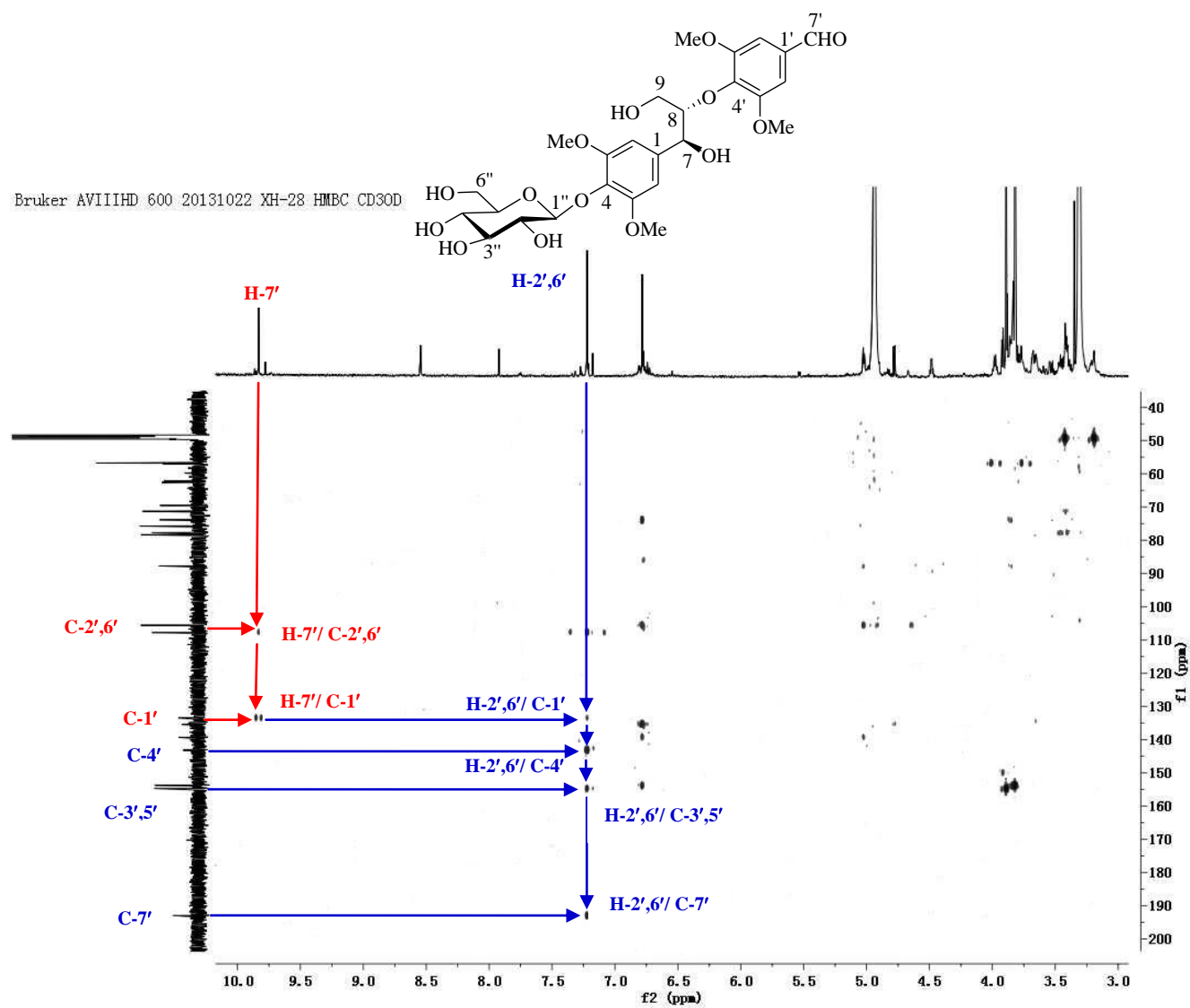


S7: HSQC (600 MHz) Spectrum of Compound 1

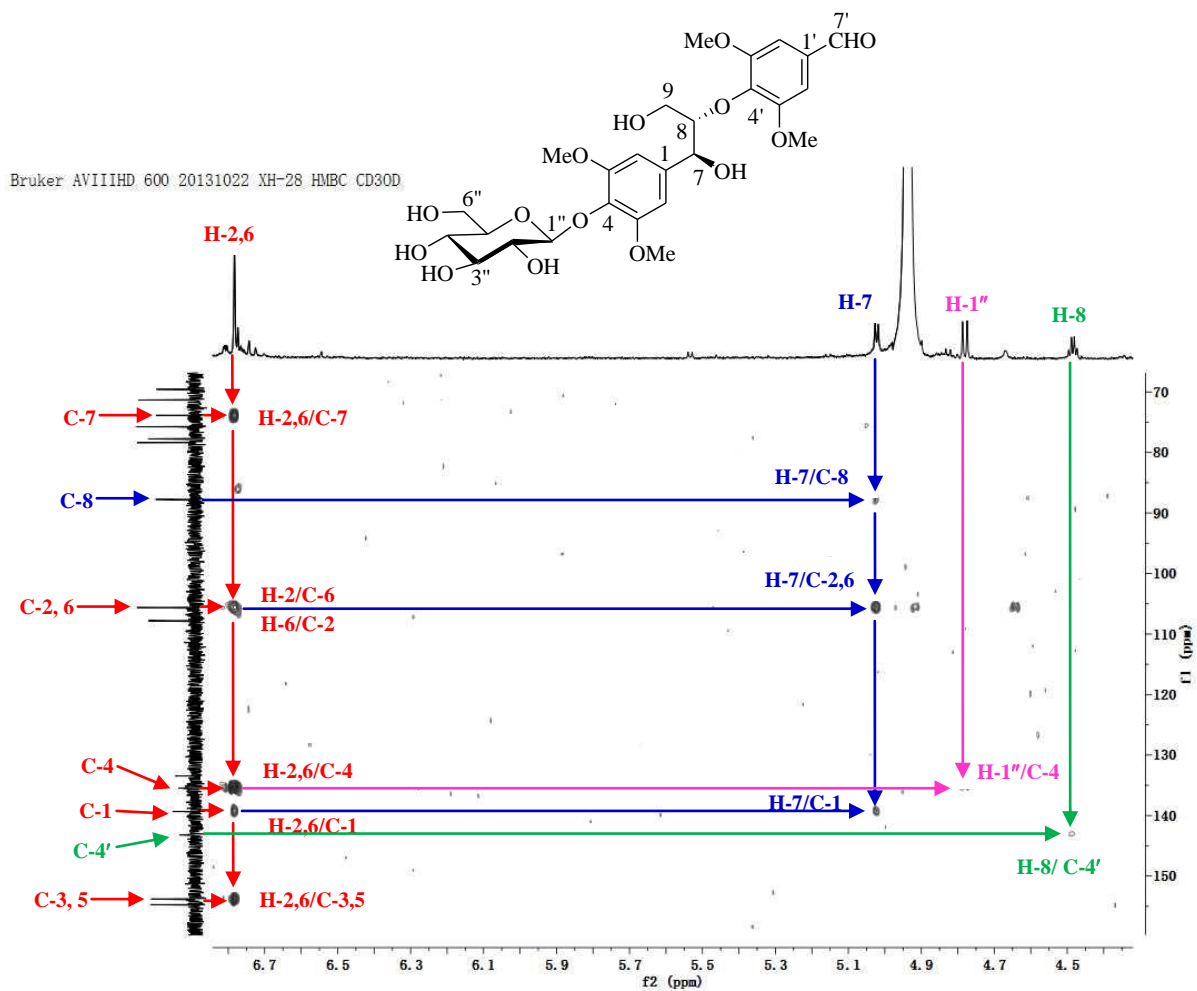


S8: Expansion of HSQC Spectrum of Compound 1 (From 3.08 to 3.93 ppm)

Bruker AVIIIHD 600 20131022 XH-28 HMBC CD3OD



S9: HMBC (600 MHz) Spectrum of Compound 1



S10: Expansion of HMBC Spectrum of Compound 1 (From 4.30 to 6.90 ppm)