

**Microbial Transformation of Diosgenin by *Cunninghamella blakesleana* AS 3.970
and Potential Inhibitory Effects on P-Glycoprotein of its Metabolites**

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S50 HSQC spectrum of metabolite **10**

S51 HMBC spectrum of metabolite **10**

S52 NOESY spectrum of metabolite **10**

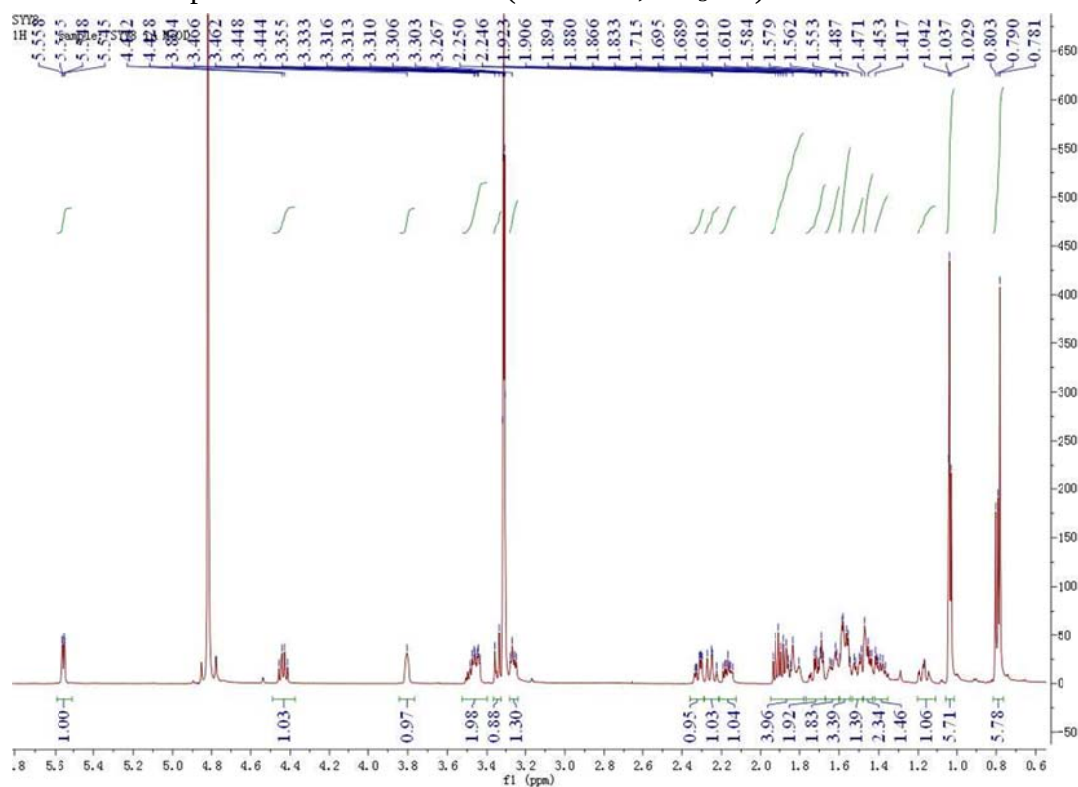
S53 HRESIMS spectrum of metabolite **10**

S54 ^1H NMR spectrum of metabolite **11** (500 MHz, CD_3OD)

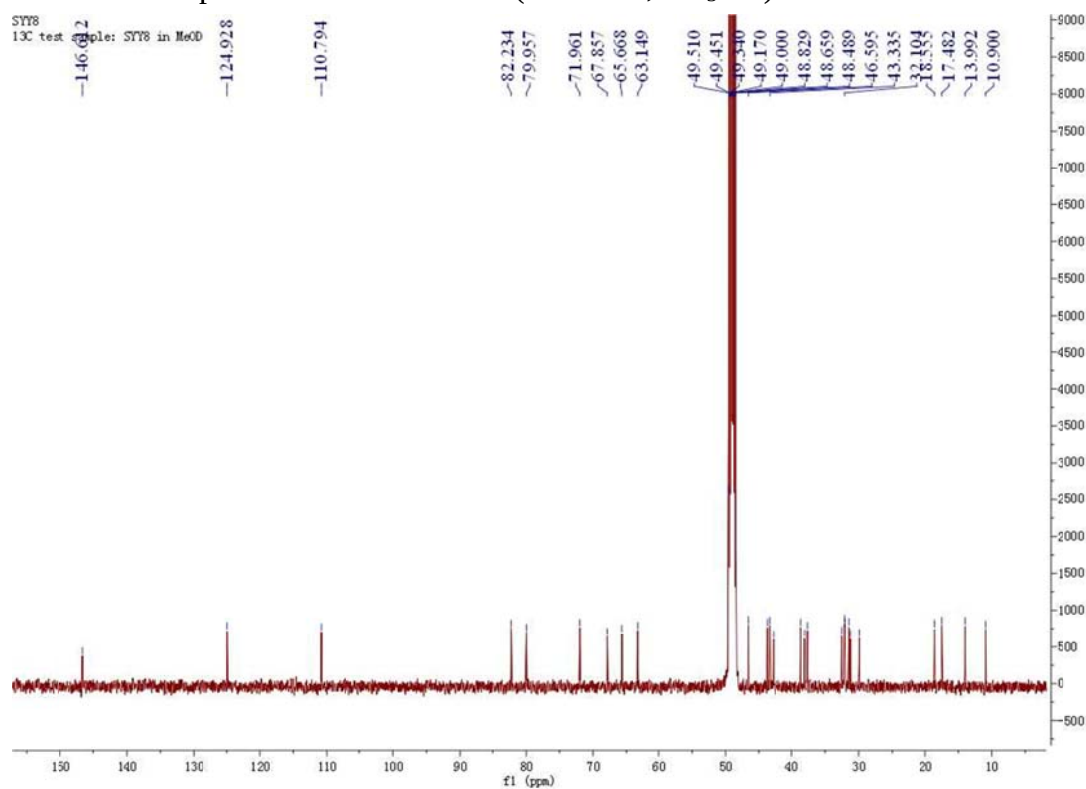
S55 ^{13}C NMR spectrum of metabolite **11** (125 MHz, CD_3OD)

S56 ESIMS spectrum of metabolite **11**

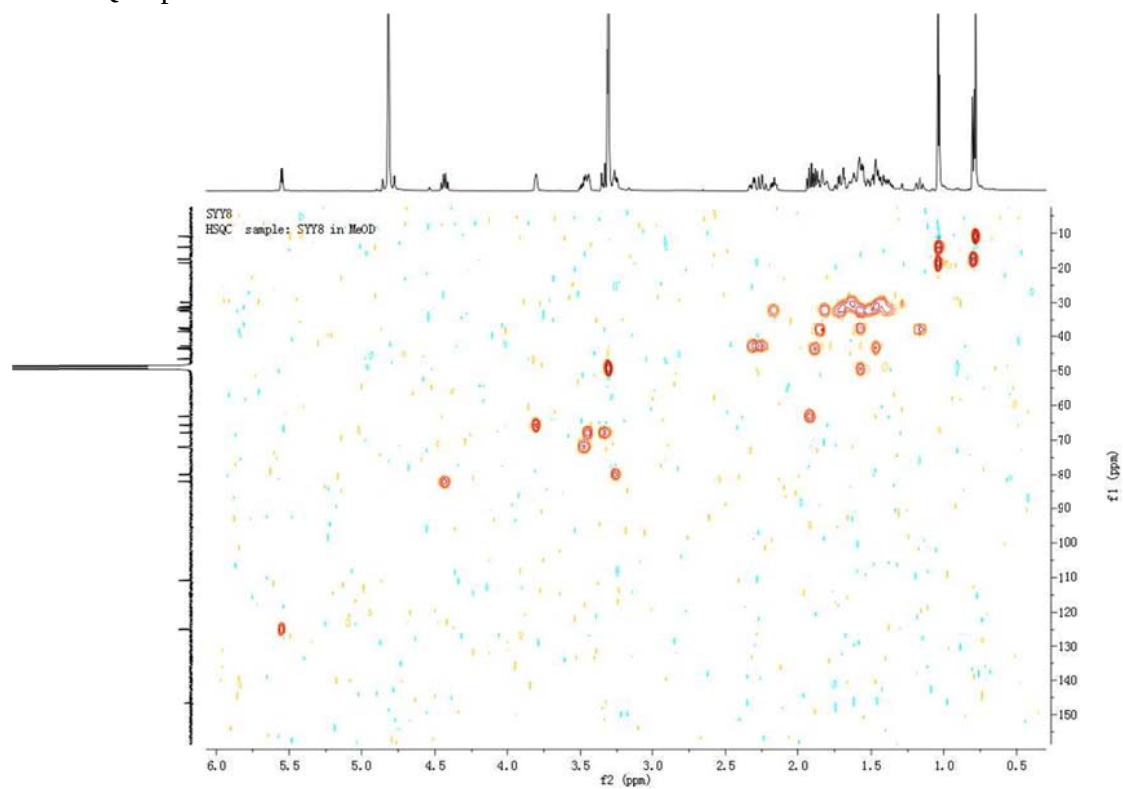
S1 ^1H NMR spectrum of metabolite **1** (500 MHz, CD_3OD)



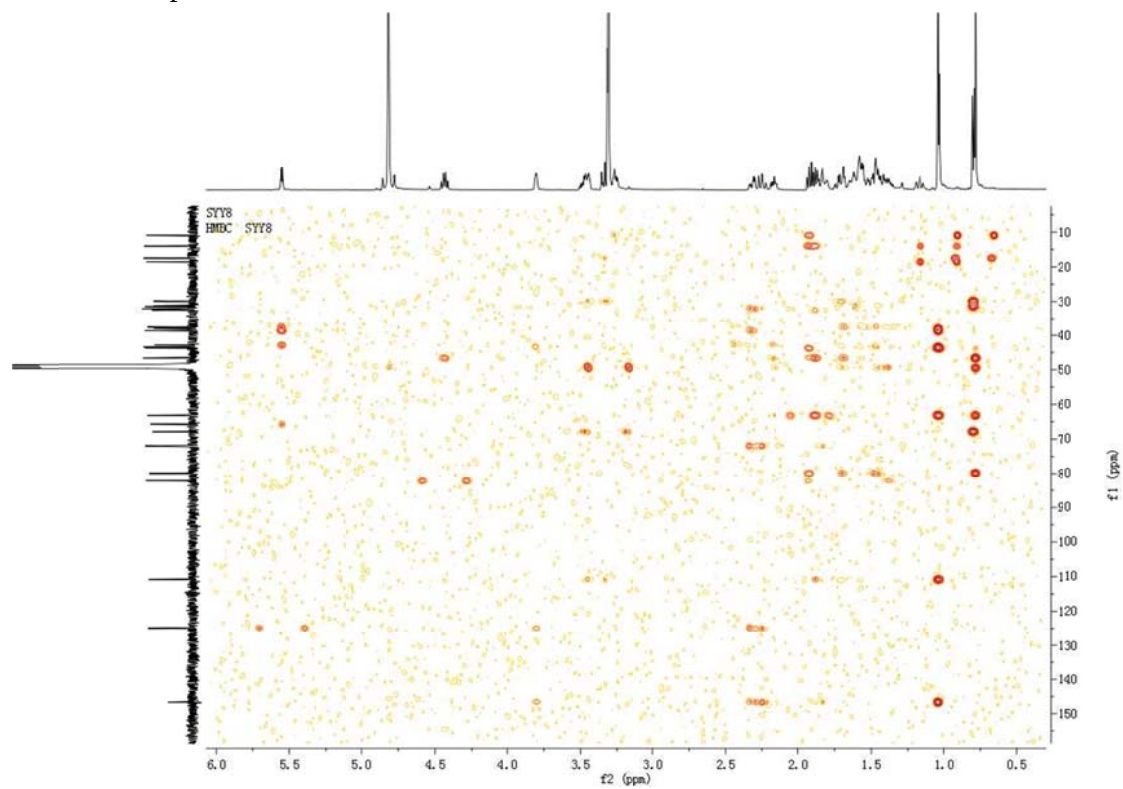
S2 ^{13}C NMR spectrum of metabolite **1** (125 MHz, CD_3OD)



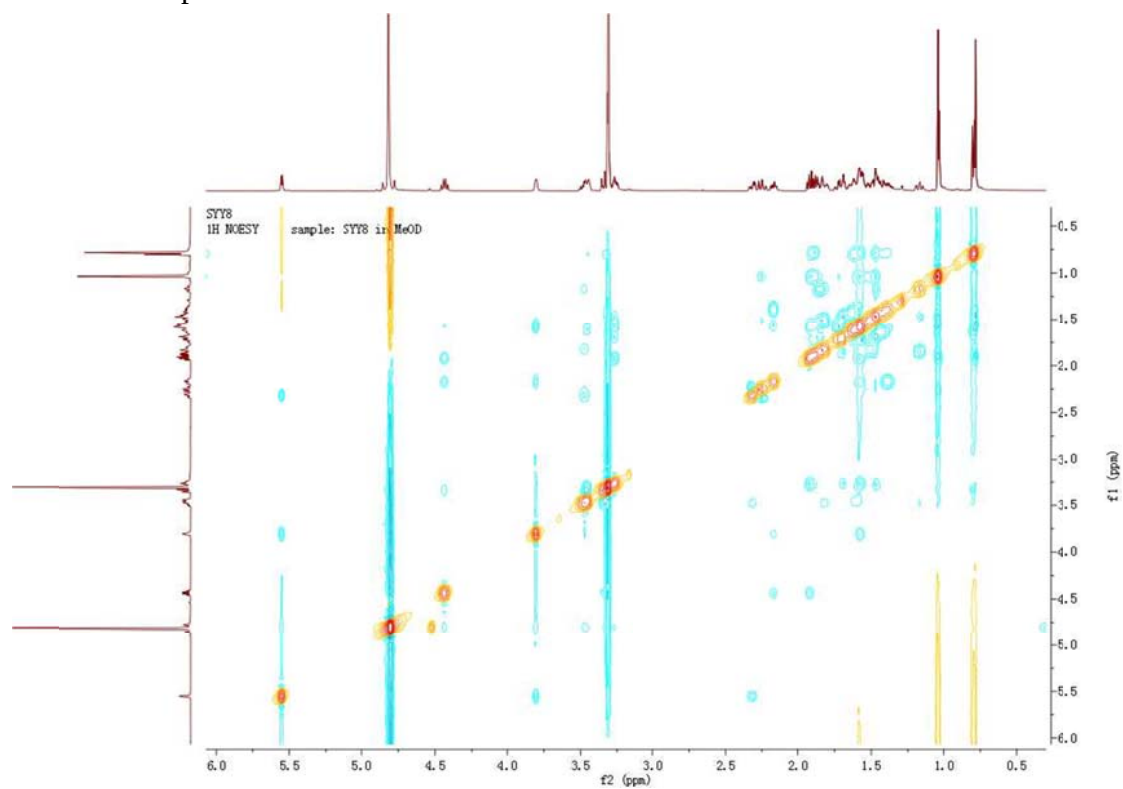
S3 HSQC spectrum of metabolite **1**



S4 HMBC spectrum of metabolite **1**

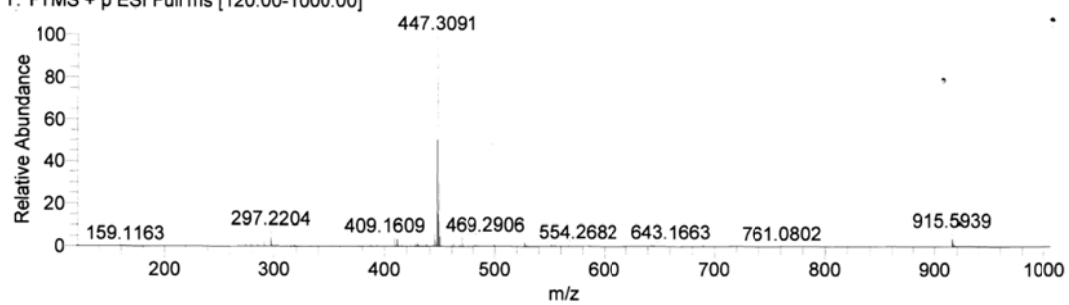


S5 NOESY spectrum of metabolite 1

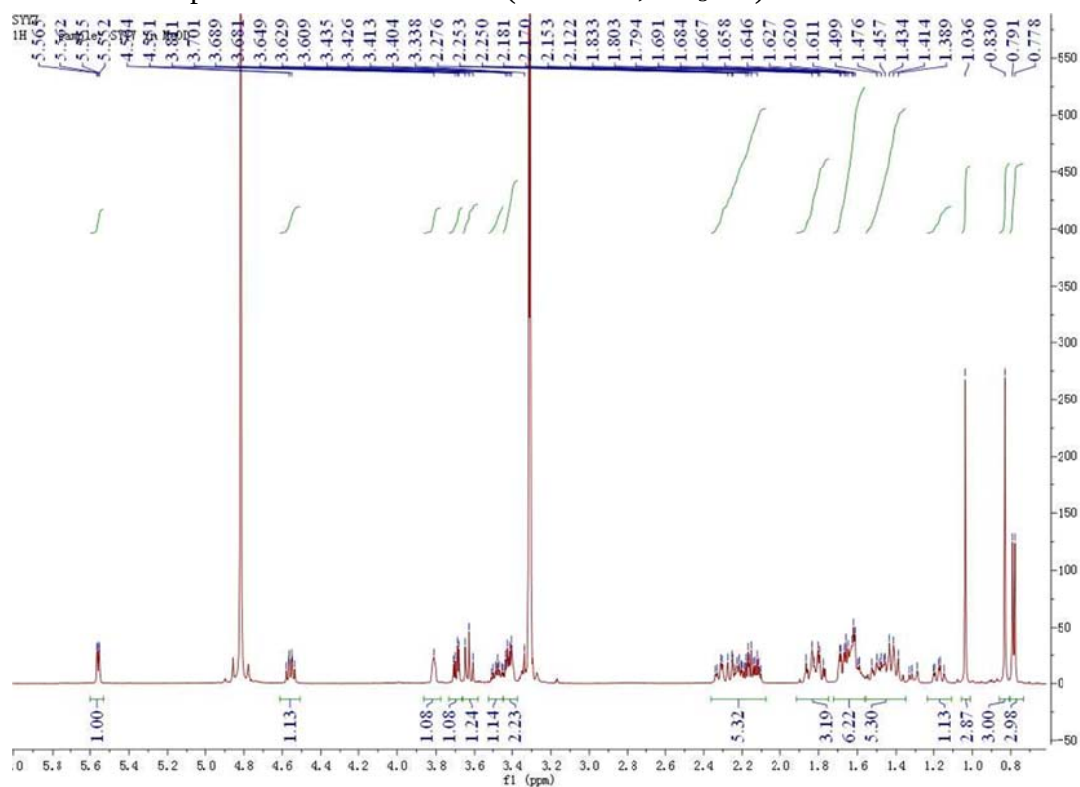


S6 HRESIMS spectrum of metabolite 1

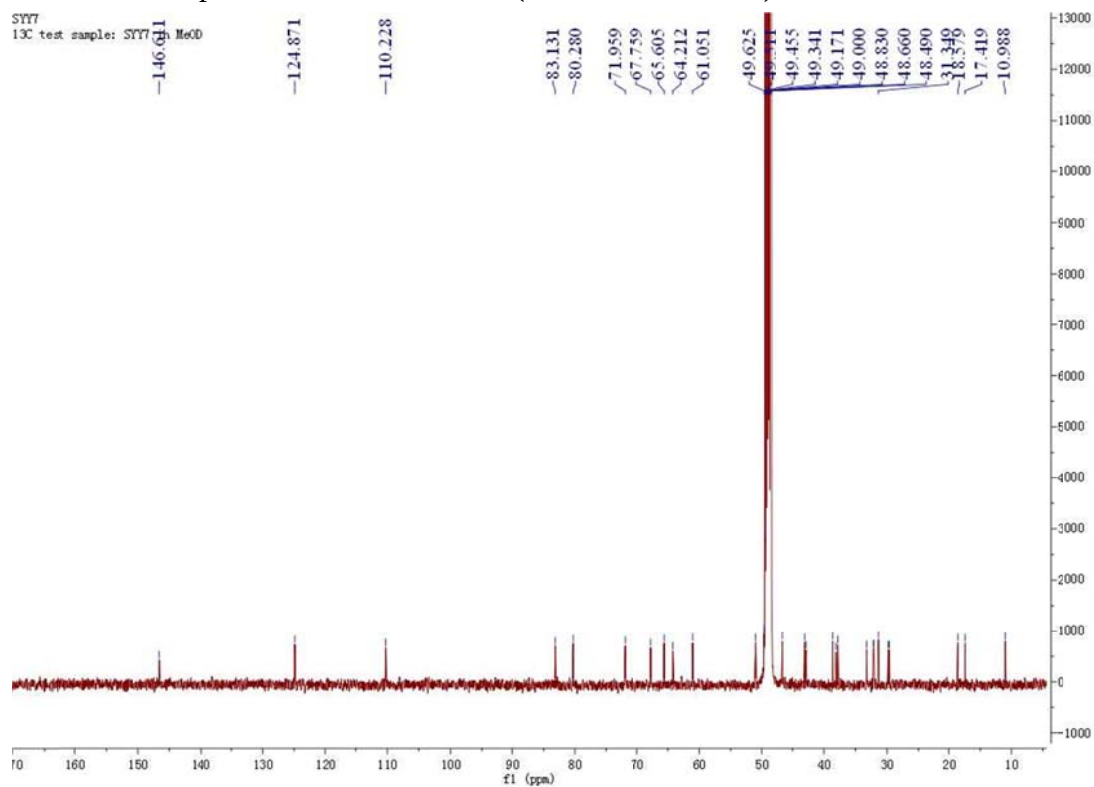
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T: FTMS + p ESI Full ms [120.00-1000.00]



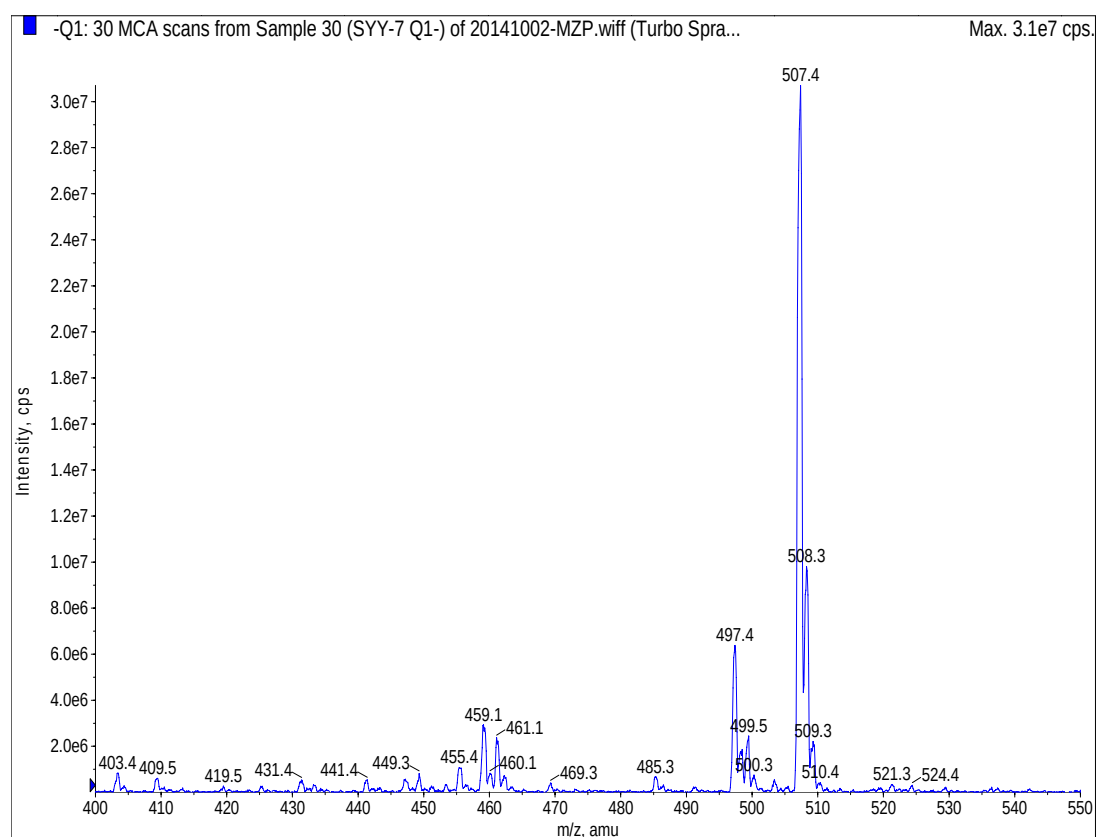
S7 ^1H NMR spectrum of metabolite **2** (500 MHz, CD_3OD)



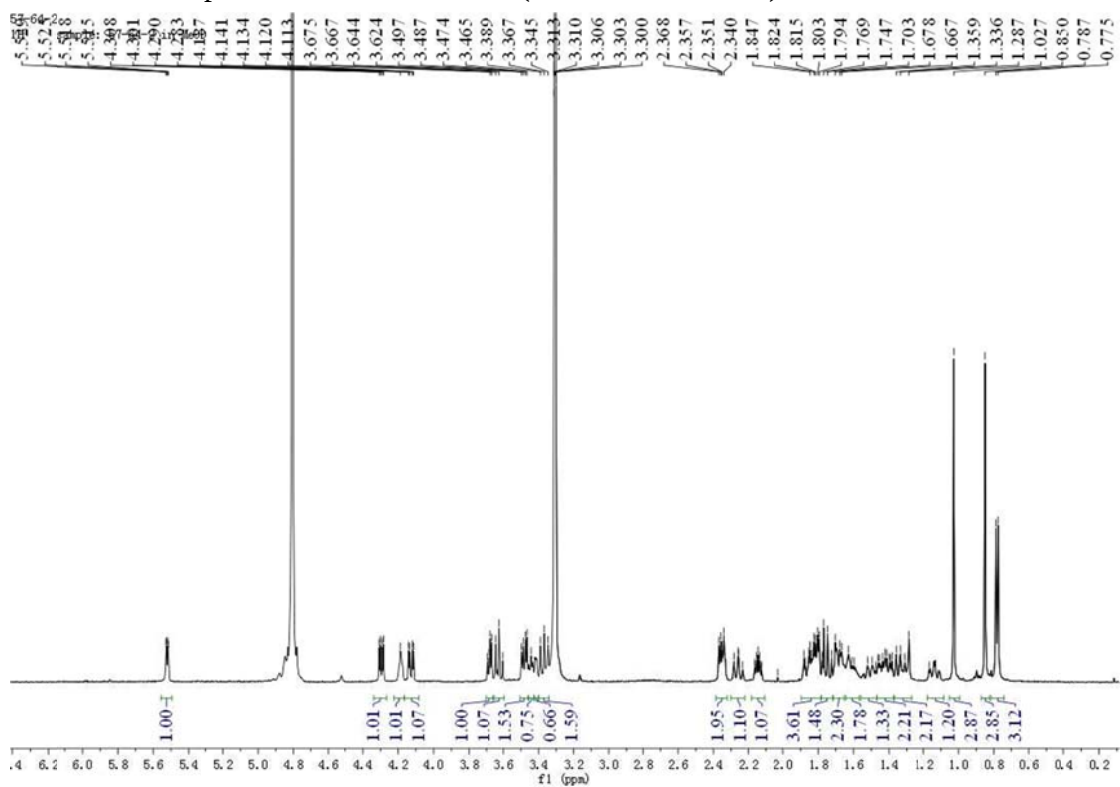
S8 ^{13}C NMR spectrum of metabolite **2** (125 MHz, CD_3OD)



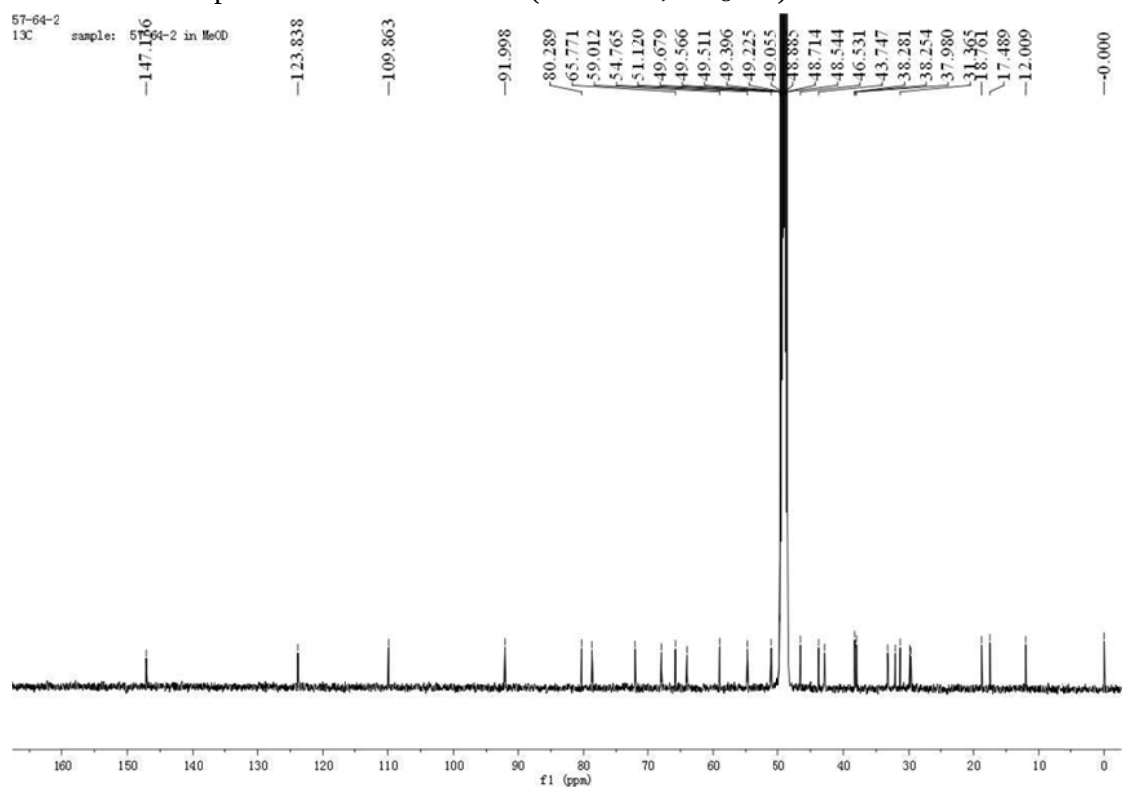
S9 ESIMS spectrum of metabolite 2



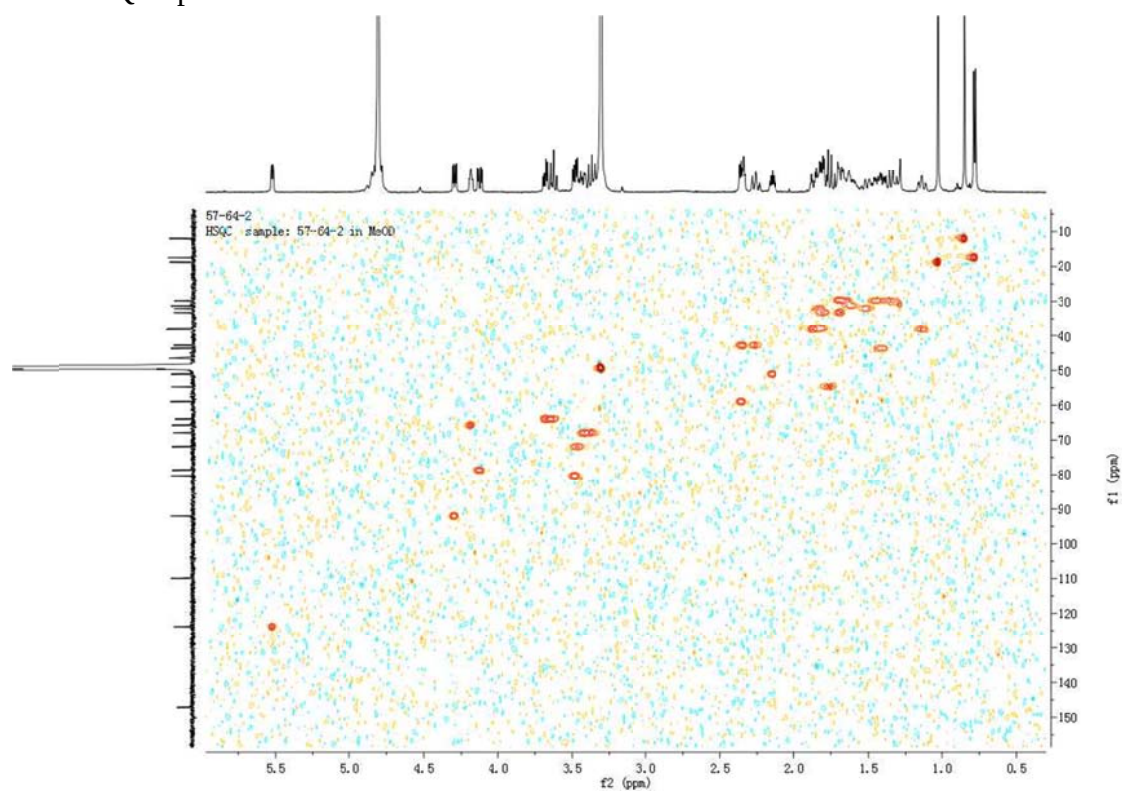
S10 ^1H NMR spectrum of metabolite 3 (500 MHz, CD_3OD)



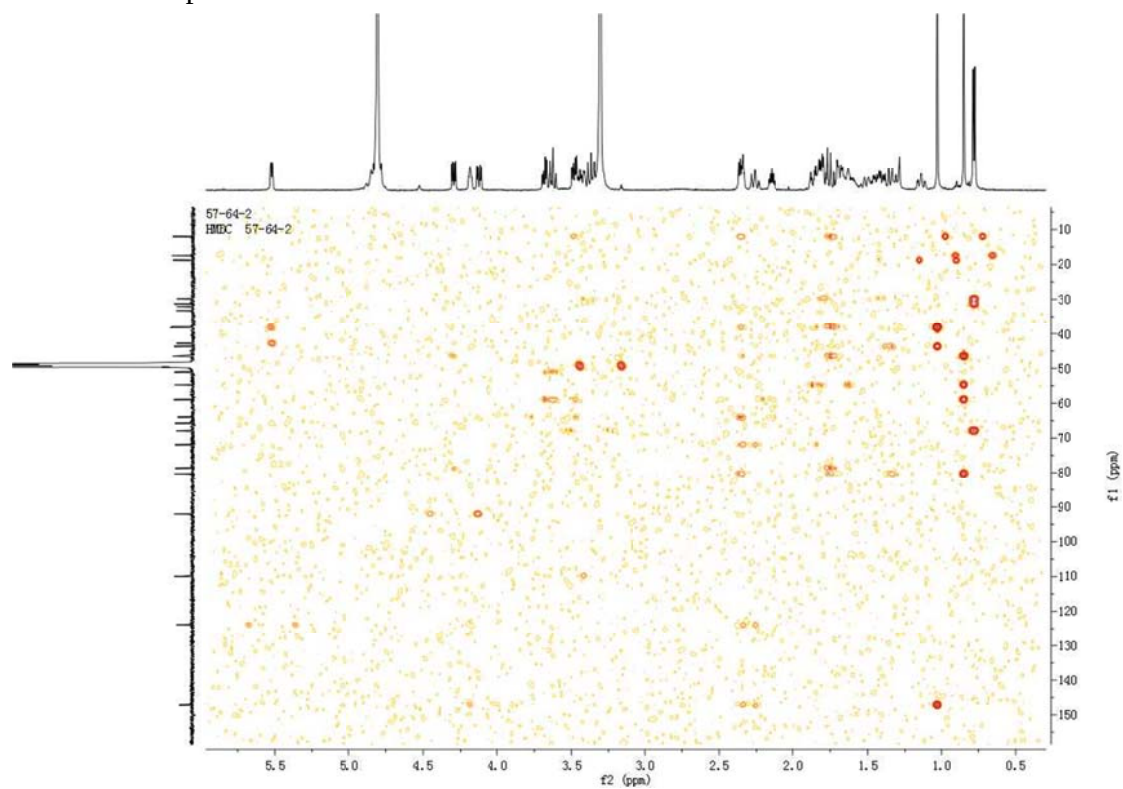
S11 ^{13}C NMR spectrum of metabolite **3** (125 MHz, CD_3OD)



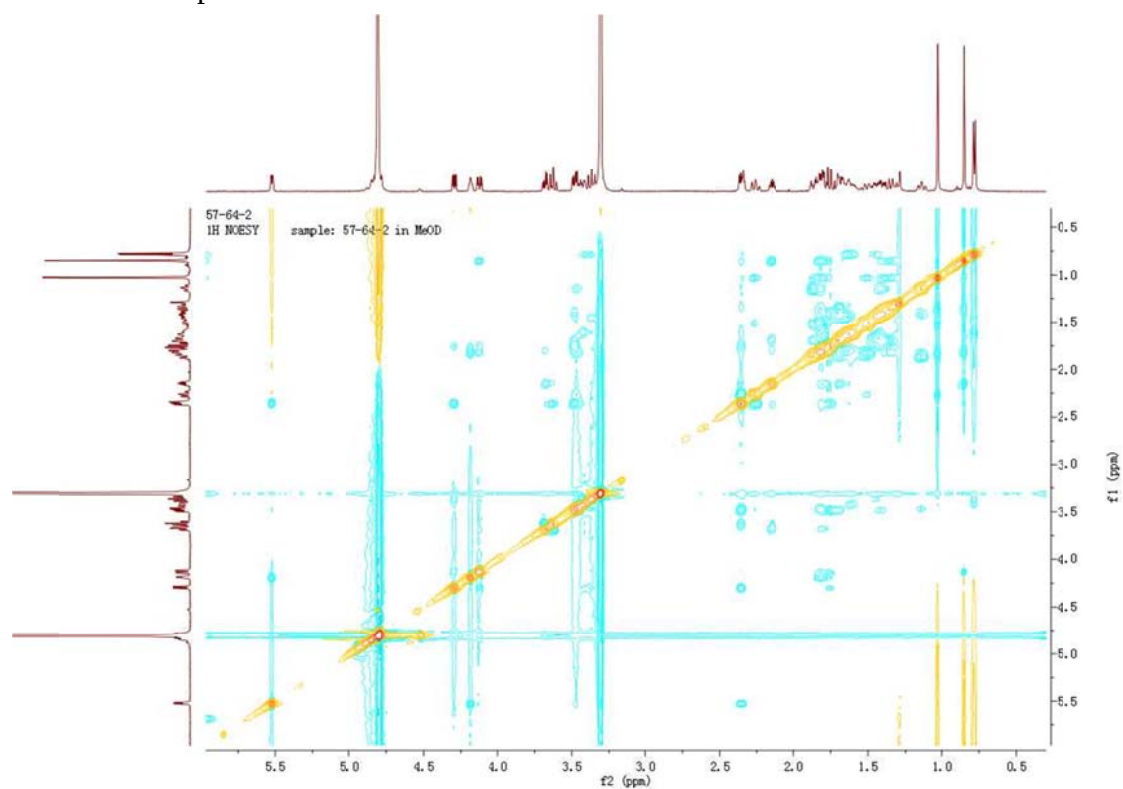
S12 HSQC spectrum of metabolite **3**



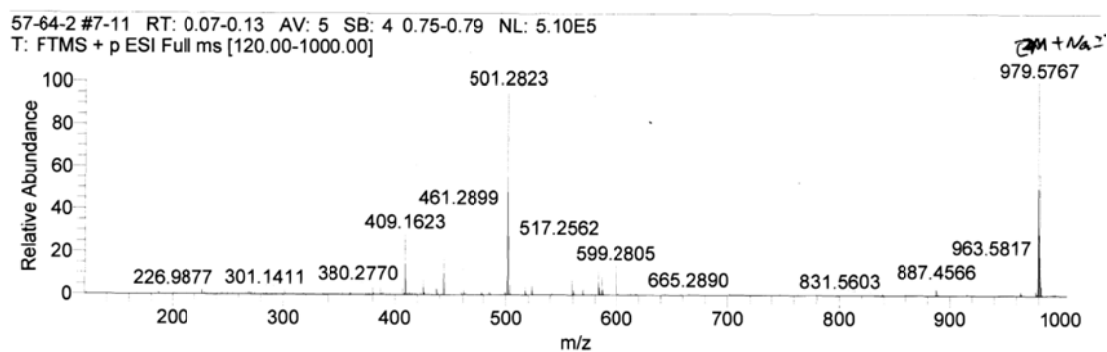
S13 HMBC spectrum of metabolite **3**



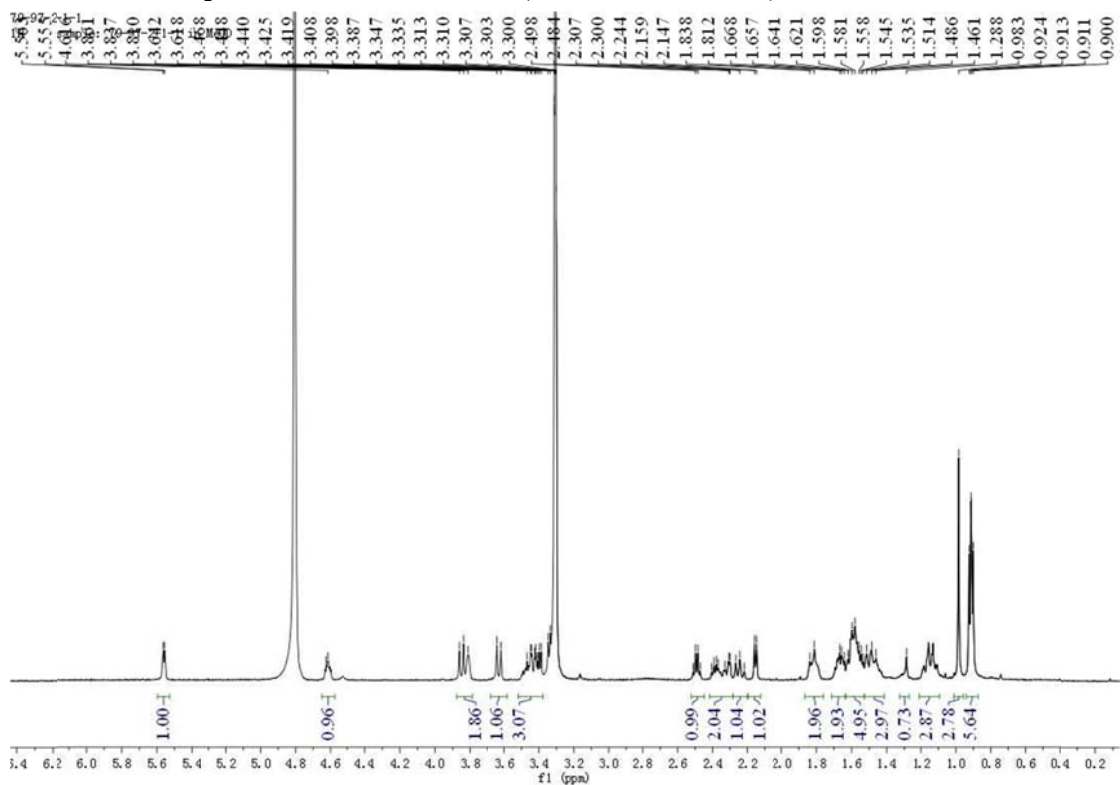
S14 NOESY spectrum of metabolite **3**



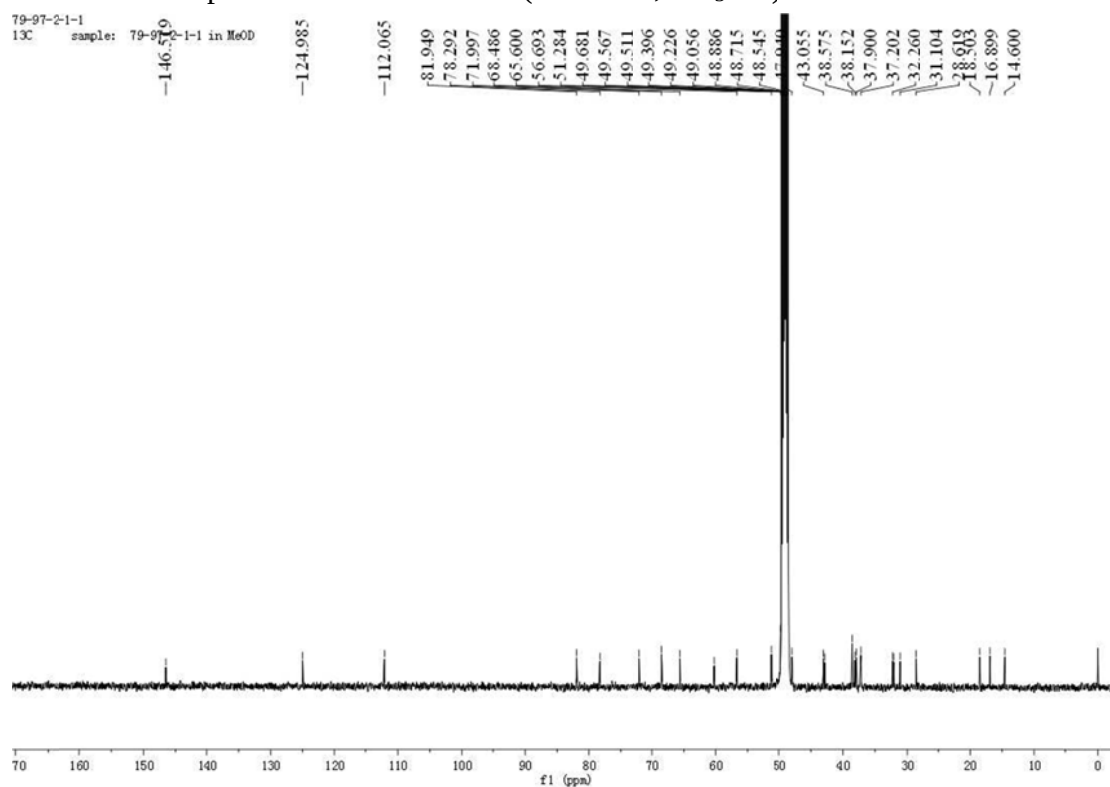
S15 HRESIMS spectrum of metabolite 3



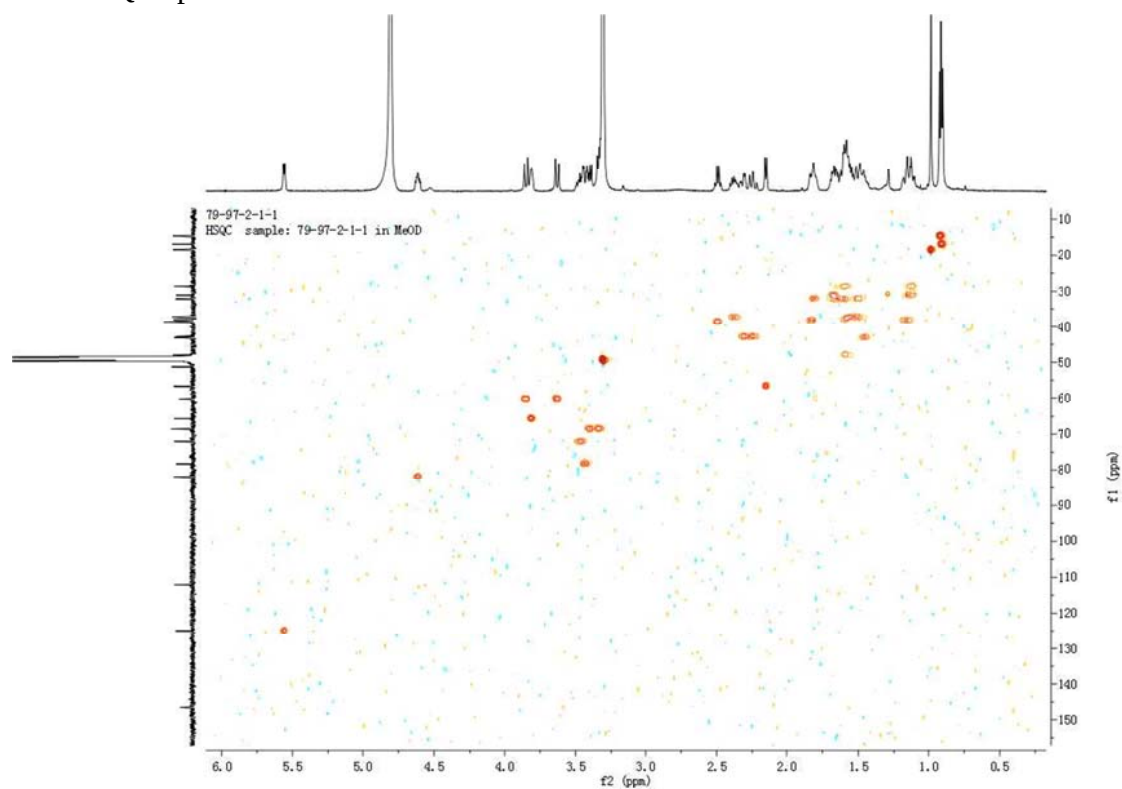
S16 ^1H NMR spectrum of metabolite 4 (500 MHz, CD_3OD)



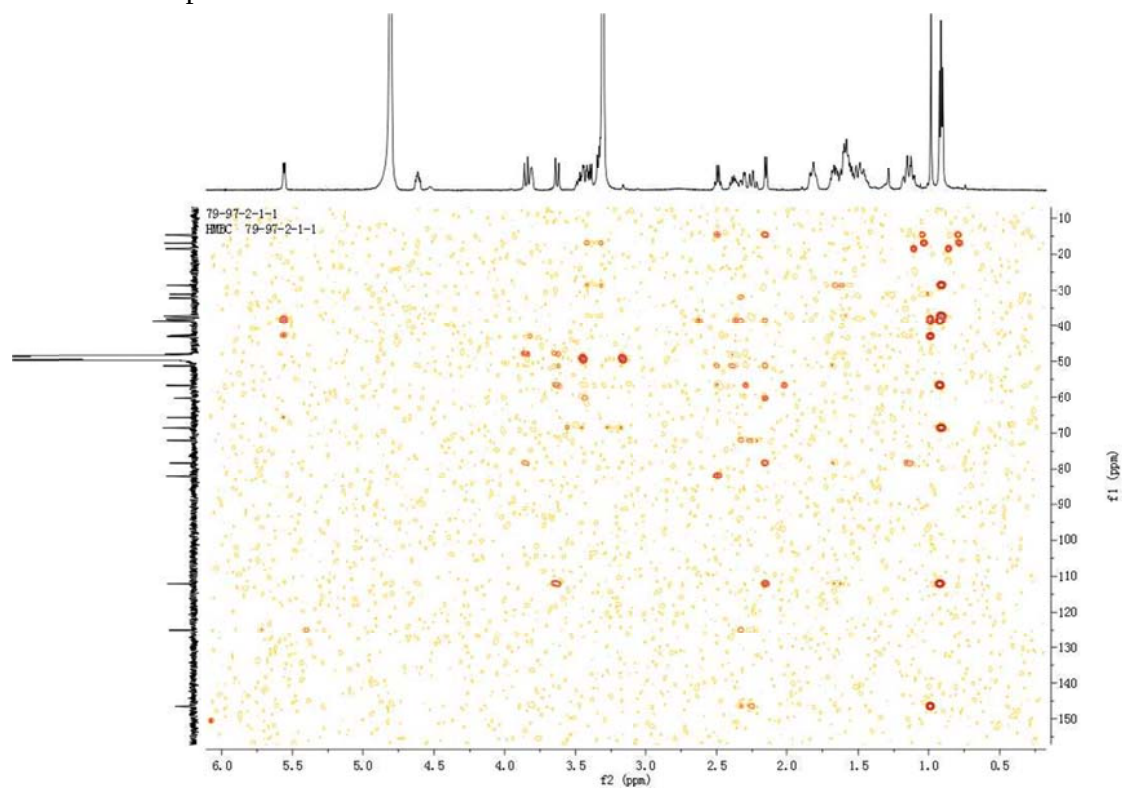
S17 ^{13}C NMR spectrum of metabolite **4** (125 MHz, CD_3OD)



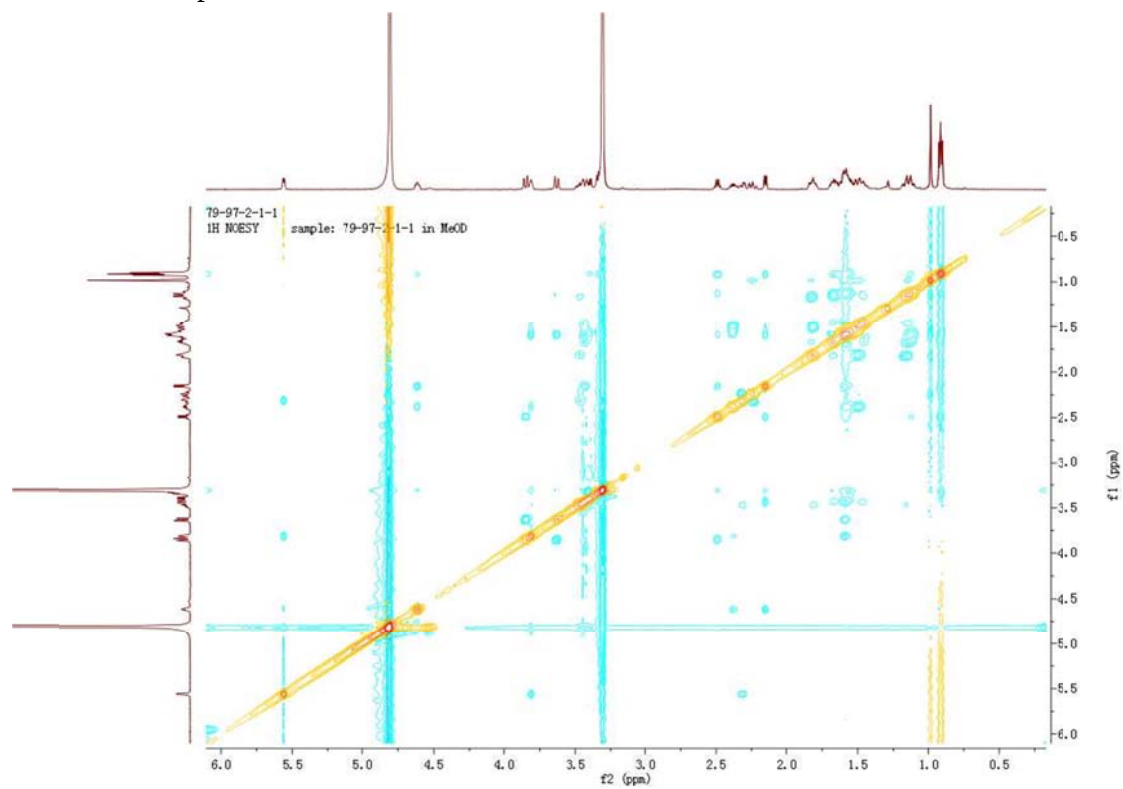
S18 HSQC spectrum of metabolite **4**



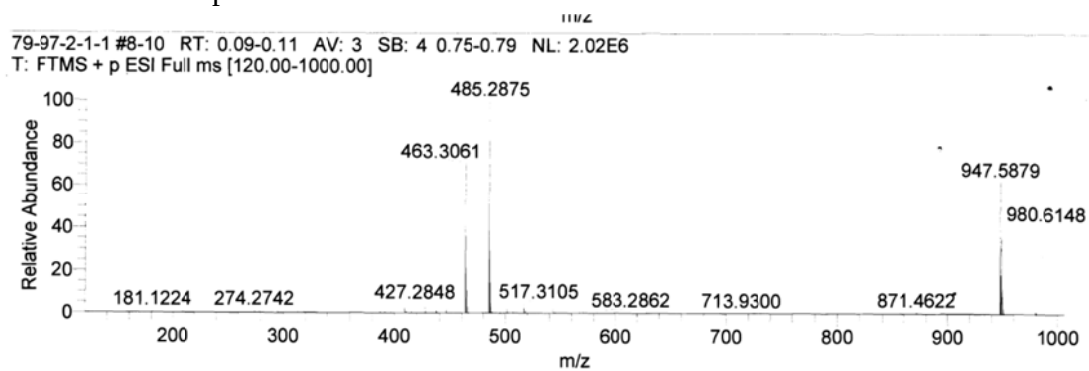
S19 HMBC spectrum of metabolite **4**



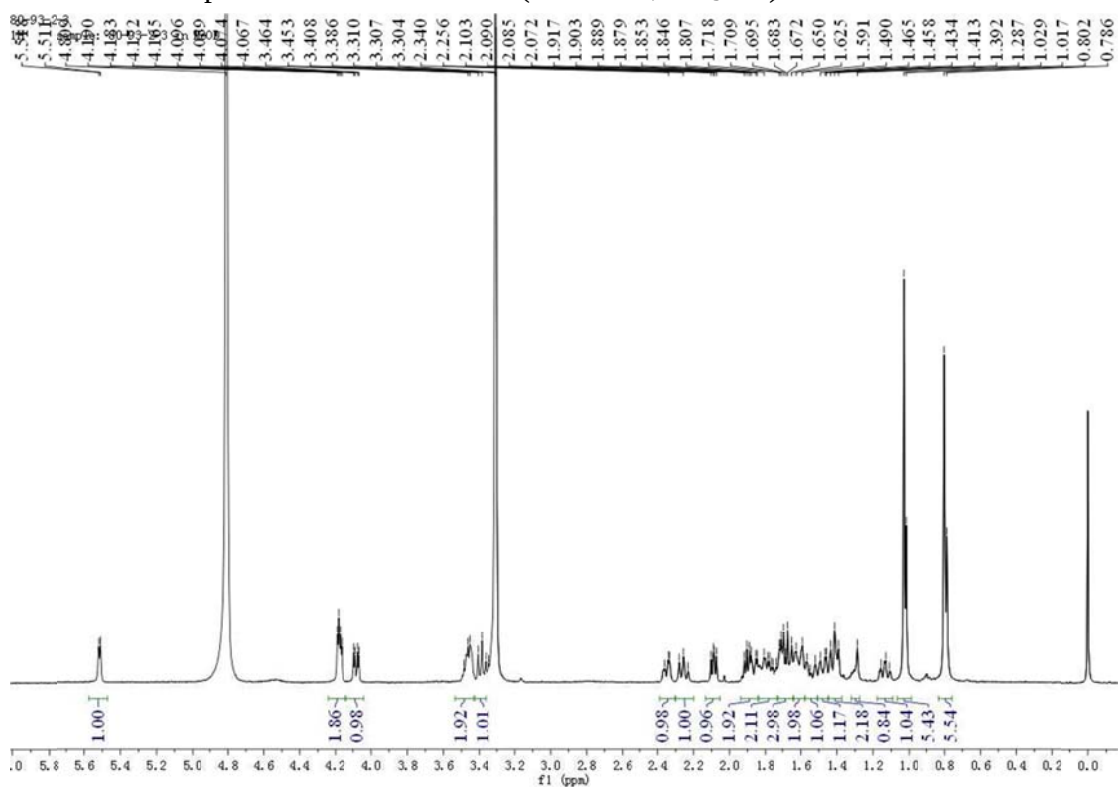
S20 NOESY spectrum of metabolite **4**



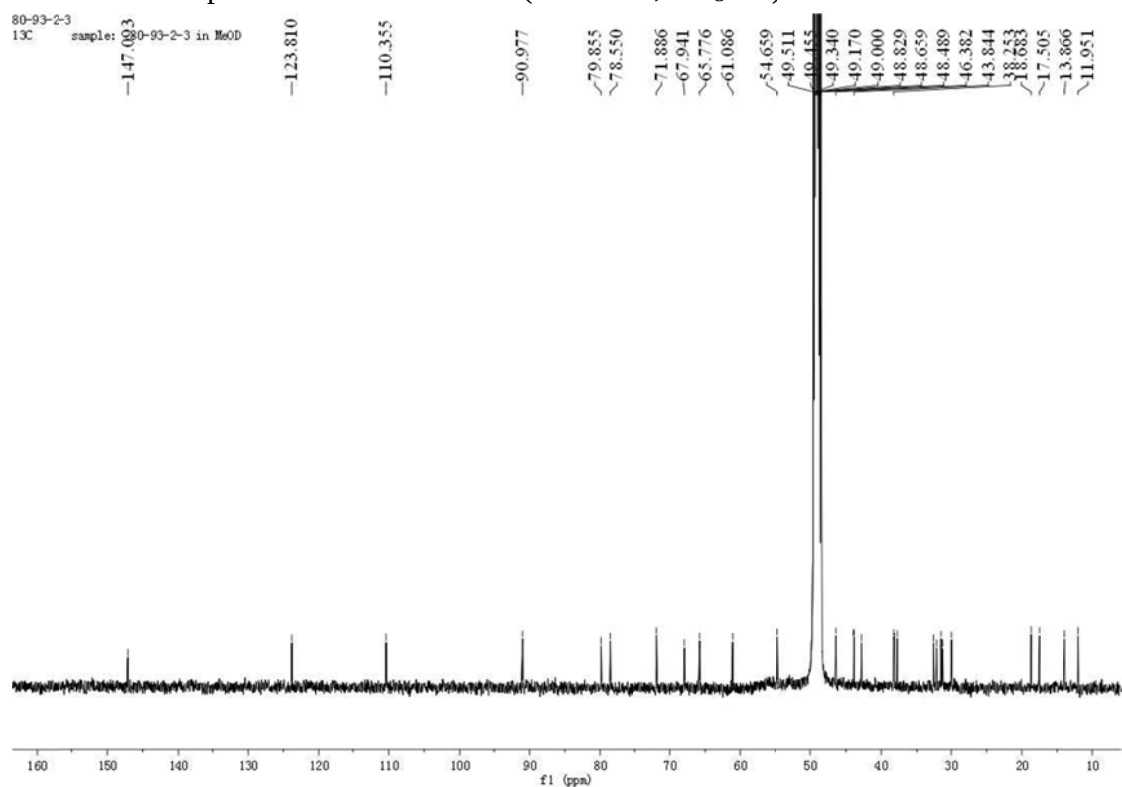
S21 HRESIMS spectrum of metabolite 4



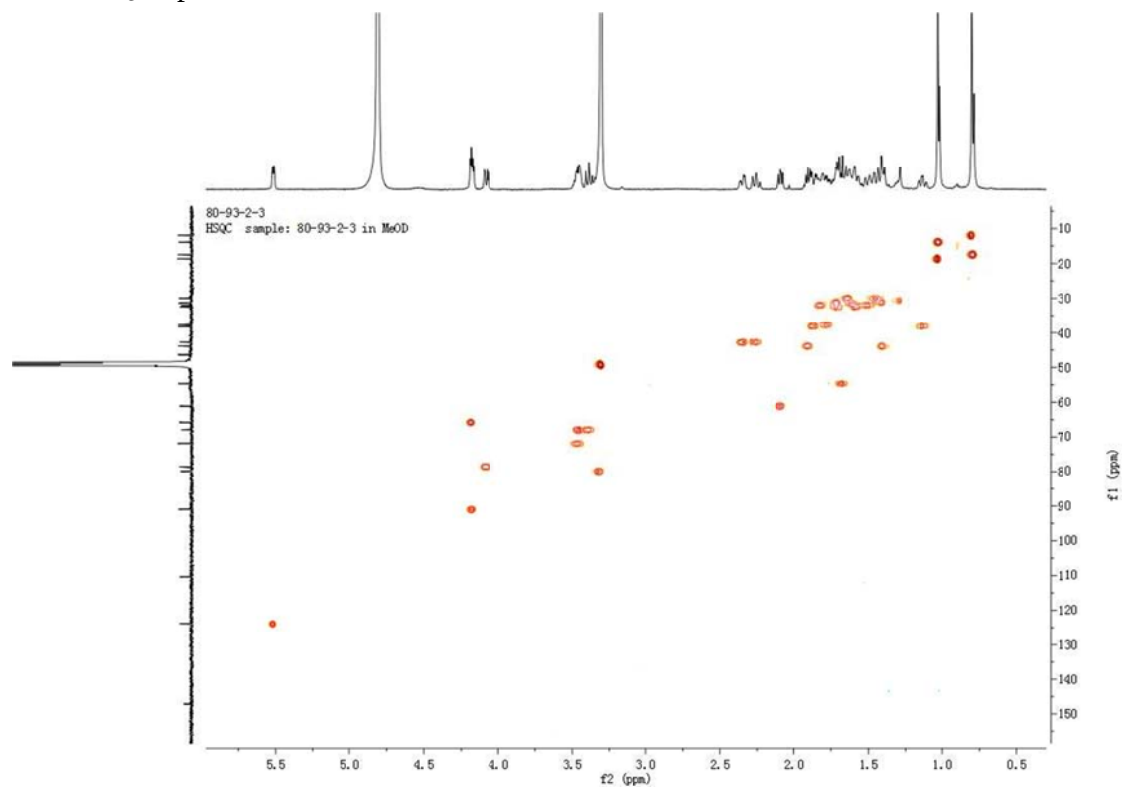
S22 ¹H NMR spectrum of metabolite 5 (500 MHz, CD₃OD)



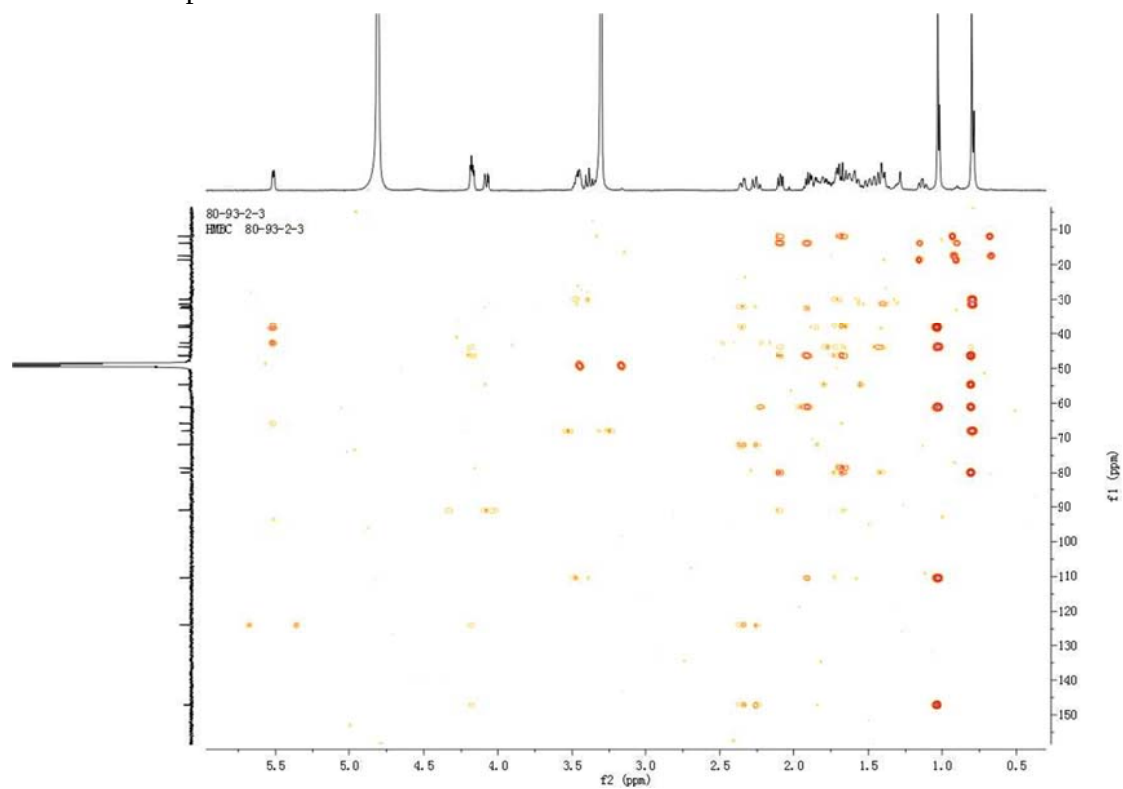
S23 ^{13}C NMR spectrum of metabolite 5 (125 MHz, CD_3OD)



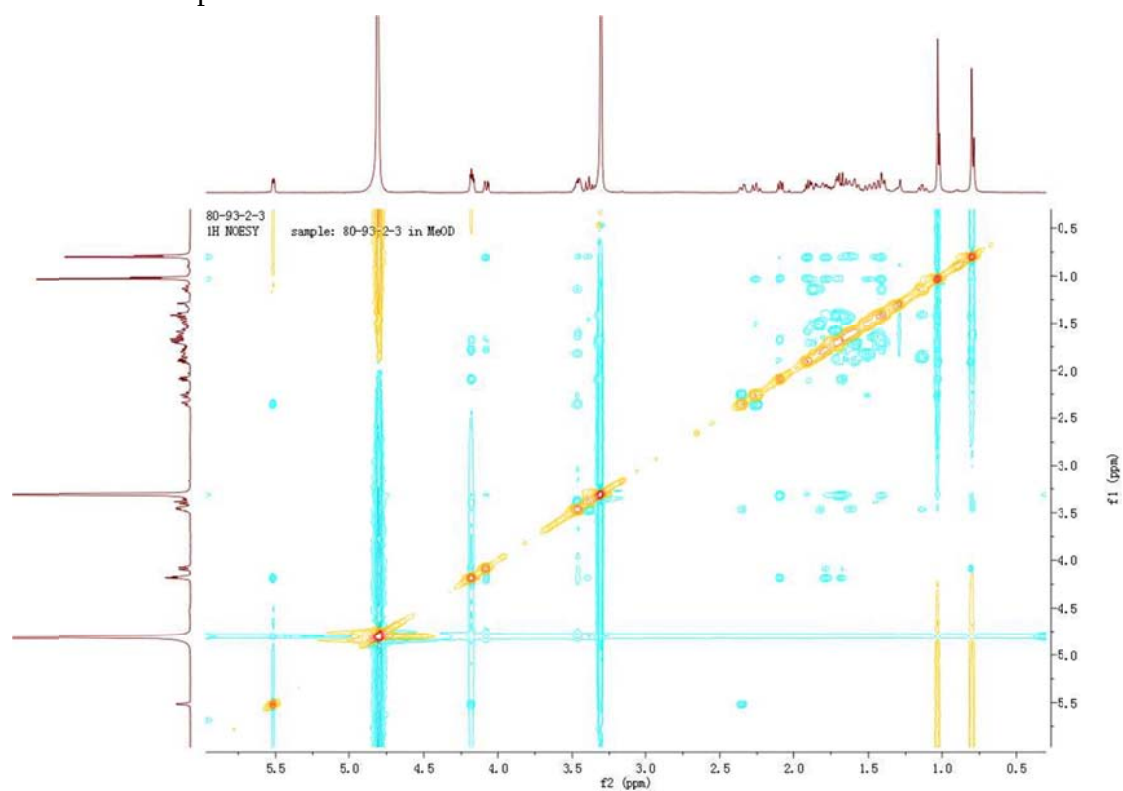
S24 HSQC spectrum of metabolite 5



S25 HMBC spectrum of metabolite 5

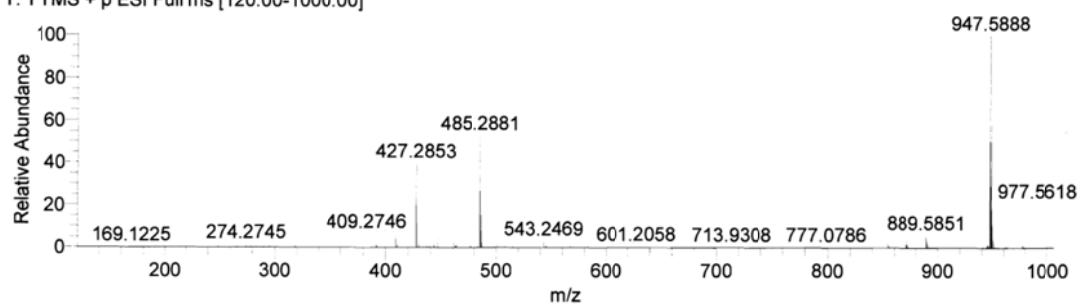


S26 NOESY spectrum of metabolite 5

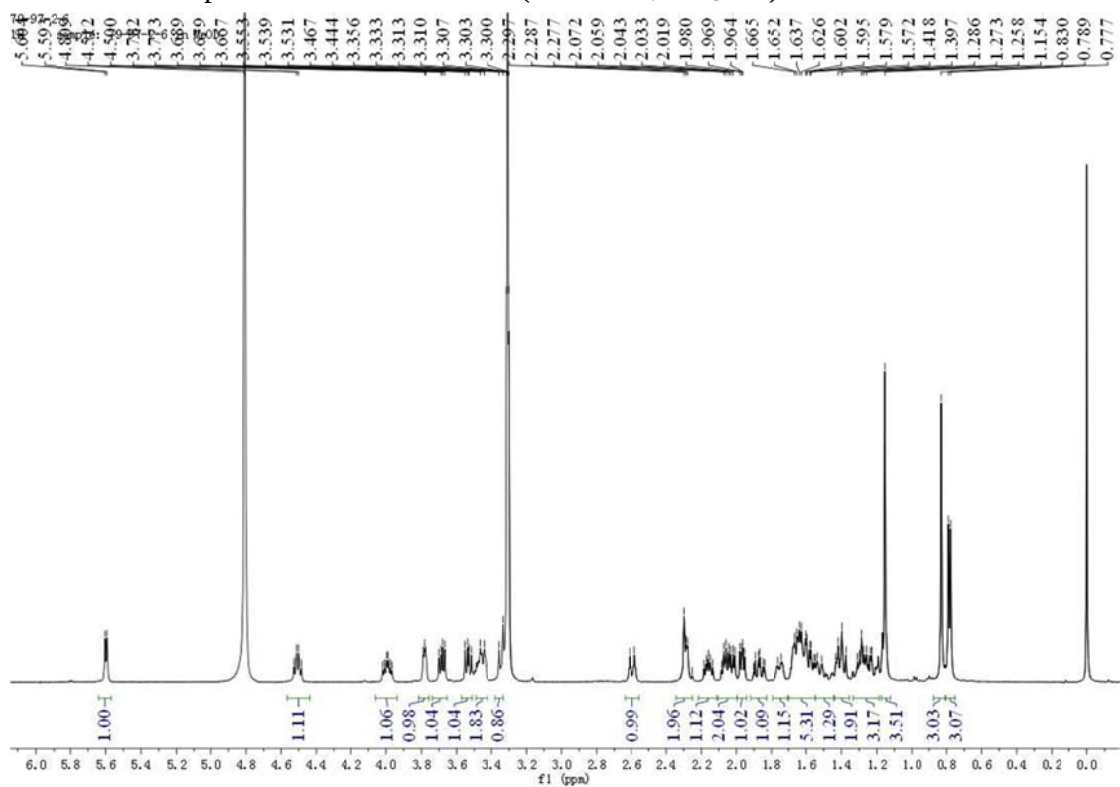


S27 HRESIMS spectrum of metabolite 5

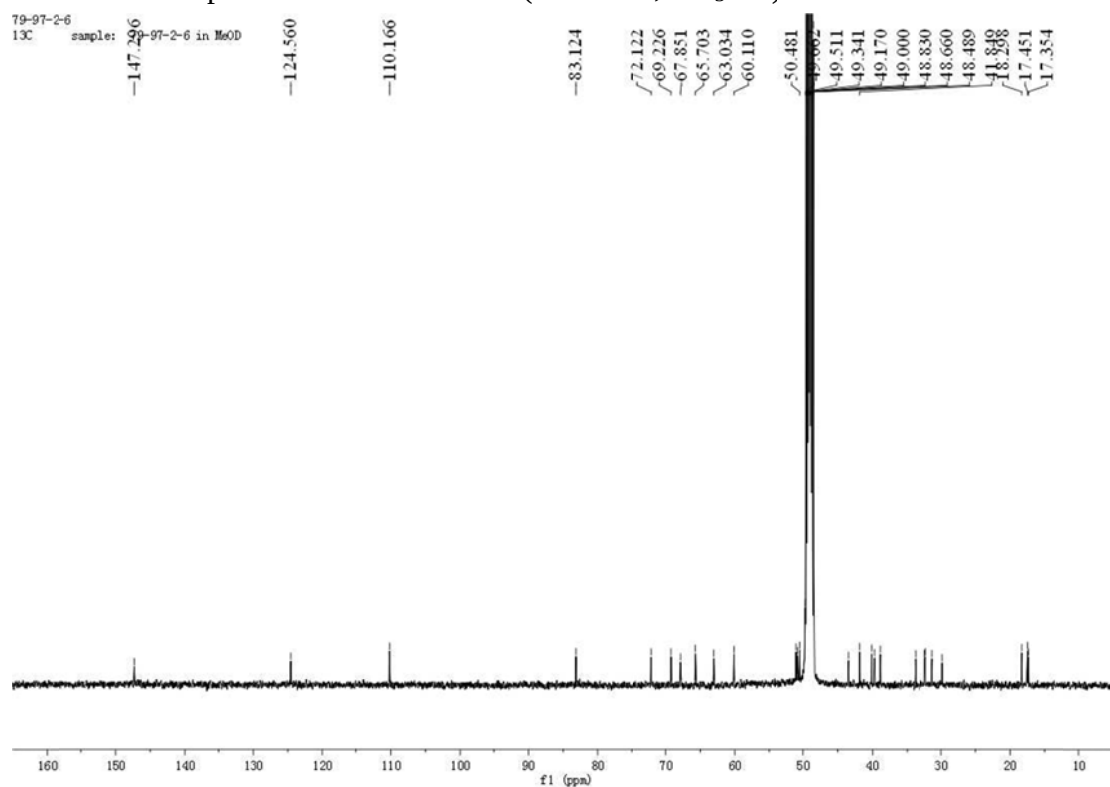
80-93-2-3 #8-9 RT: 0.09-0.10 AV: 2 SB: 2 0.79-0.81 NL: 2.52E6
T: FTMS + p ESI Full ms [120.00-1000.00]



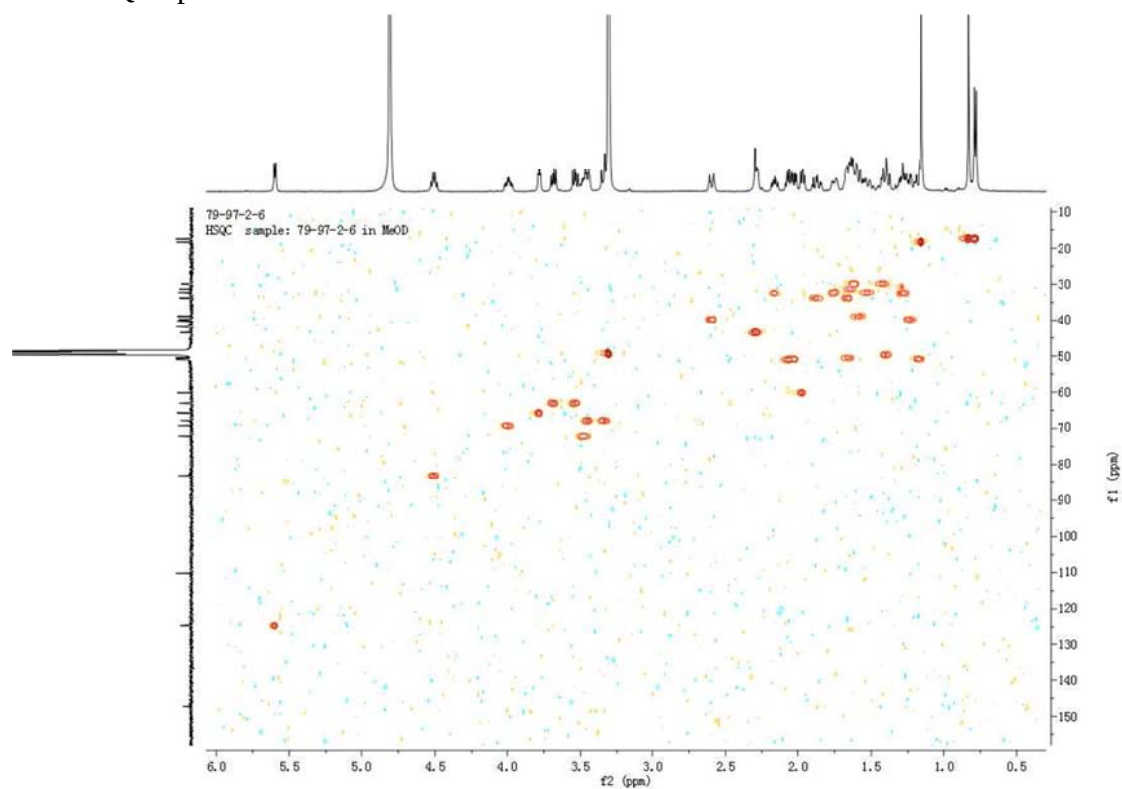
S28 ^1H NMR spectrum of metabolite 6 (500 MHz, CD_3OD)



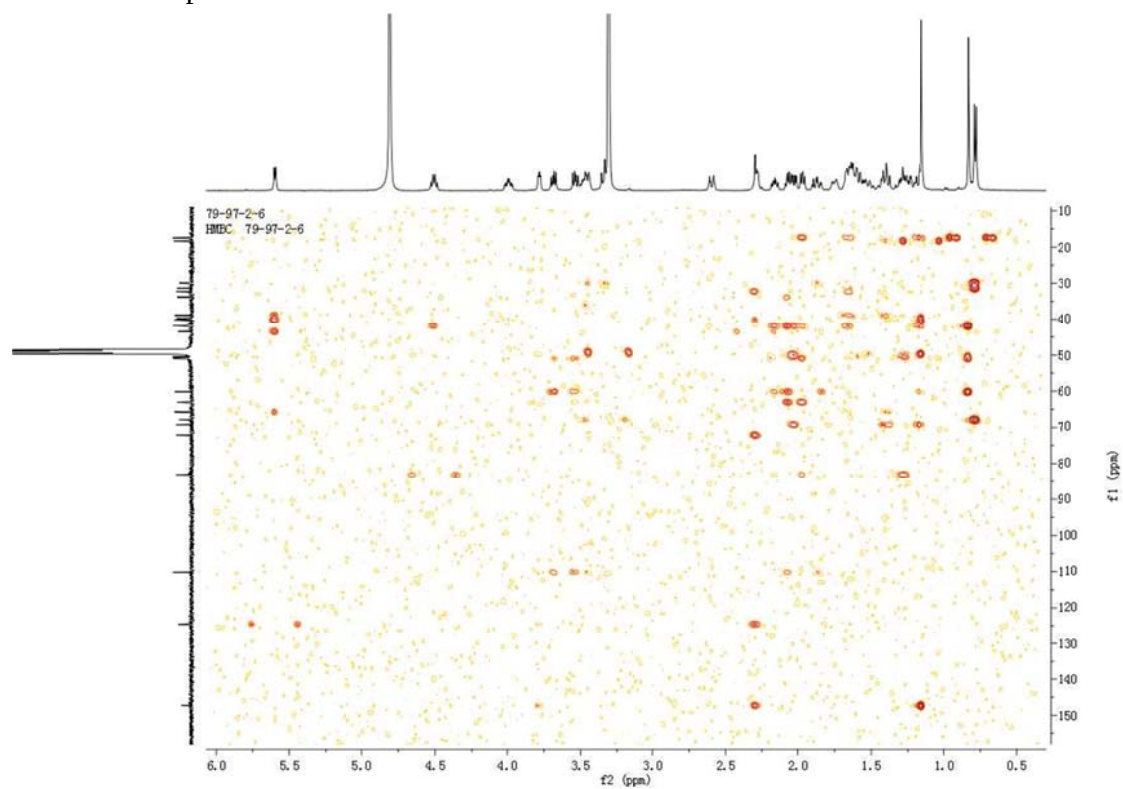
S29¹³C NMR spectrum of metabolite **6** (125 MHz, CD₃OD)



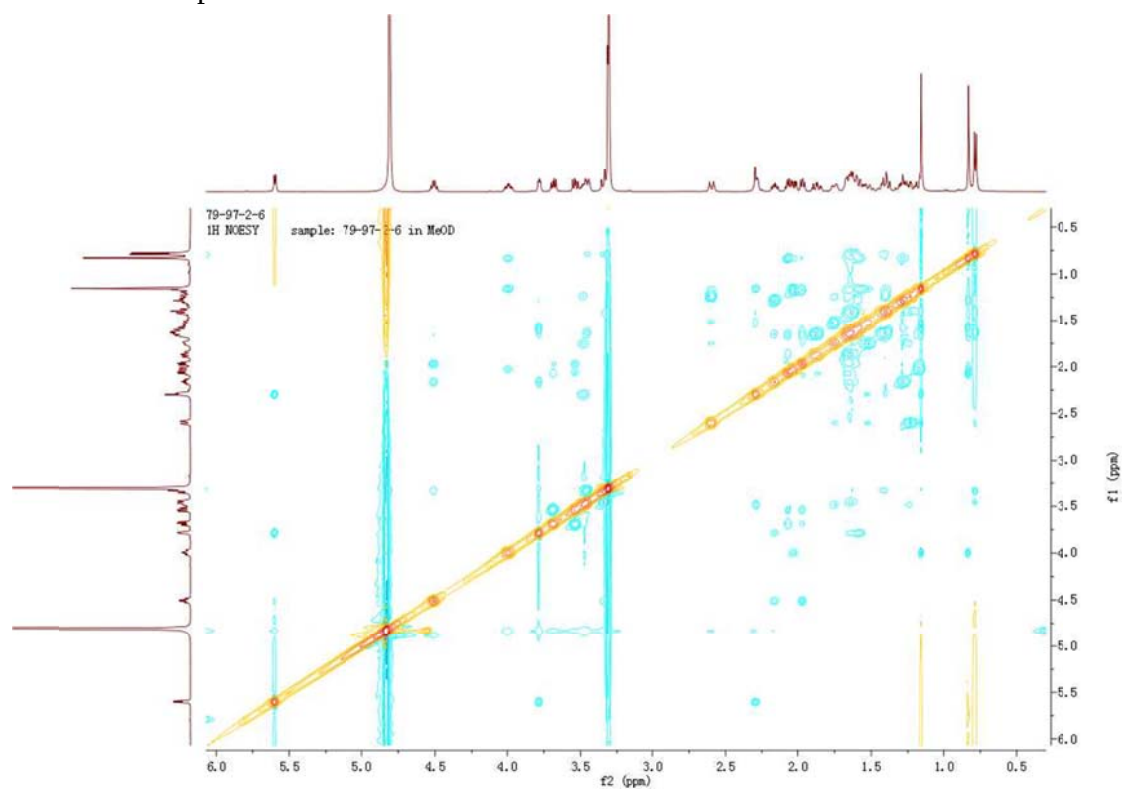
S30 HSQC spectrum of metabolite **6**



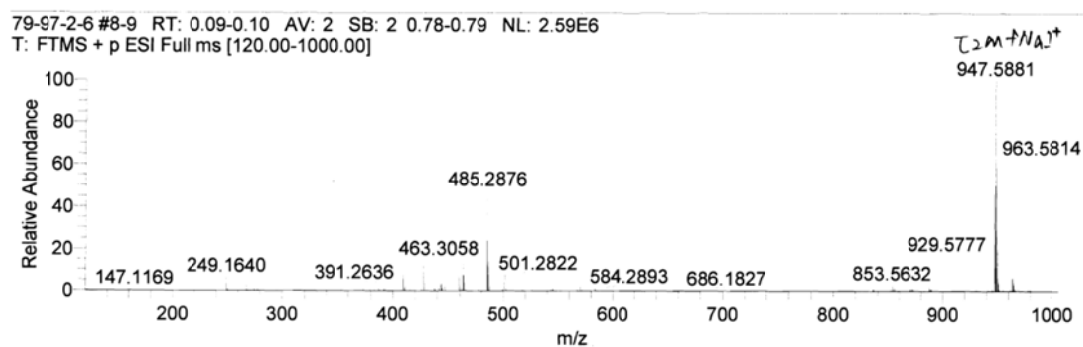
S31 HMBC spectrum of metabolite **6**



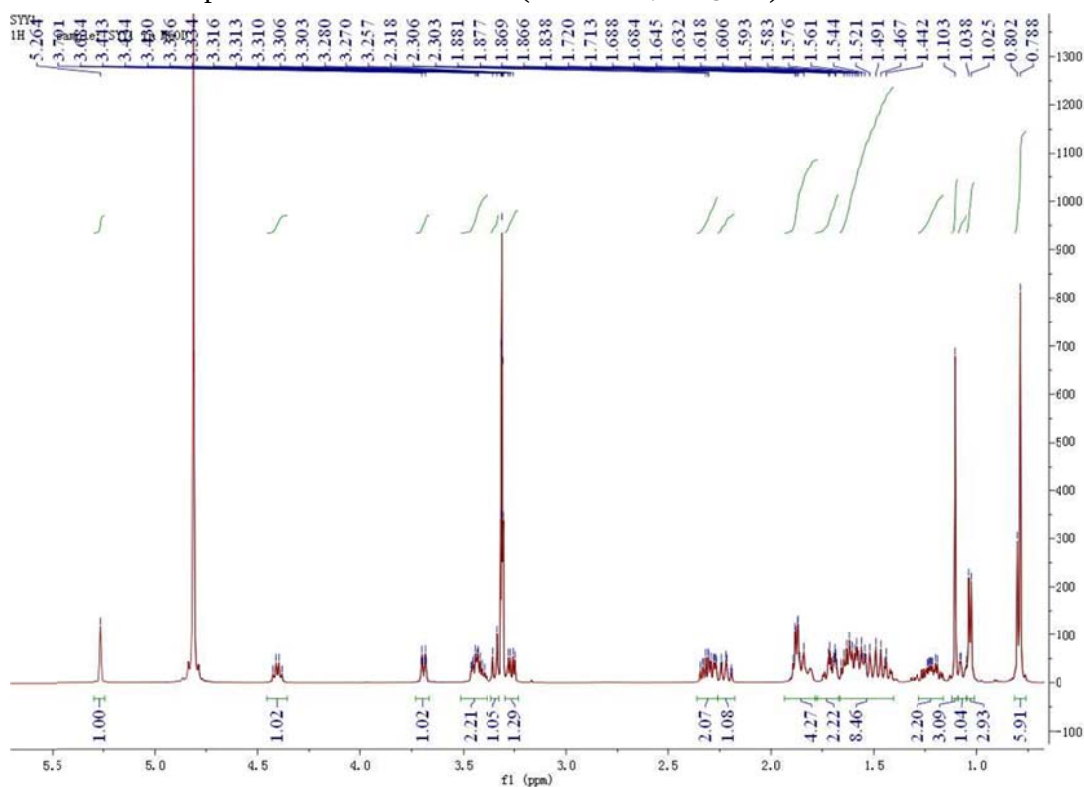
S32 NOESY spectrum of metabolite **6**



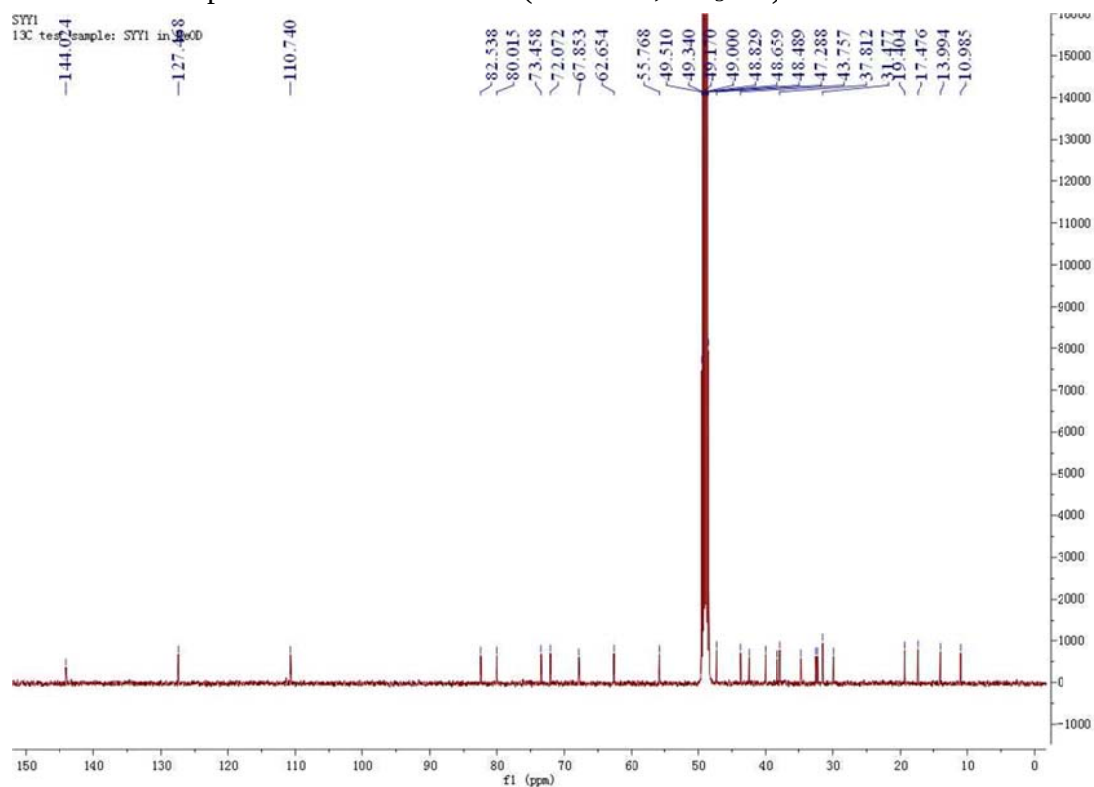
S33 HRESIMS spectrum of metabolite 6



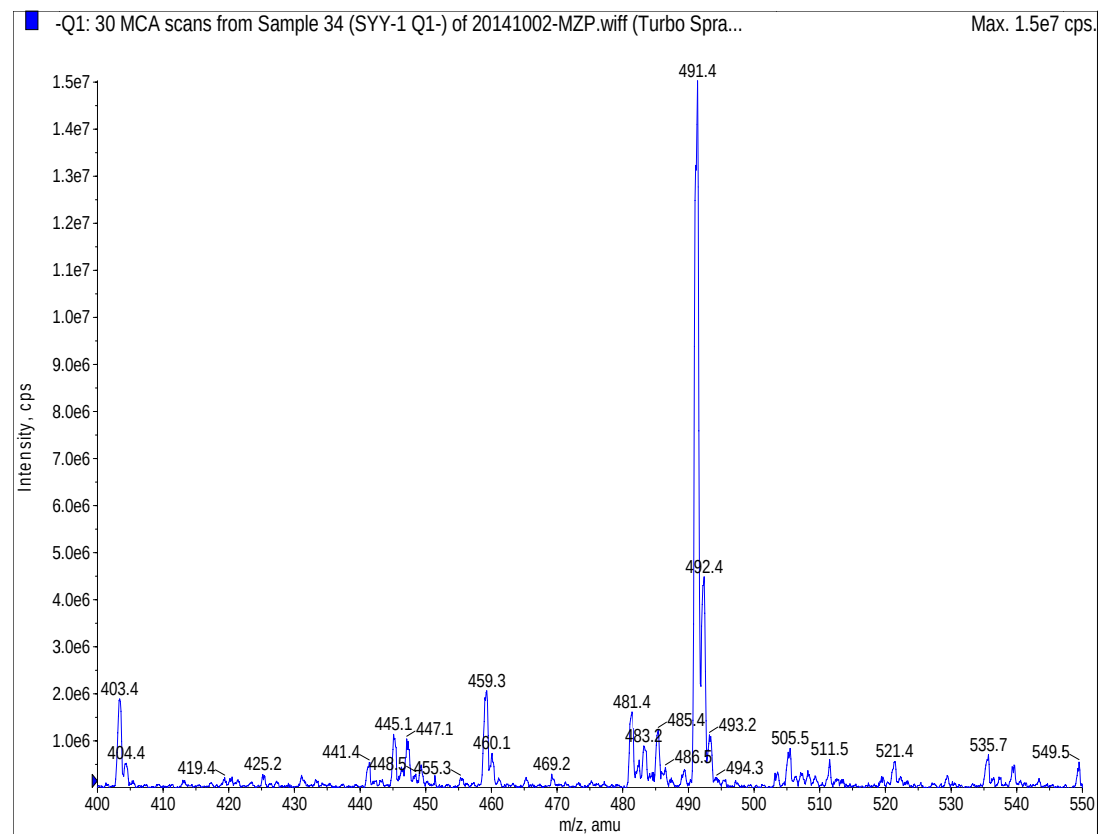
S34 ¹H NMR spectrum of metabolite 7 (500 MHz, CD₃OD)



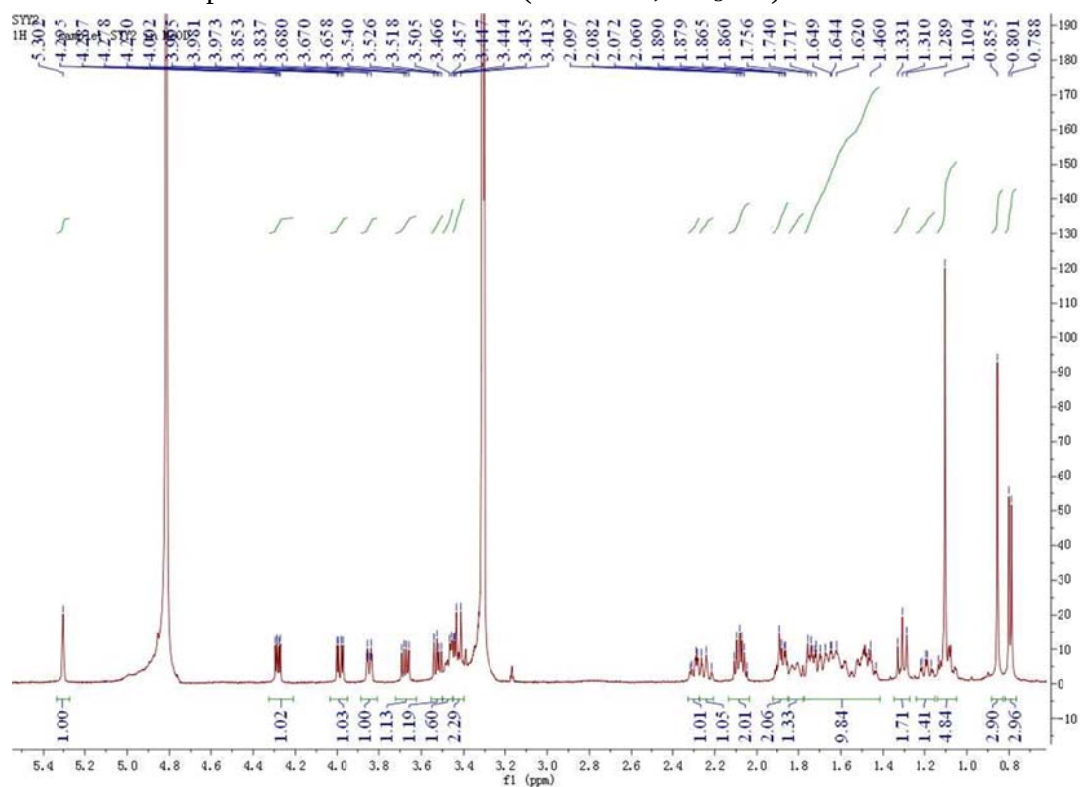
S35 ^{13}C NMR spectrum of metabolite 7 (125 MHz, CD_3OD)



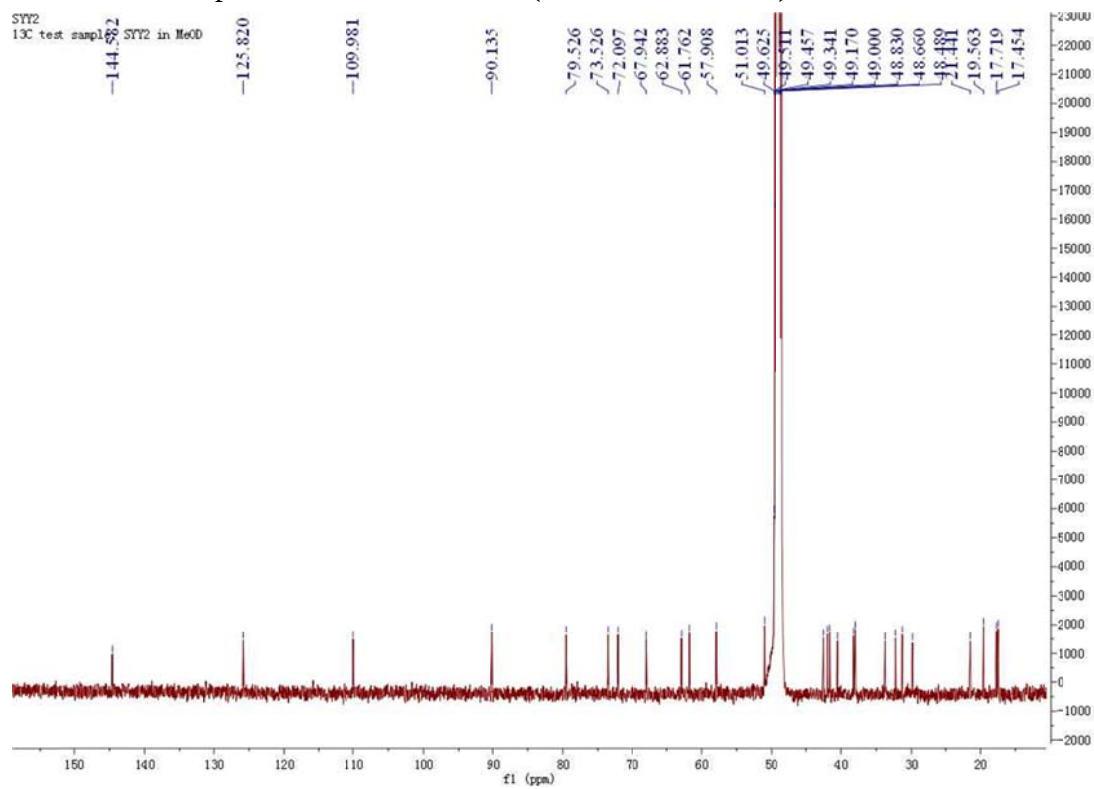
S36 ESIMS spectrum of metabolite 7



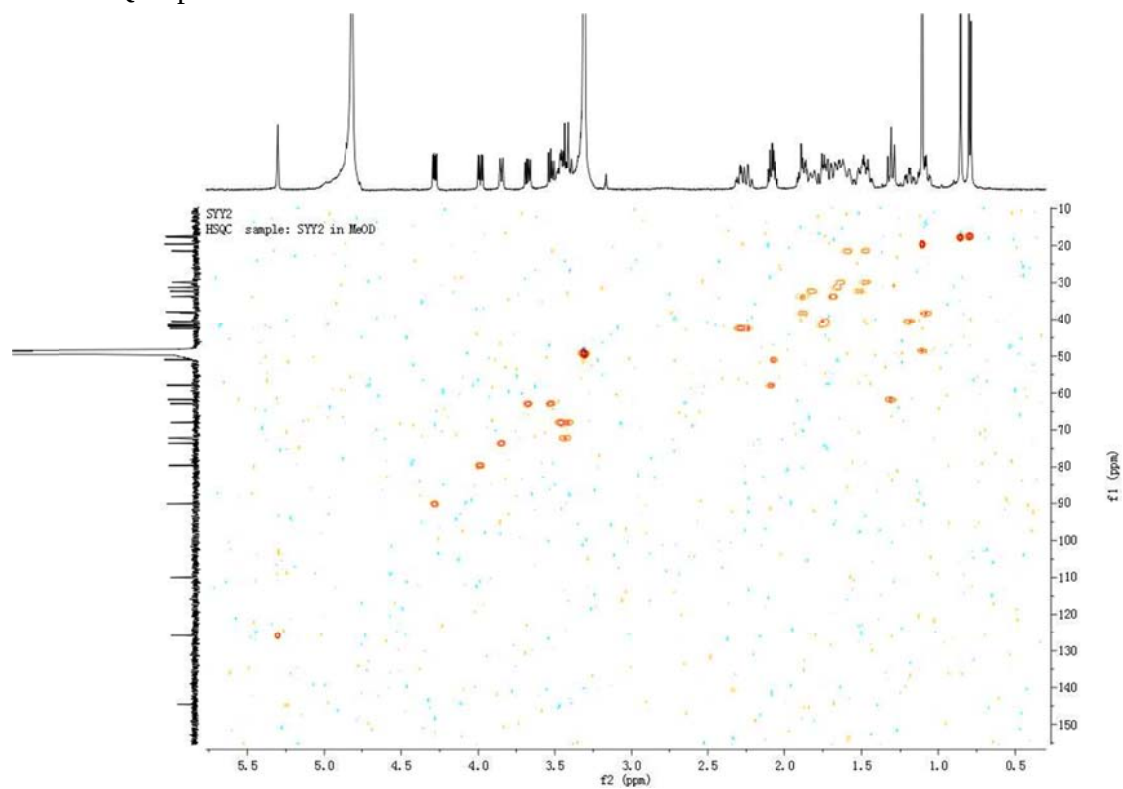
S37 ^1H NMR spectrum of metabolite **8** (500 MHz, CD_3OD)



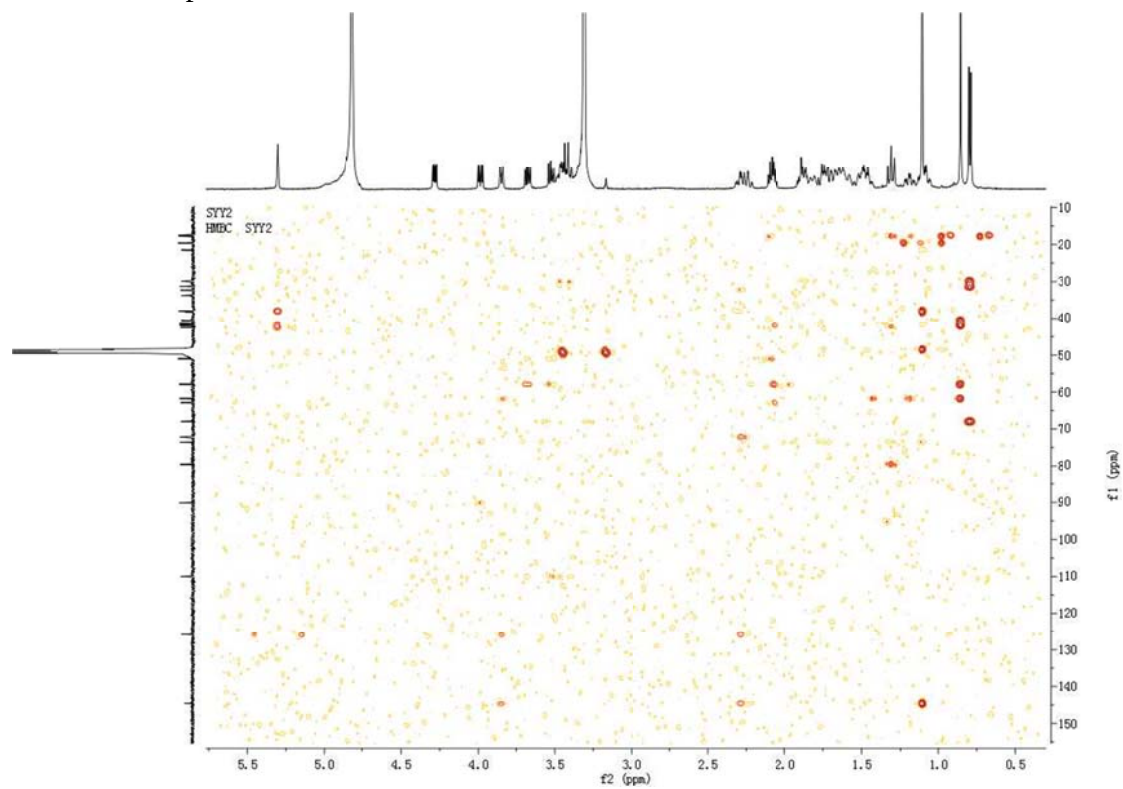
S38 ^{13}C NMR spectrum of metabolite **8** (125 MHz, CD_3OD)



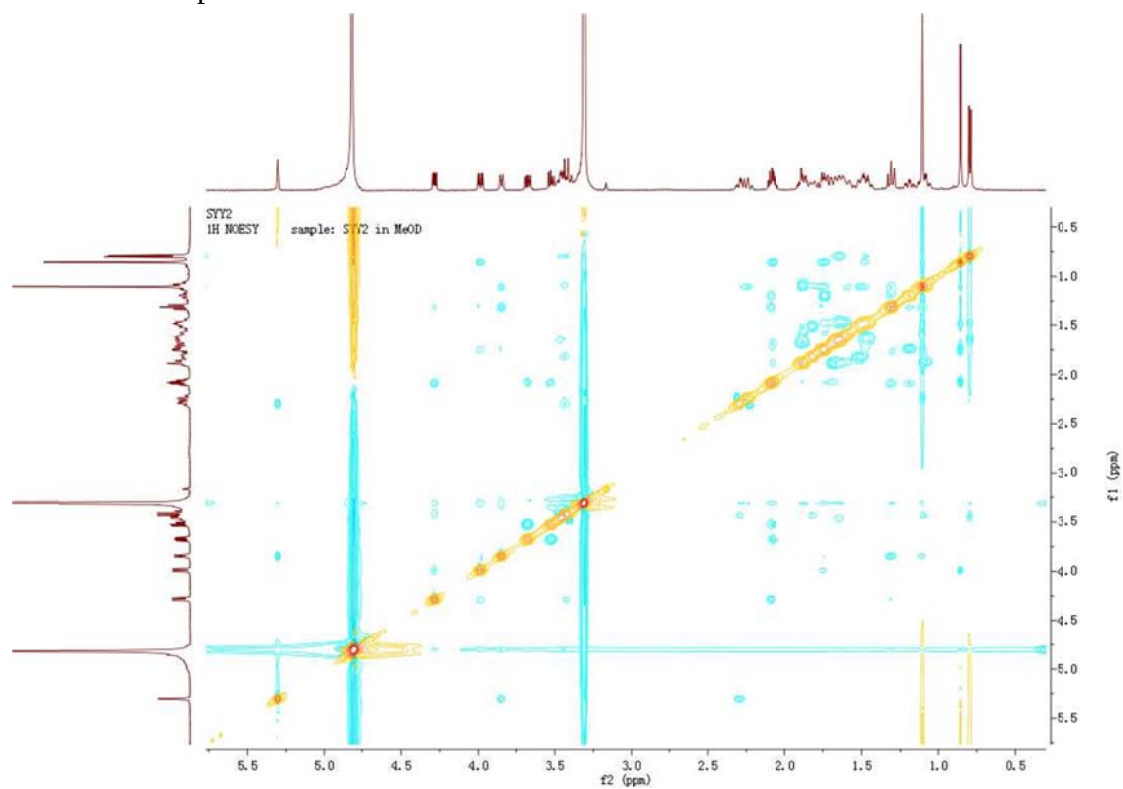
S39 HSQC spectrum of metabolite **8**



S40 HMBC spectrum of metabolite **8**

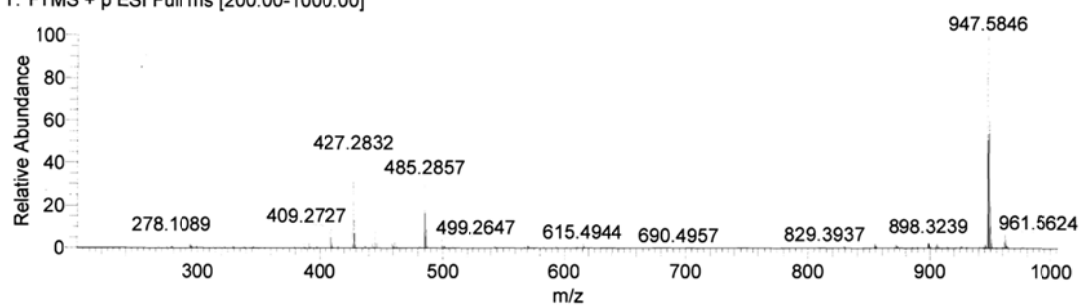


S41 NOESY spectrum of metabolite **8**

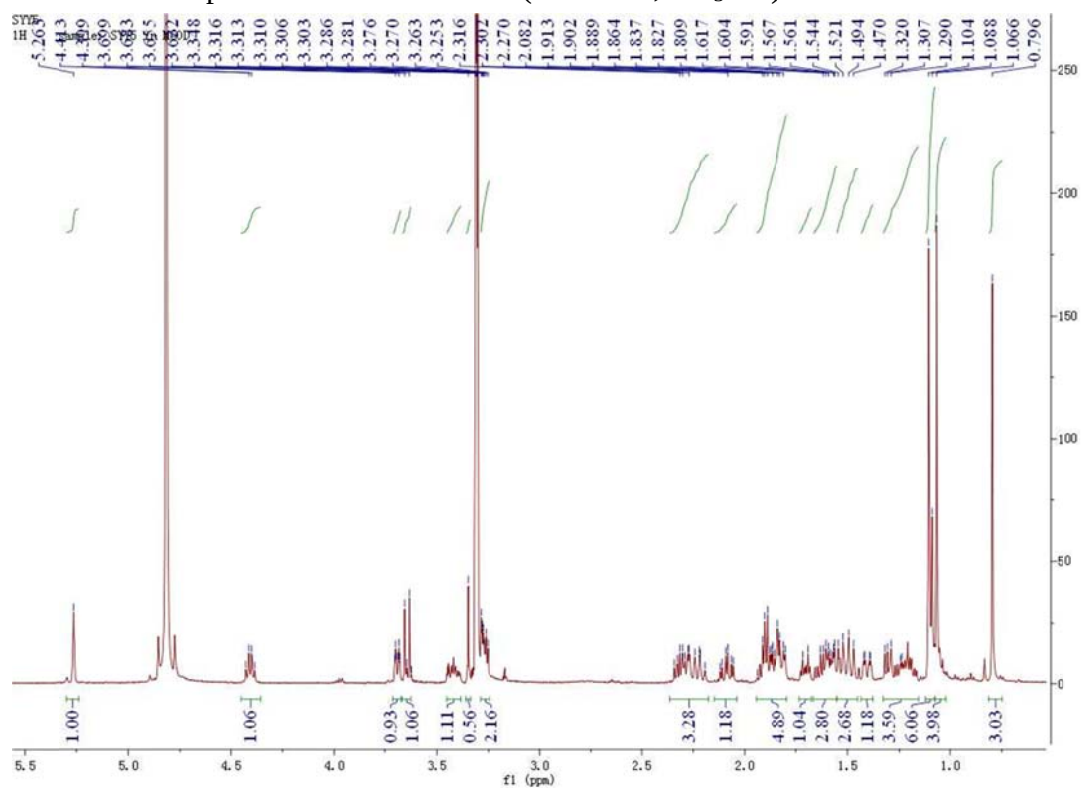


S42 HRESIMS spectrum of metabolite **8**

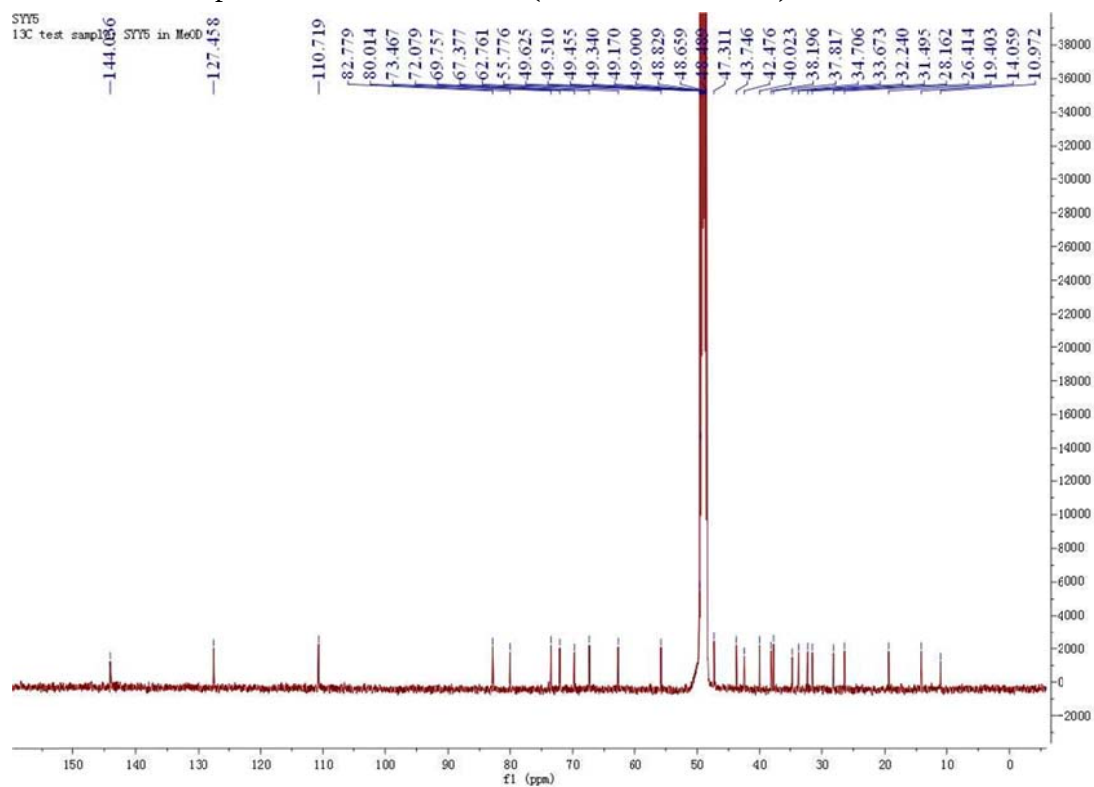
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T: FTMS + p ESI Full ms [200.00-1000.00]



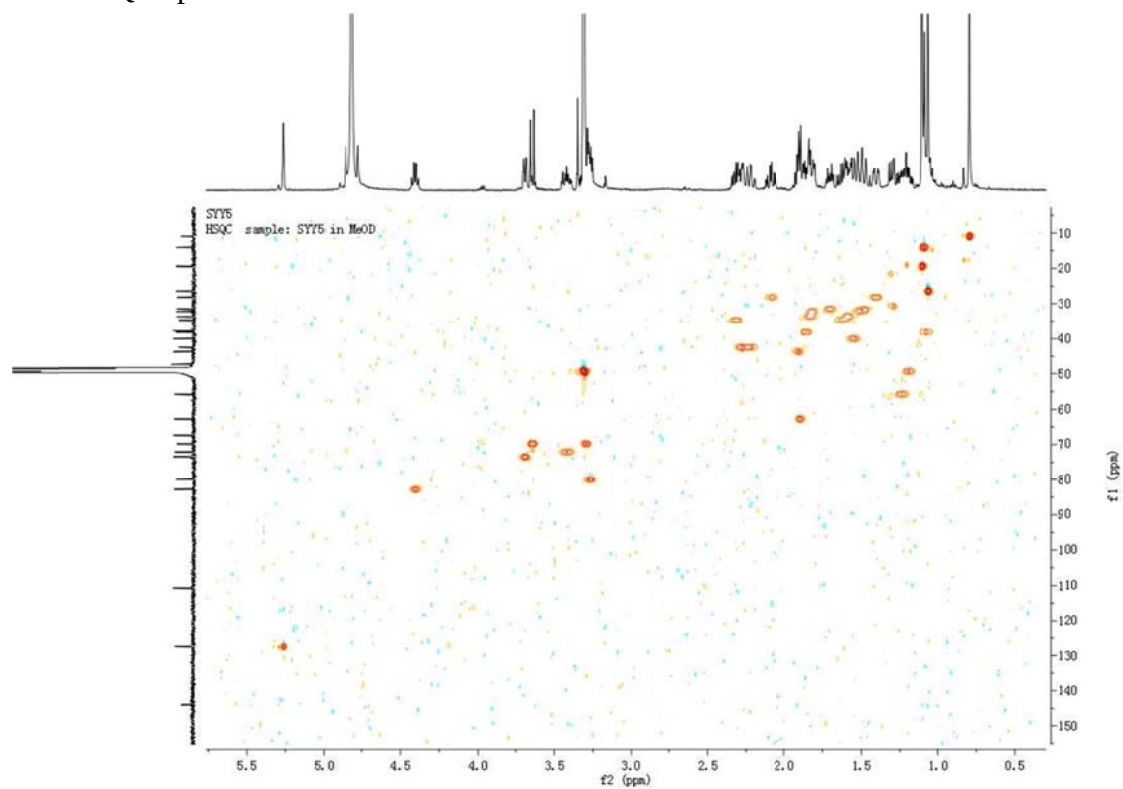
S43 ^1H NMR spectrum of metabolite **9** (500 MHz, CD_3OD)



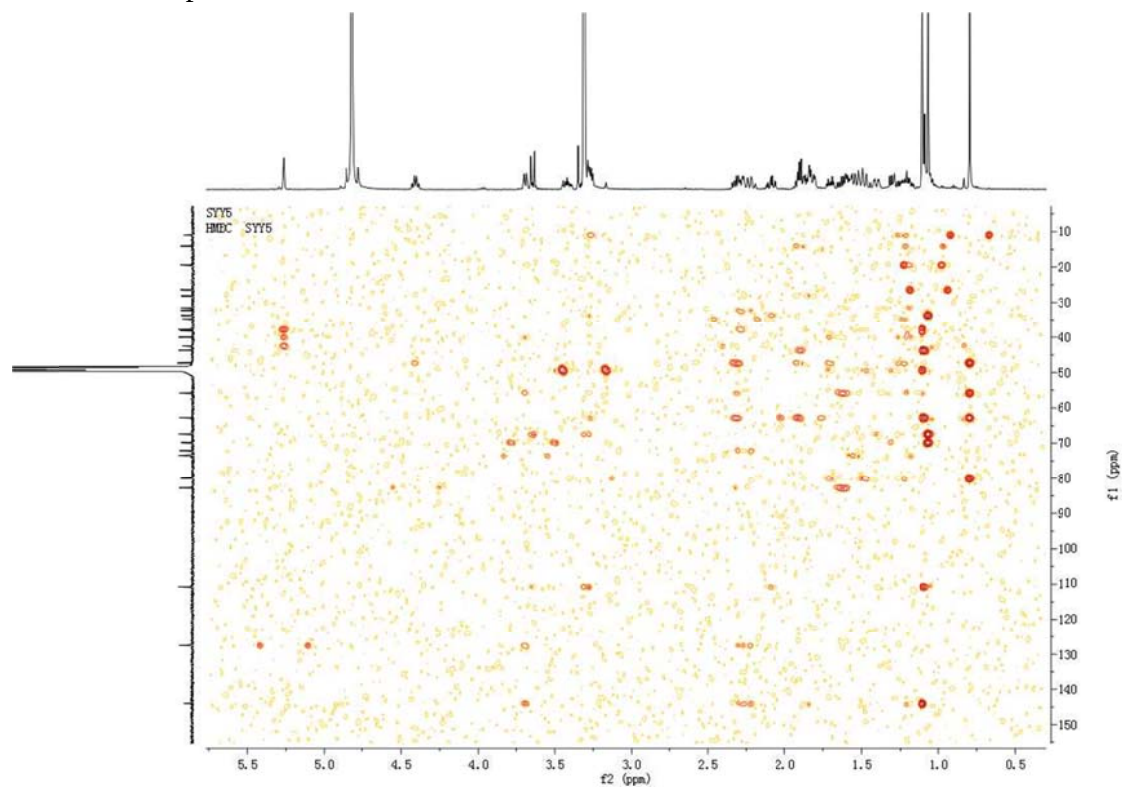
S44 ^{13}C NMR spectrum of metabolite **9** (125 MHz, CD_3OD)



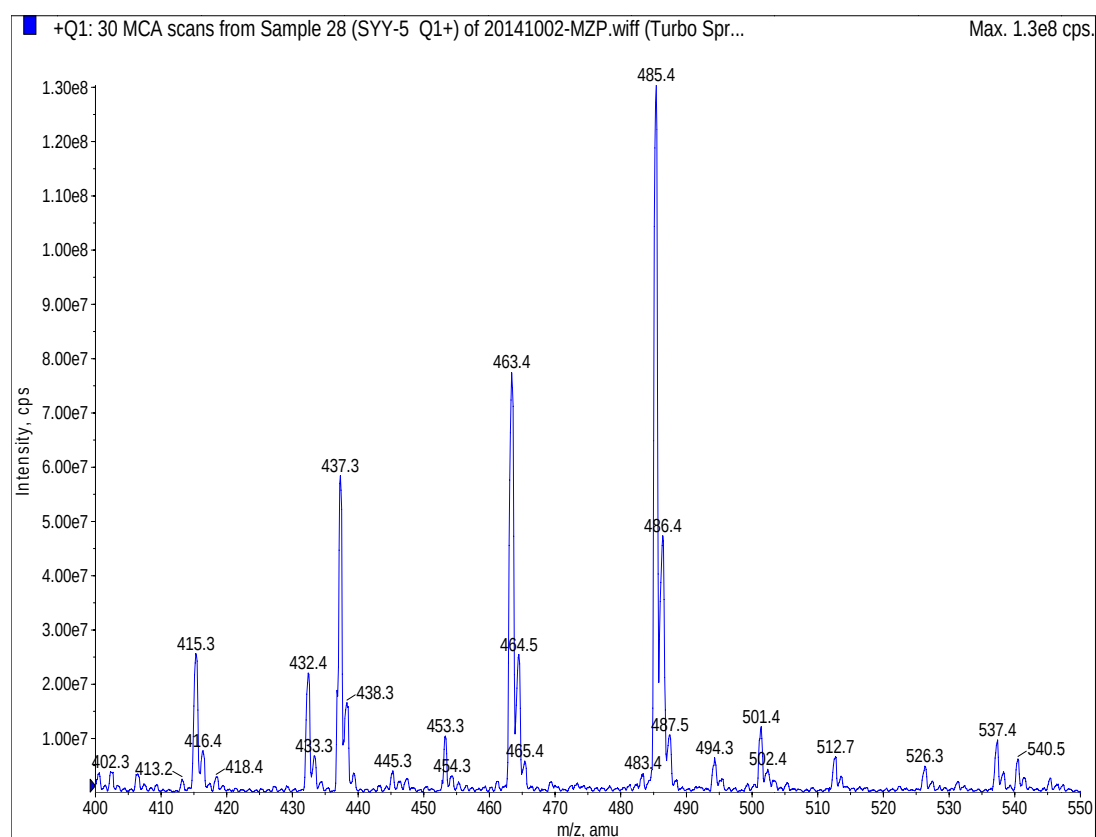
S45 HSQC spectrum of metabolite **9**



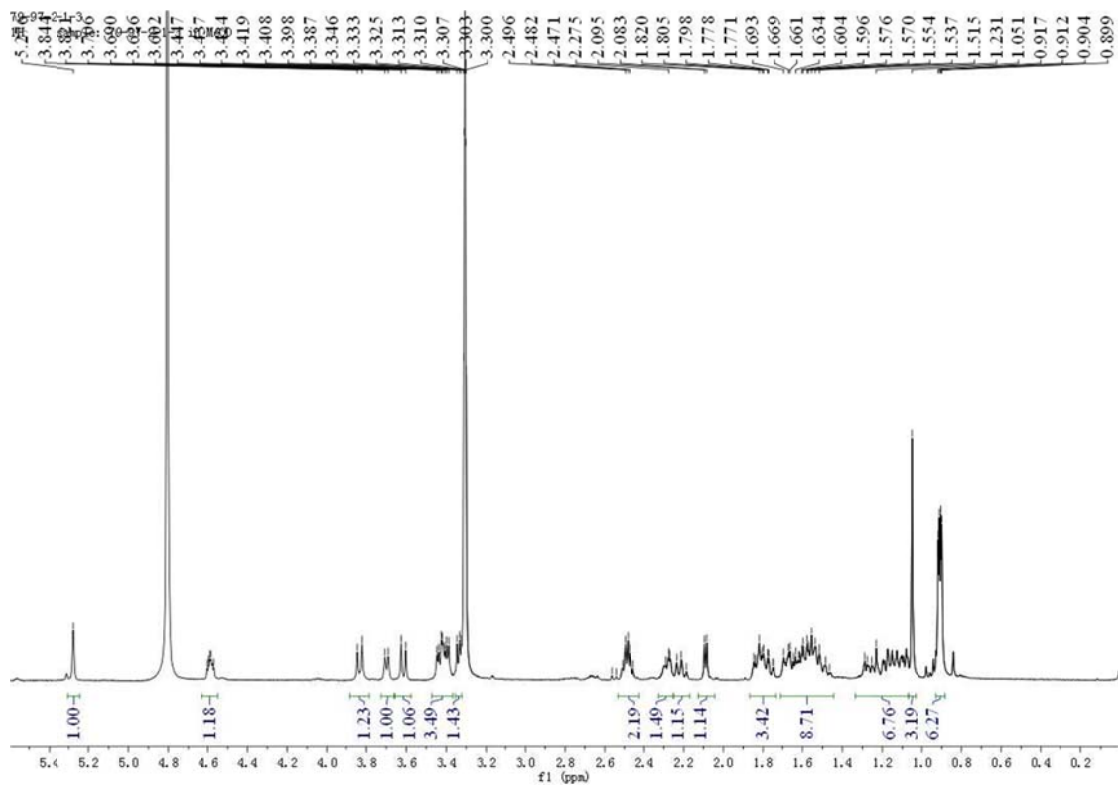
S46 HMBC spectrum of metabolite **9**



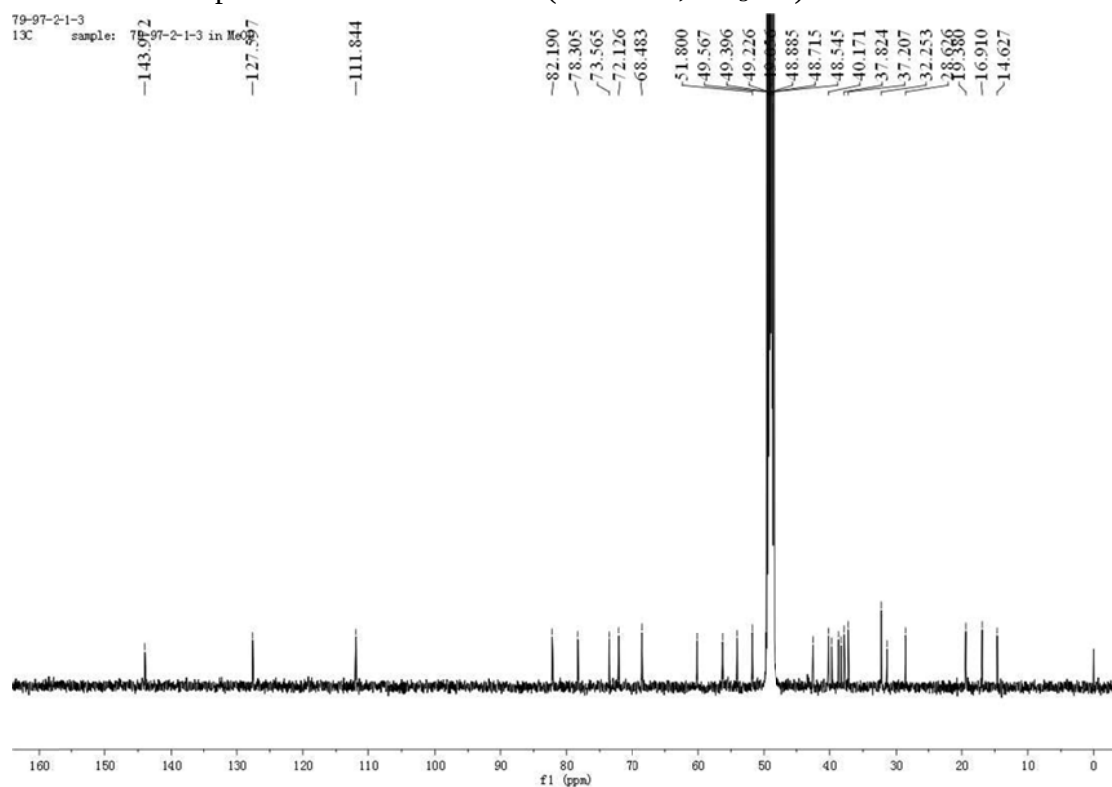
S47 ESIMS spectrum of metabolite **9**



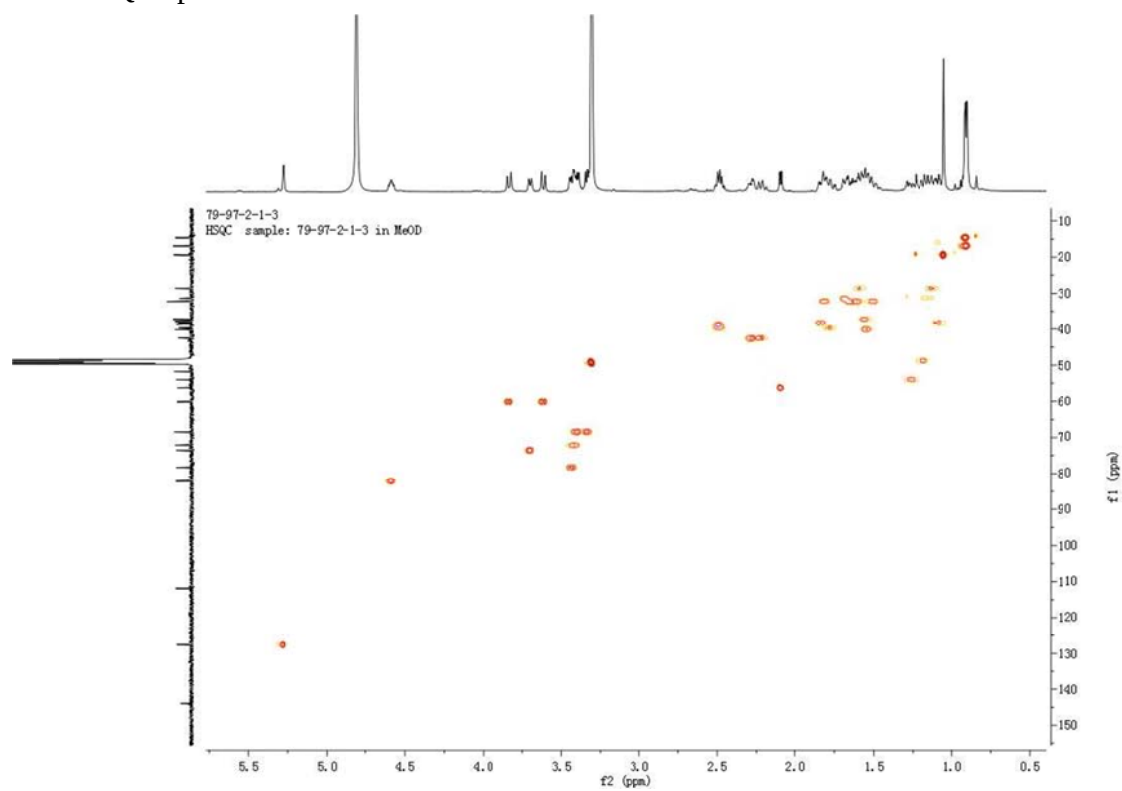
S48 ¹H NMR spectrum of metabolite **10** (500 MHz, CD₃OD)



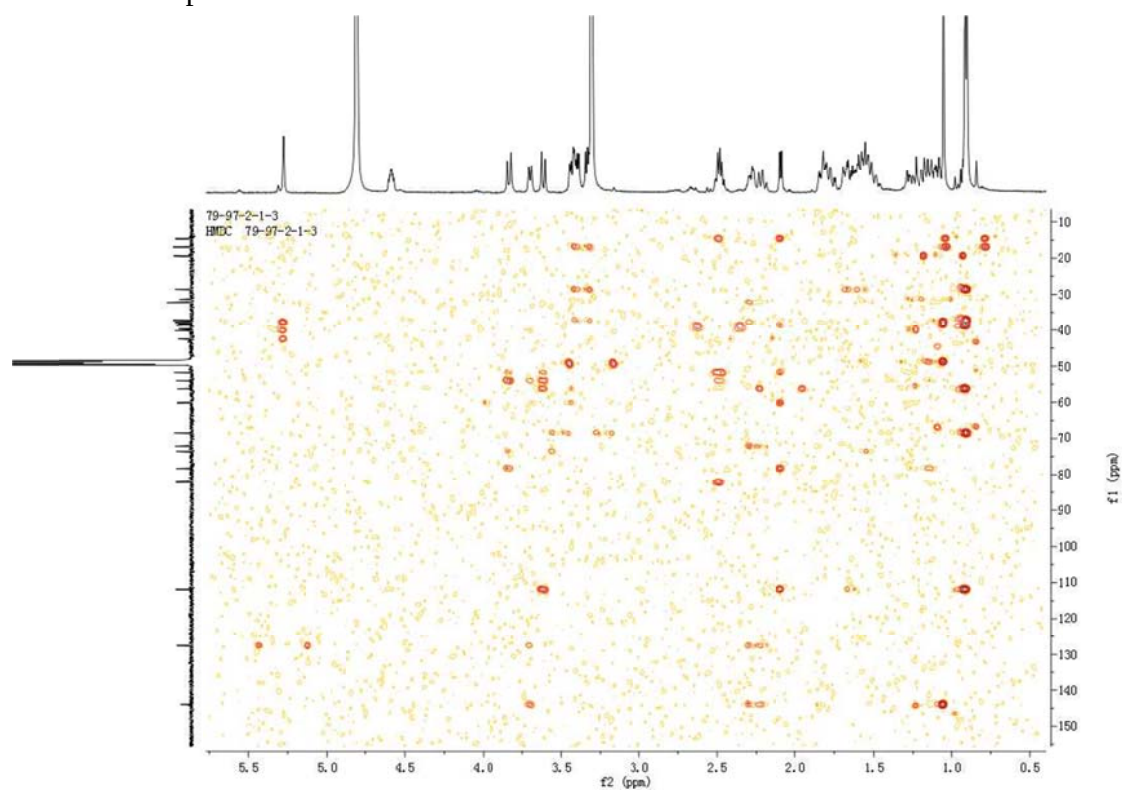
S49 ^{13}C NMR spectrum of metabolite **10** (125 MHz, CD_3OD)



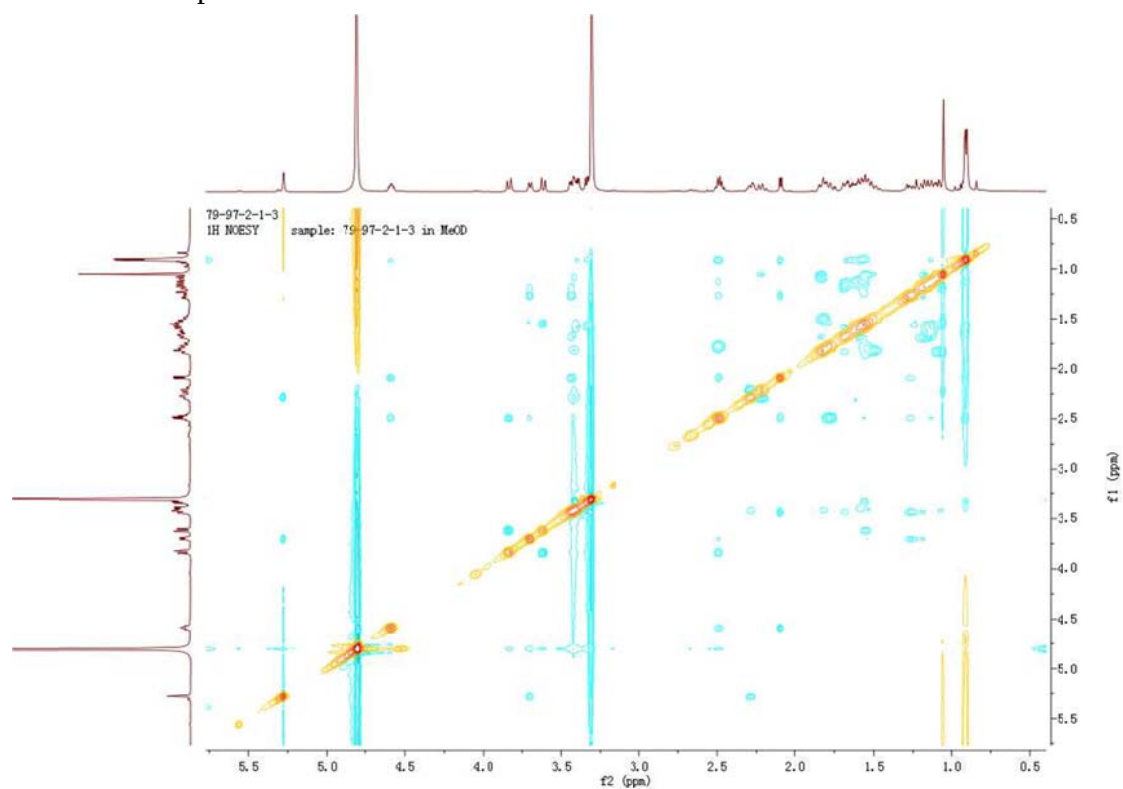
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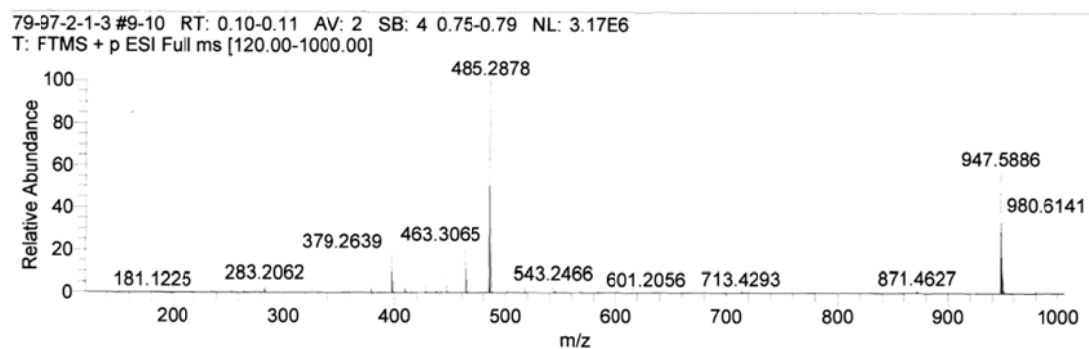
S51 HMBC spectrum of metabolite **10**



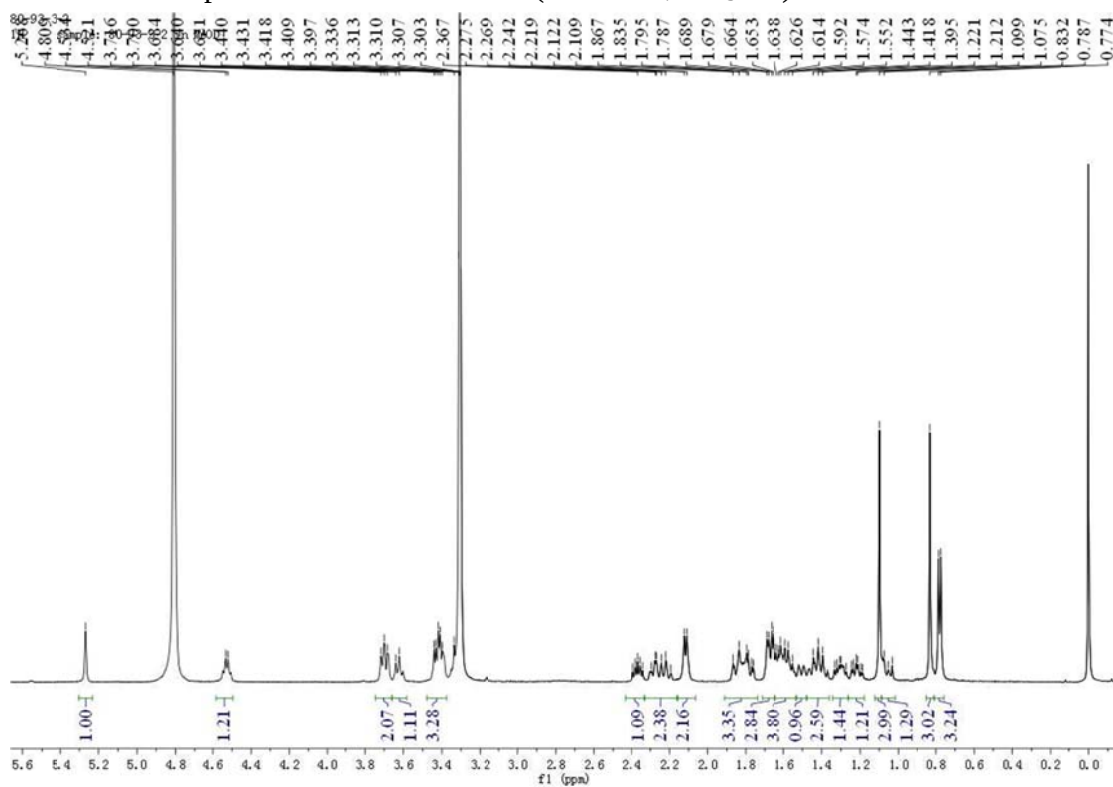
S52 NOESY spectrum of metabolite **10**



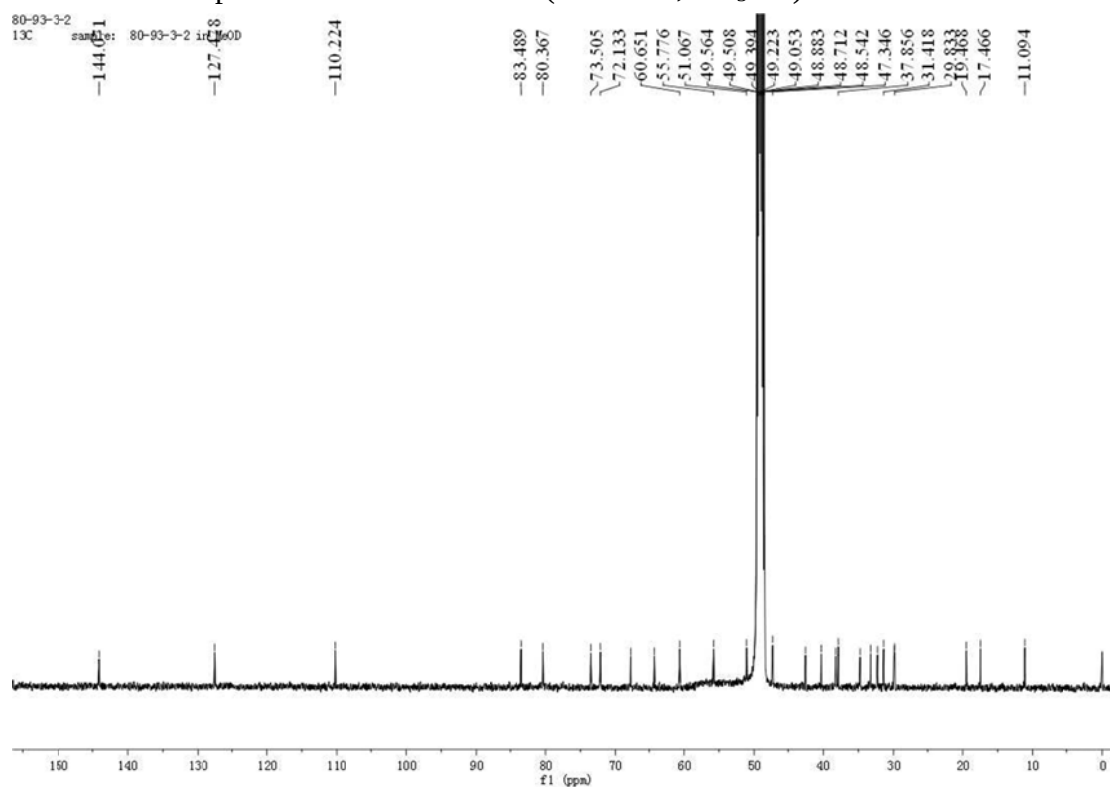
S53 HRESIMS spectrum of metabolite **10**



S54 ^1H NMR spectrum of metabolite **11** (500 MHz, CD_3OD)



S55 ^{13}C NMR spectrum of metabolite **11** (125 MHz, CD_3OD)



S56 ESIMS spectrum of metabolite **11**

