

# **Lobophytones O–T, New Biscembranoids and Cembranoid from Soft**

## ***Coral Lobophytum pauciflorum***

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## **Supplemental Information**

## Spectra of compound 1

Avance DRX 500 Bruker A&T Center BNU  
Sample: ypc-H-46, Solvent: DMSO-d6  
1H NMR

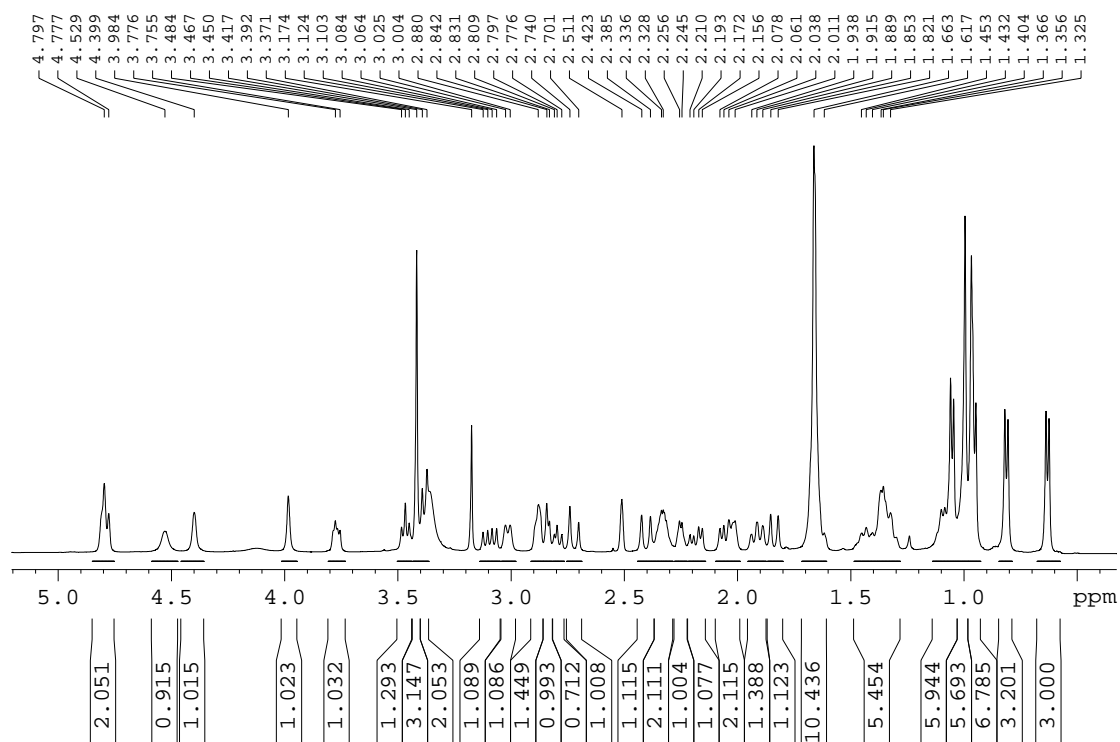


Figure S1 <sup>1</sup>H NMR spectrum of compound 1

ypc-H-46, DMSO-d6  
APT 13C NMR

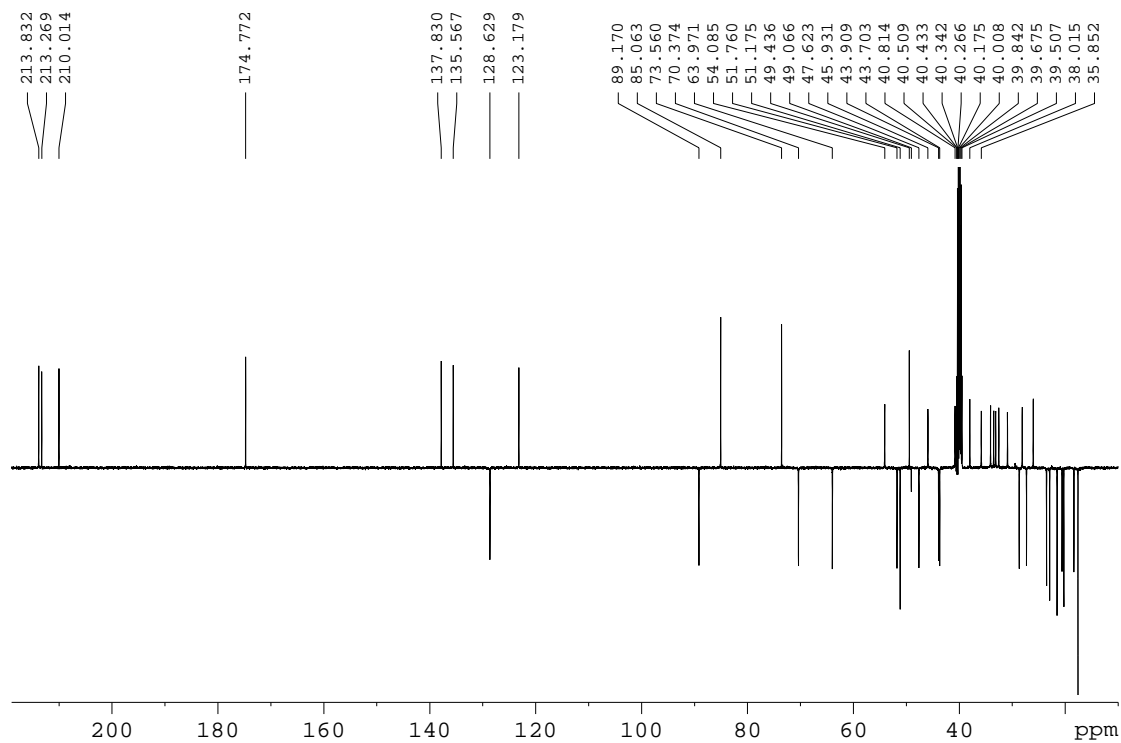


Figure S2 <sup>13</sup>C NMR spectrum of compound 1

Avance DRX 500 Bruker A&T Center BNU  
Sample: ypc-H-46, Solvent: DMSO-d6  
HMQC

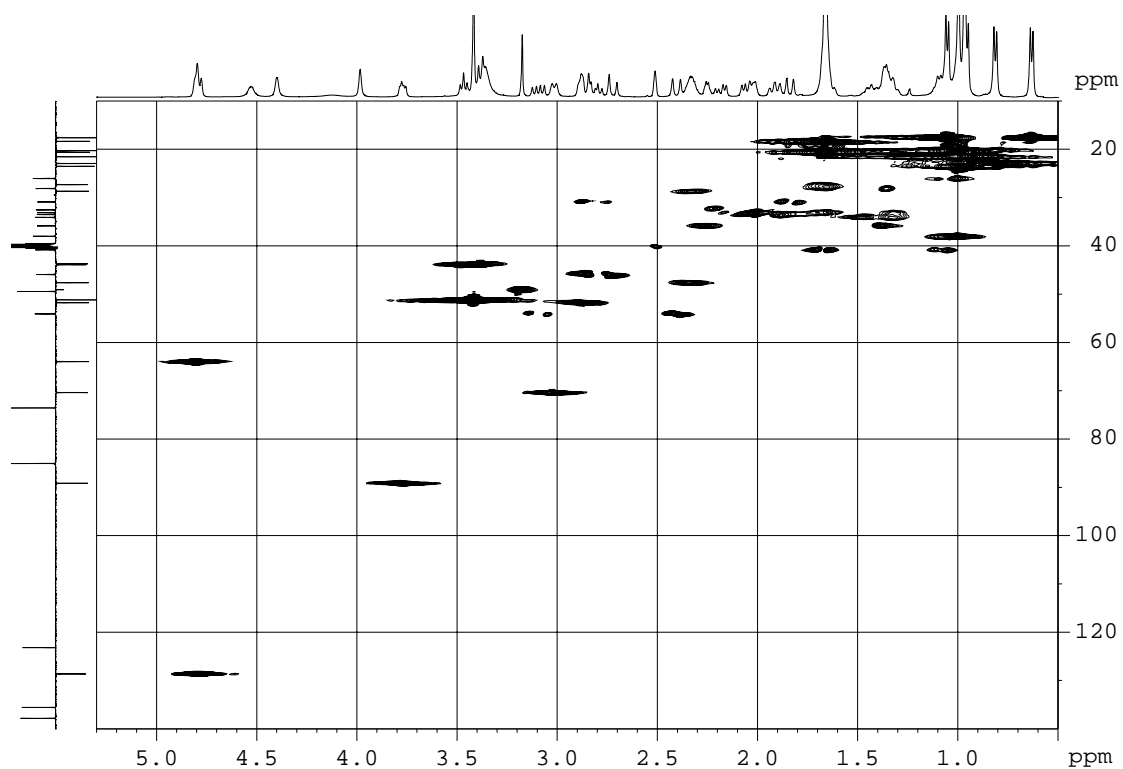


Figure S3 HMQC spectrum of compound 1

ypc-H-46, DMSO-d6  
HMBC

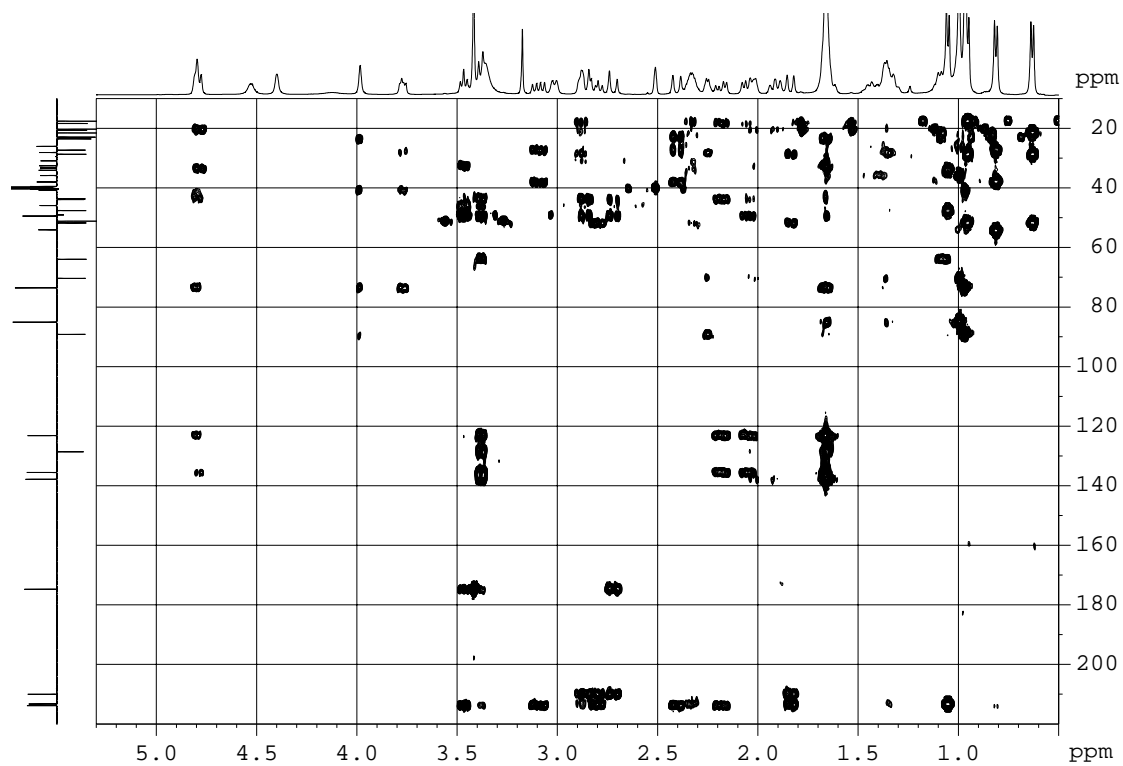


Figure S4 HMBC spectrum of compound 1

Avance DRX 500 Bruker A&T Center BNU  
Sample: ypc-H-46, Solvent: DMSO-d6  
COSY

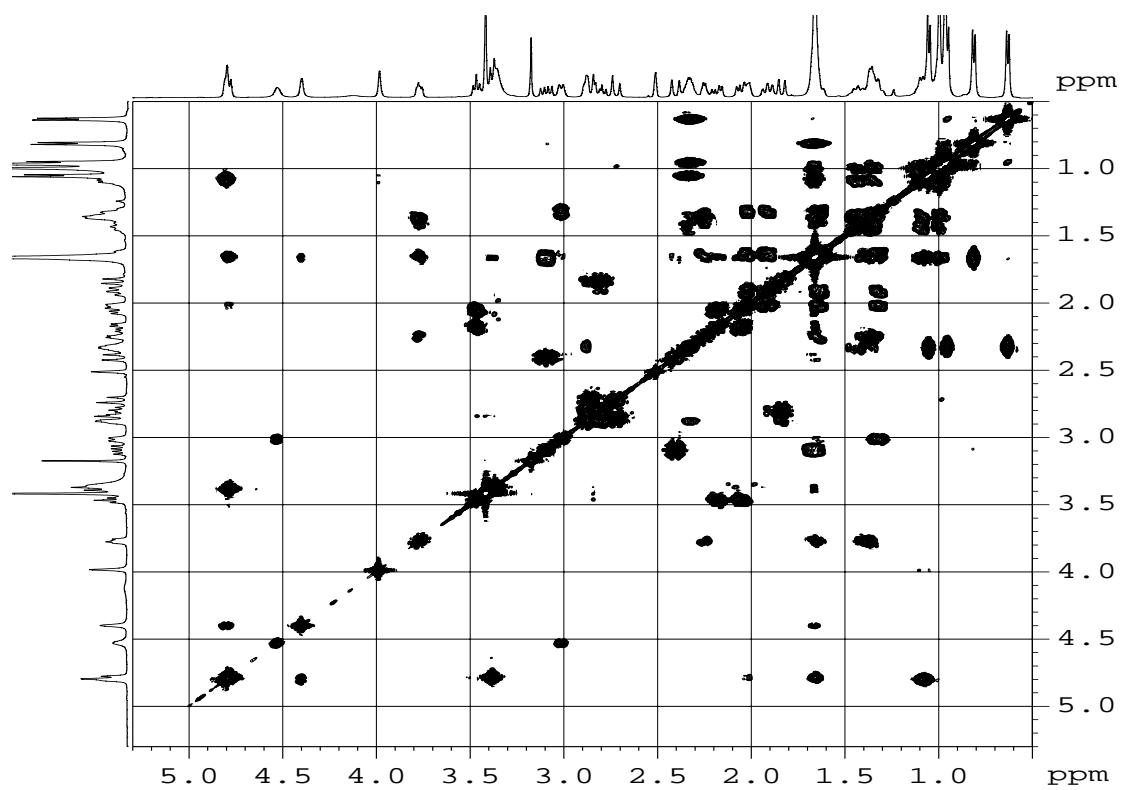


Figure S5 COSY spectrum of compound 1

ypc-H-46, DMSO-d6  
NOESY

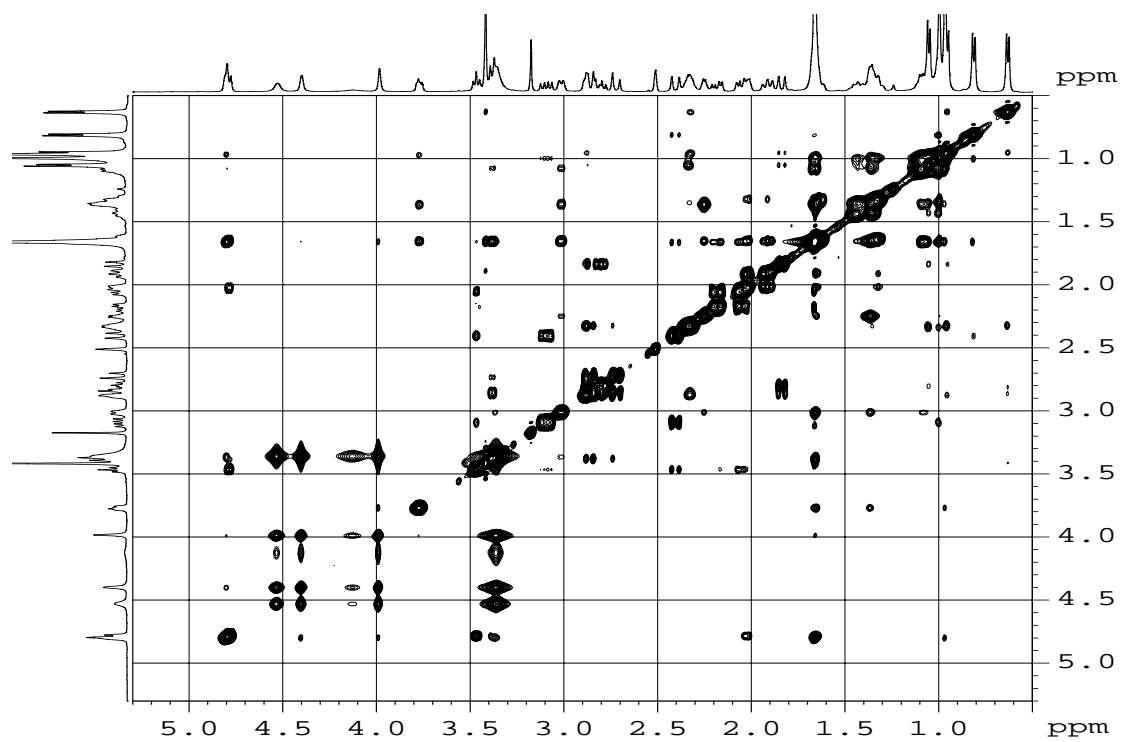


Figure S6 NOESY spectrum of compound 1

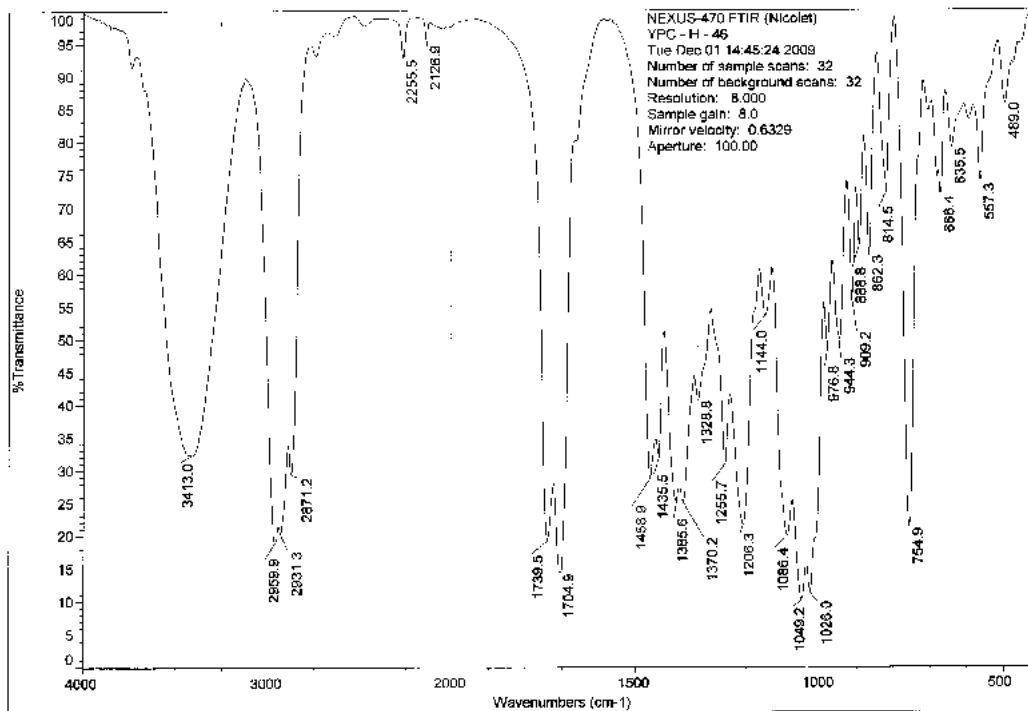


Figure S7 IR spectrum of compound 1

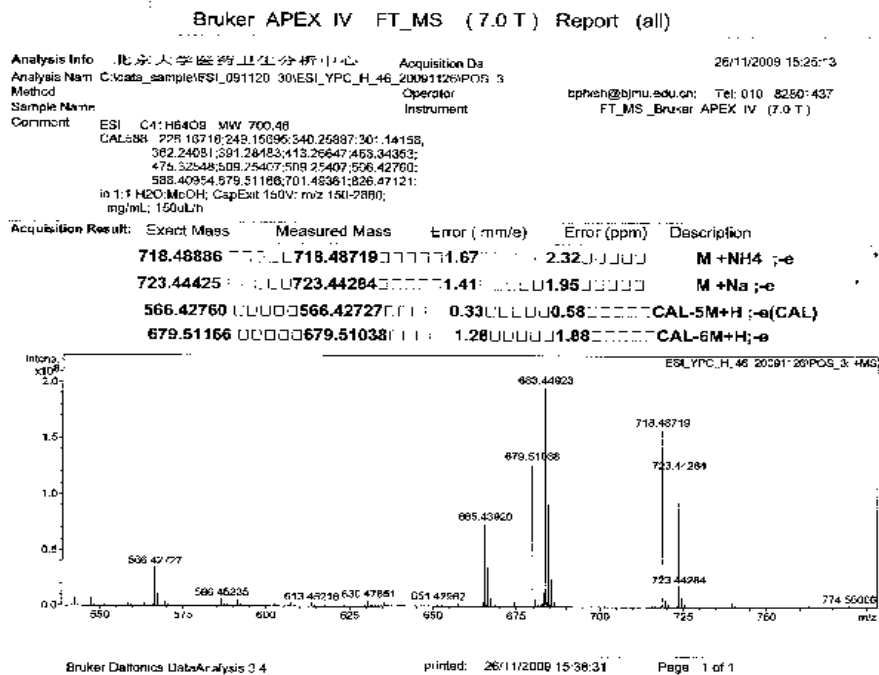


Figure S8 HRESIMS spectrum of compound 1

## Spectra of compound 2

Avance DRX 500 Bruker A&T Center BNU

Sample: ypc-H-20a, Solvent: DMSO-d6

<sup>1</sup>H NMR

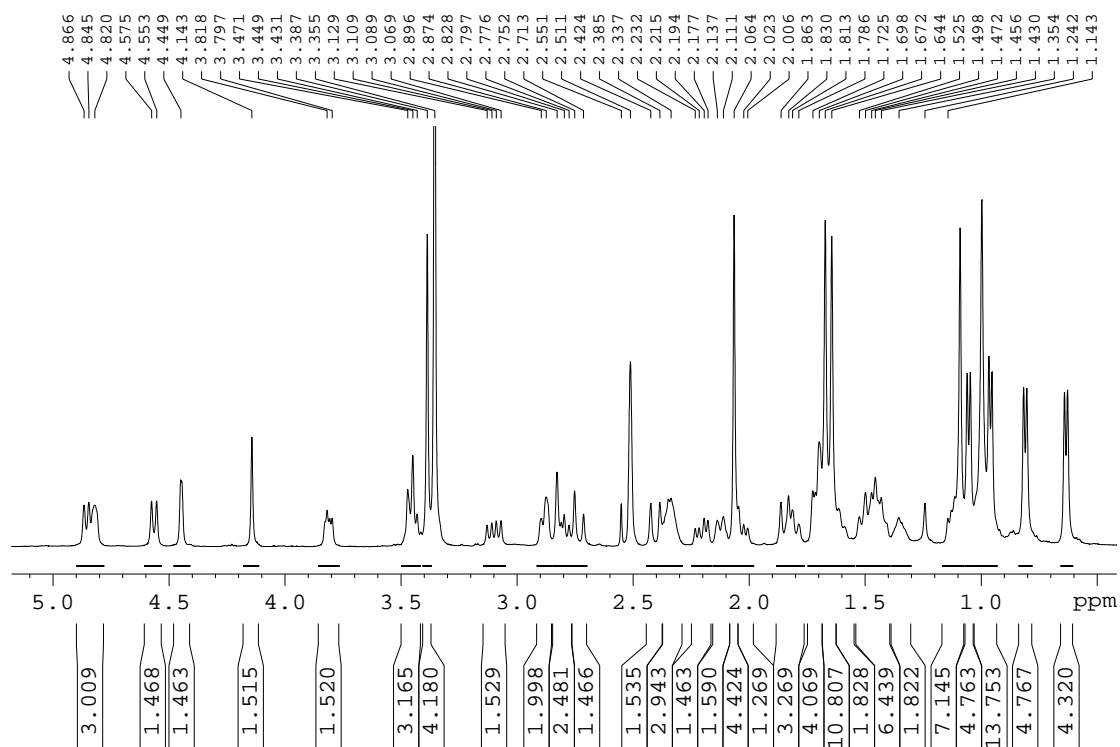


Figure S9 <sup>1</sup>H NMR spectrum of compound 2

ypc-H-20a, DMSO-d6

APT <sup>13</sup>C NMR

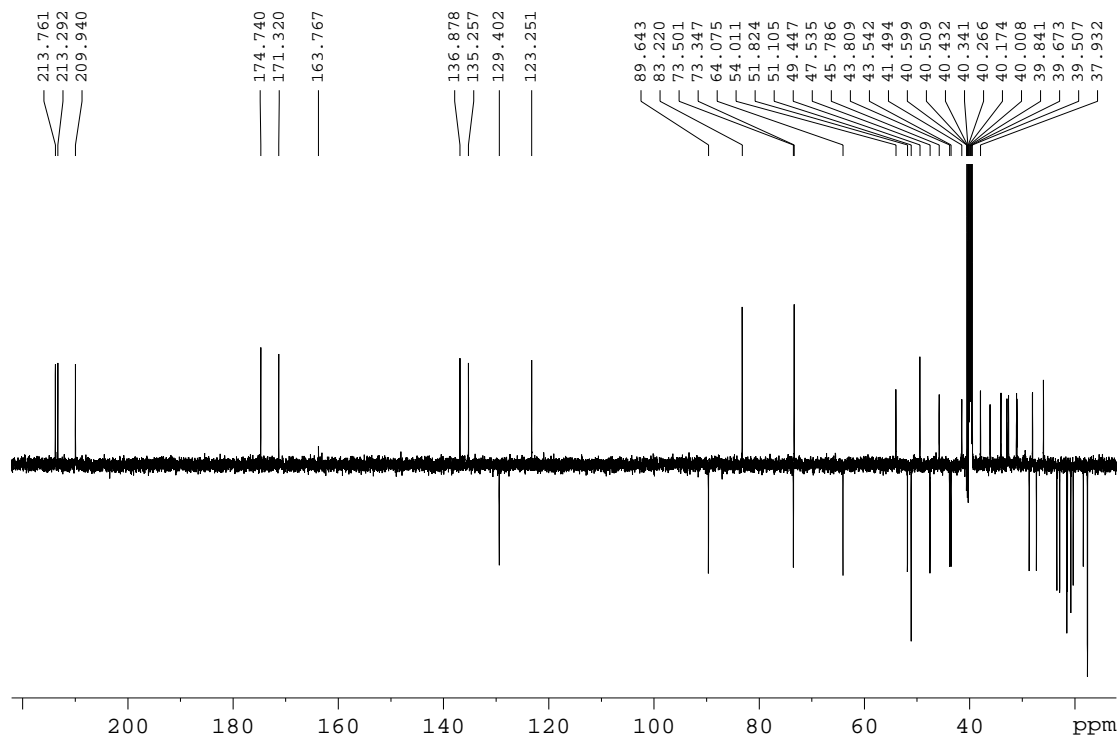


Figure S10 <sup>13</sup>C NMR spectrum of compound 2

ypc-H-20a, DMSO-d6  
HMQC

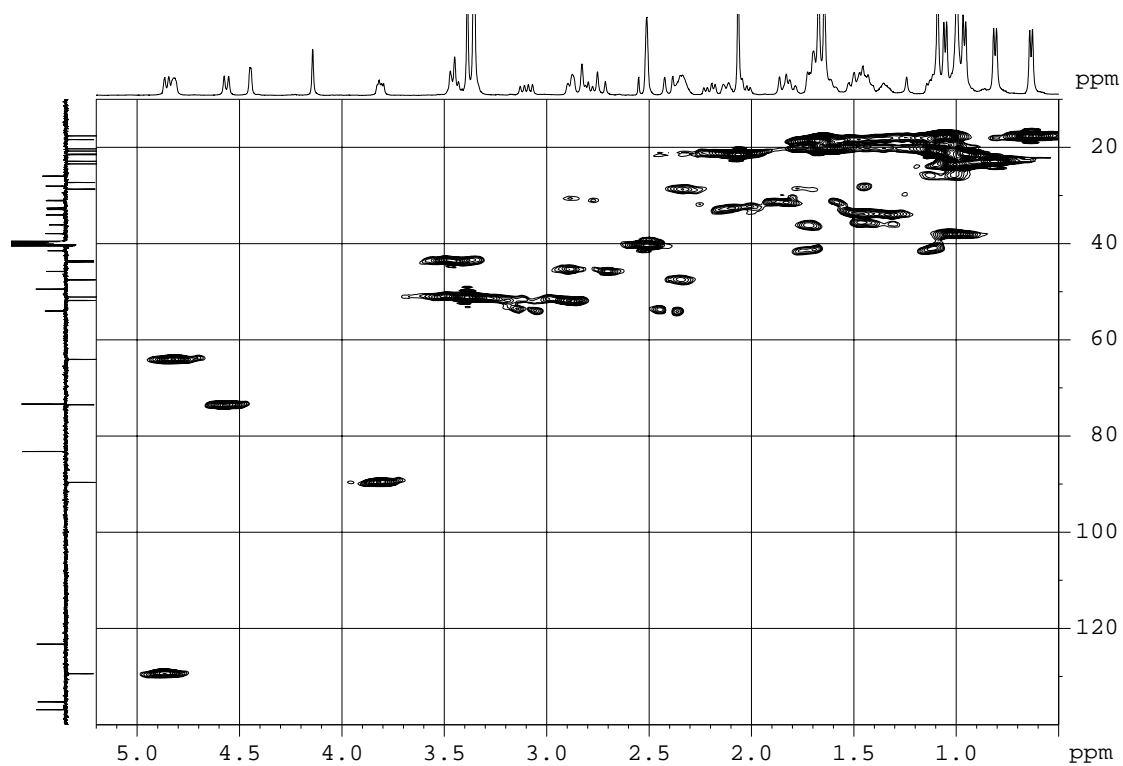


Figure S11 HMQC spectrum of compound 2

ypc-H-20a, DMSO-d6  
HMBC

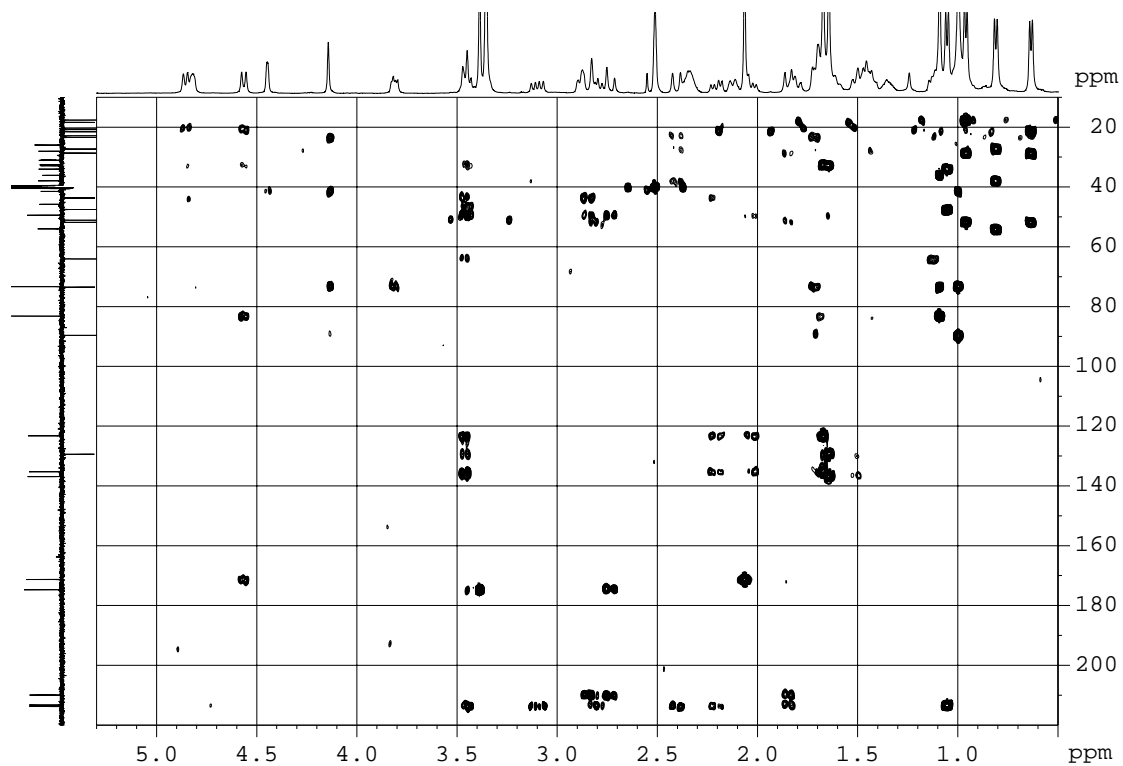


Figure S12 HMBC spectrum of compound 2

Sample: ypc-H-20a, Solvent: DMSO-d6  
COSY

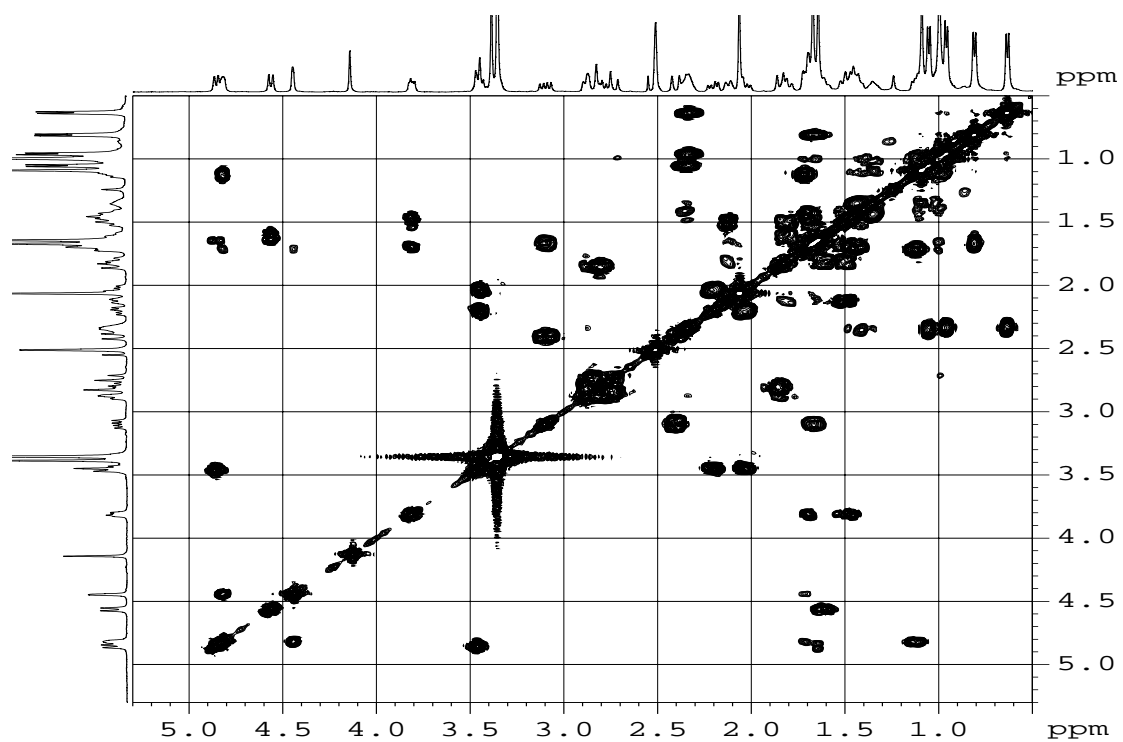


Figure S13 COSY spectrum of compound 2

ypc-H-20a, DMSO-d6  
NOESY

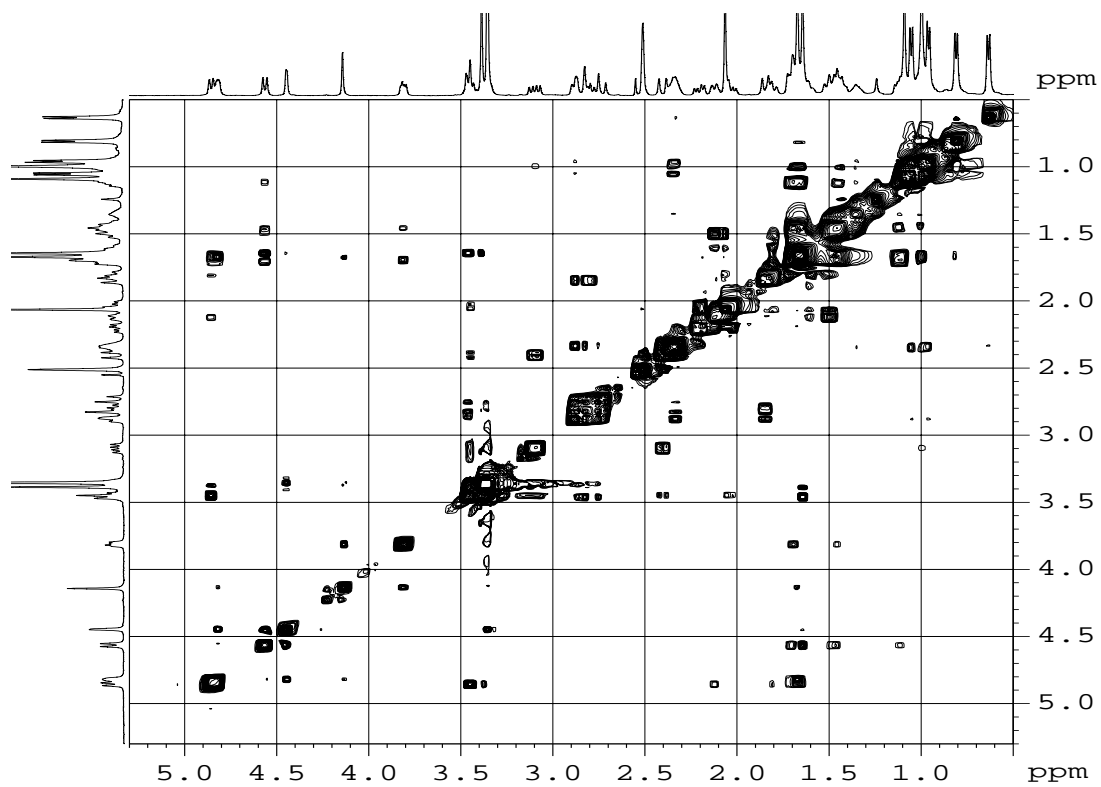


Figure S14 NOESY spectrum of compound 2



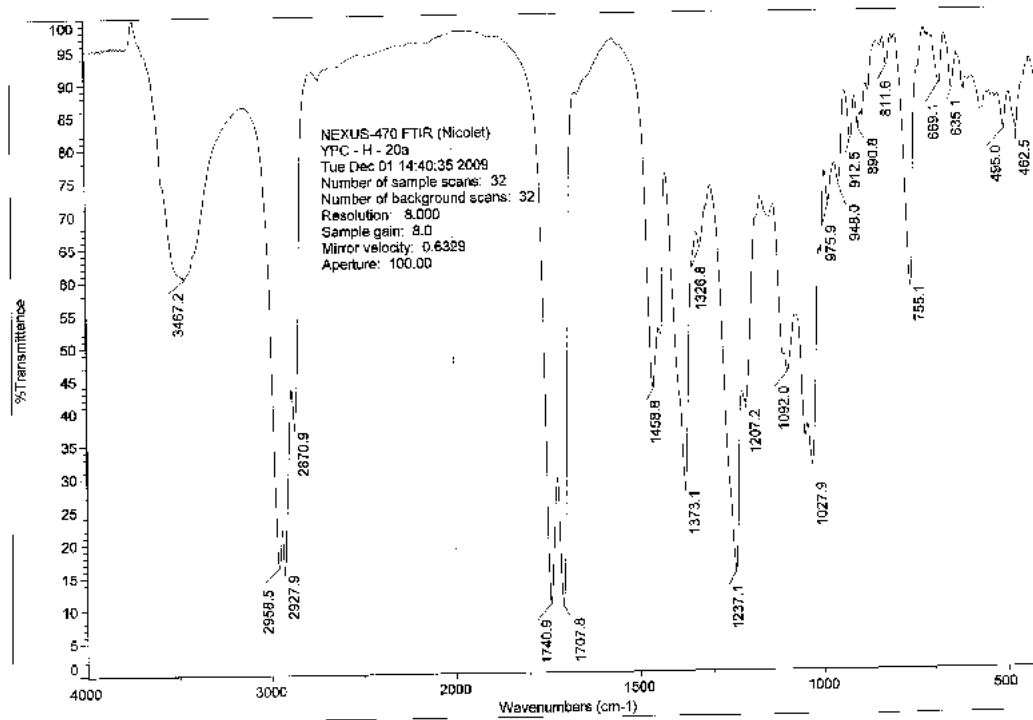


Figure S15 IR spectrum of compound 2

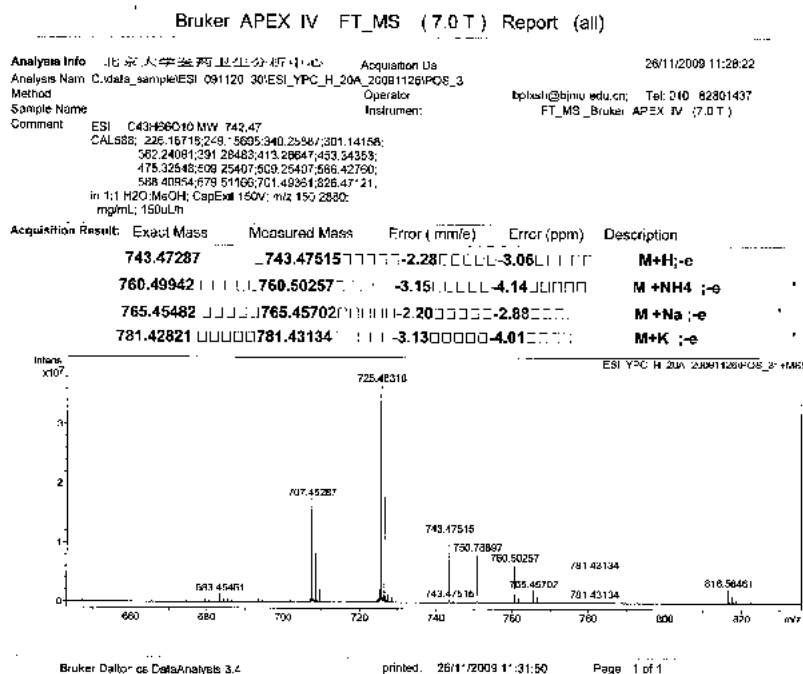


Figure S16 HRESIMS spectrum of compound 2

### Spectra of compound 3

Avance DRX 500 Bruker A&T Center BNU  
Sample: ypc-H-24, Solvent: DMSO-d6  
1H NMR

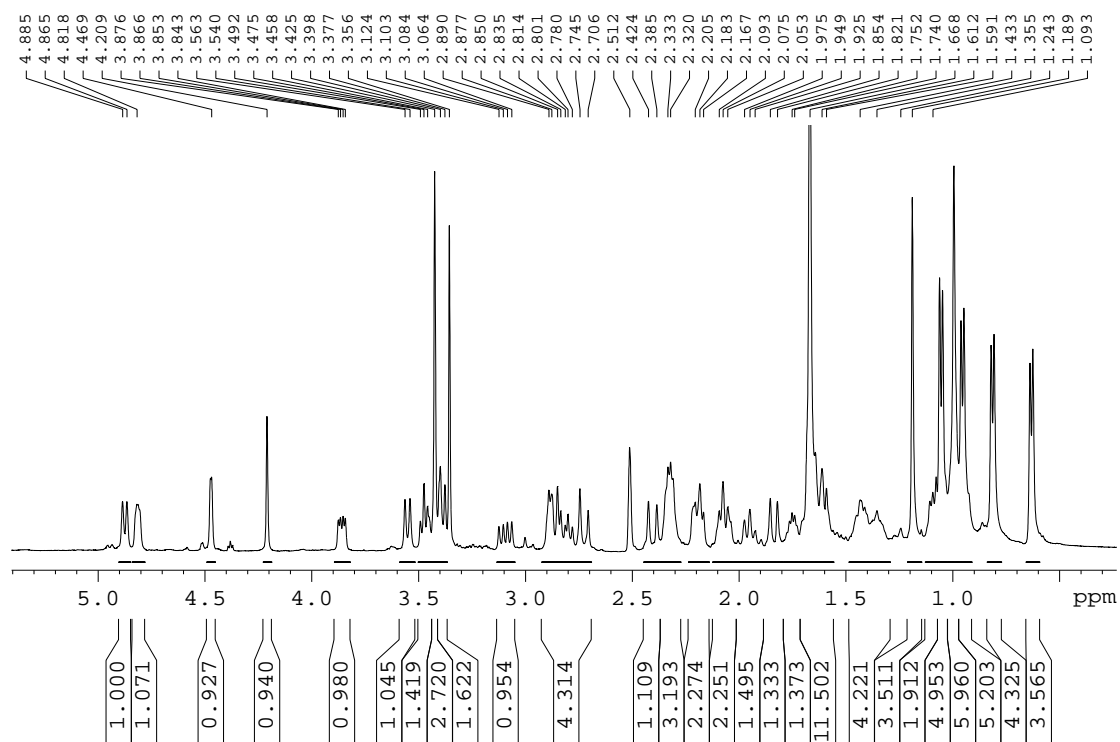


Figure S17 <sup>1</sup>H NMR spectrum of compound 3

Avance DRX 500 Bruker A&T Center BNU  
Sample: ypc-H-24, Solvent: DMSO-d6  
APT 13C NMR

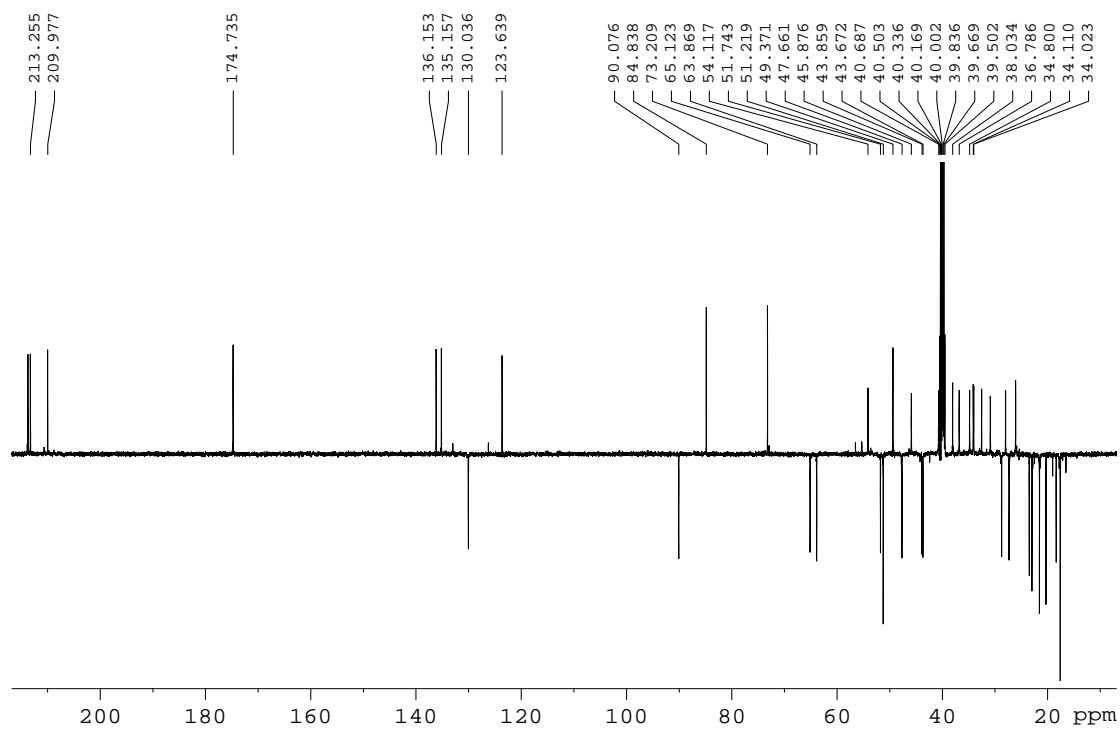


Figure S18 <sup>13</sup>C NMR spectrum of compound 3

Avance DRX 500 Bruker A&T Center BNU  
Sample: ypc-H-24, Solvent: DMSO-d6  
HMQC

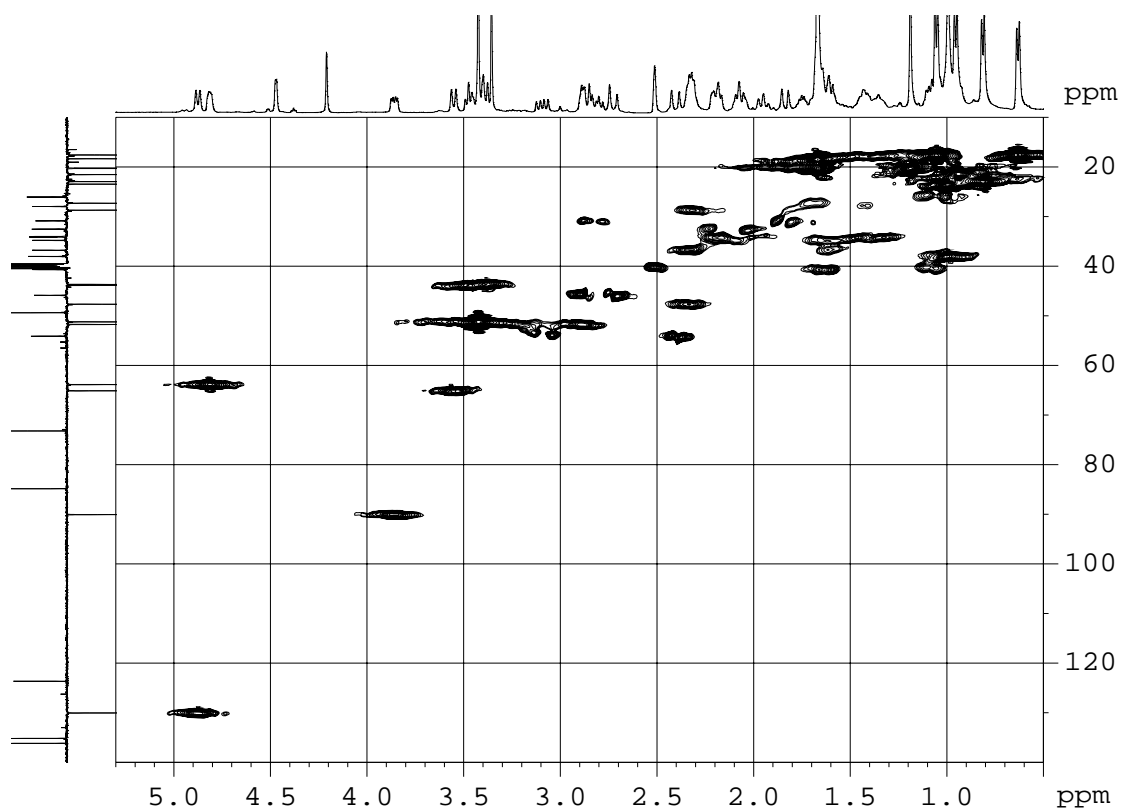


Figure S19 HMQC spectrum of compound 3

Avance DRX 500 Bruker A&T Center BNU  
Sample: ypc-H-24, Solvent: DMSO-d6  
HMBC

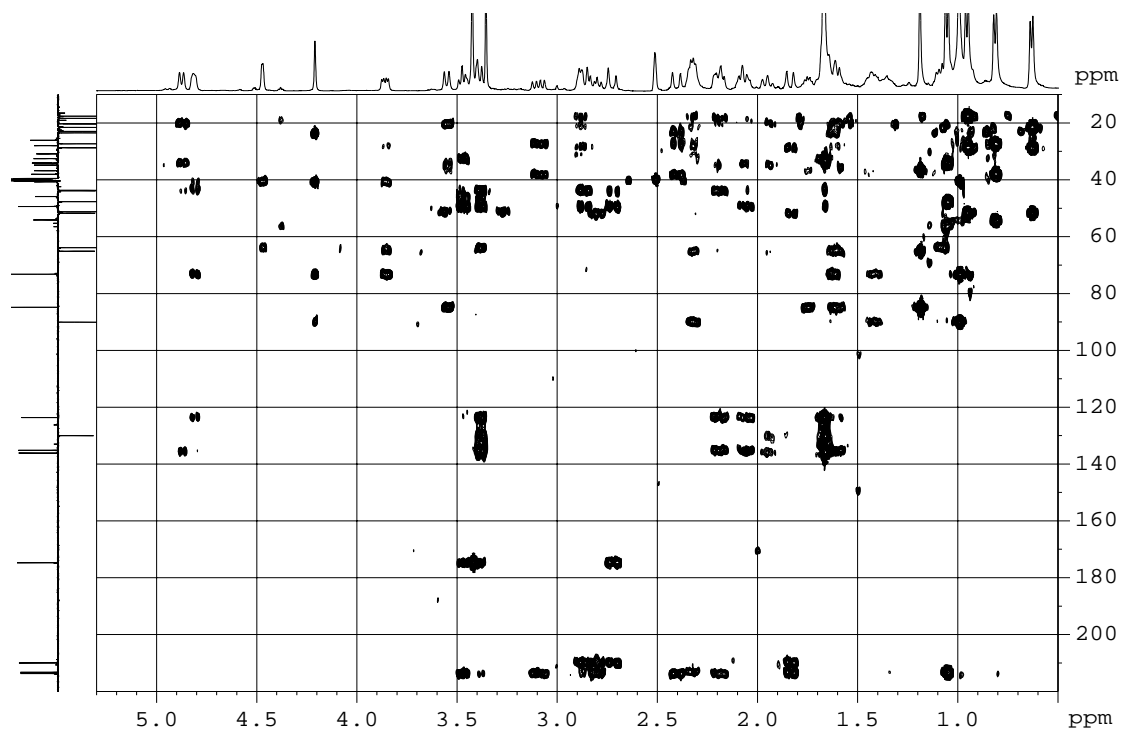


Figure S20 HMBC spectrum of compound 3

Avance DRX 500 Bruker A&T Center BNU  
Sample:ypc-H-24, Solvent:DMSO-d6  
COSY

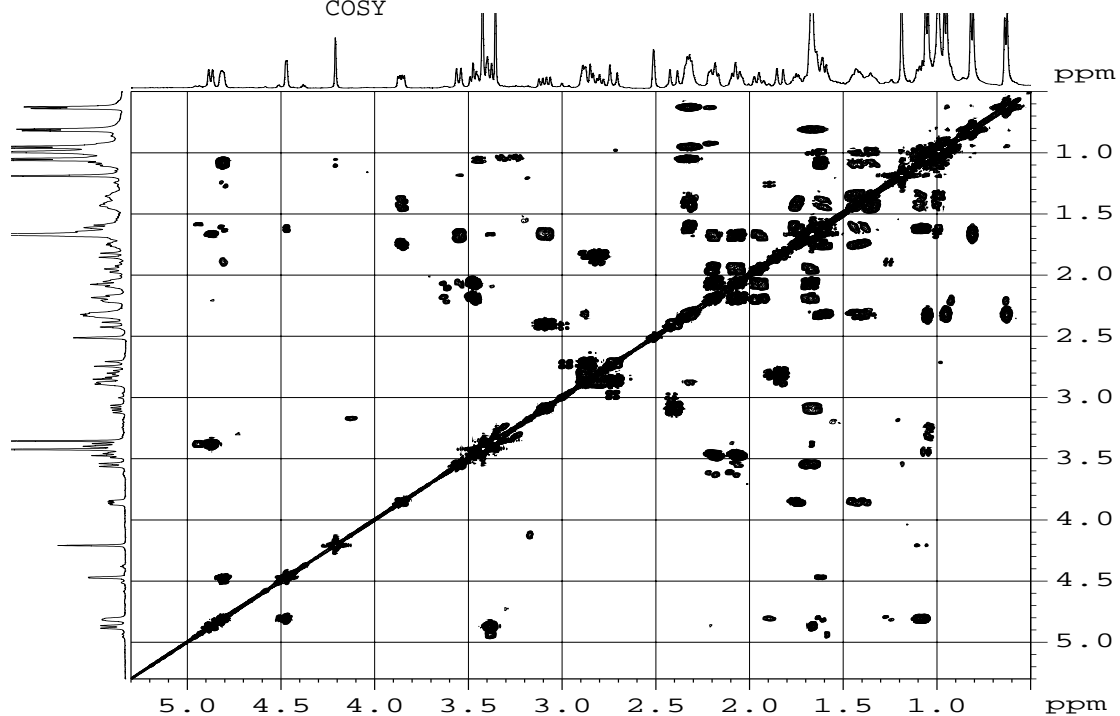


Figure S21 COSY spectrum of compound 3

Avance DRX 500 Bruker A&T Center BNU  
Sample:ypc-H-24, Solvent: DMSO-d6  
NOESY

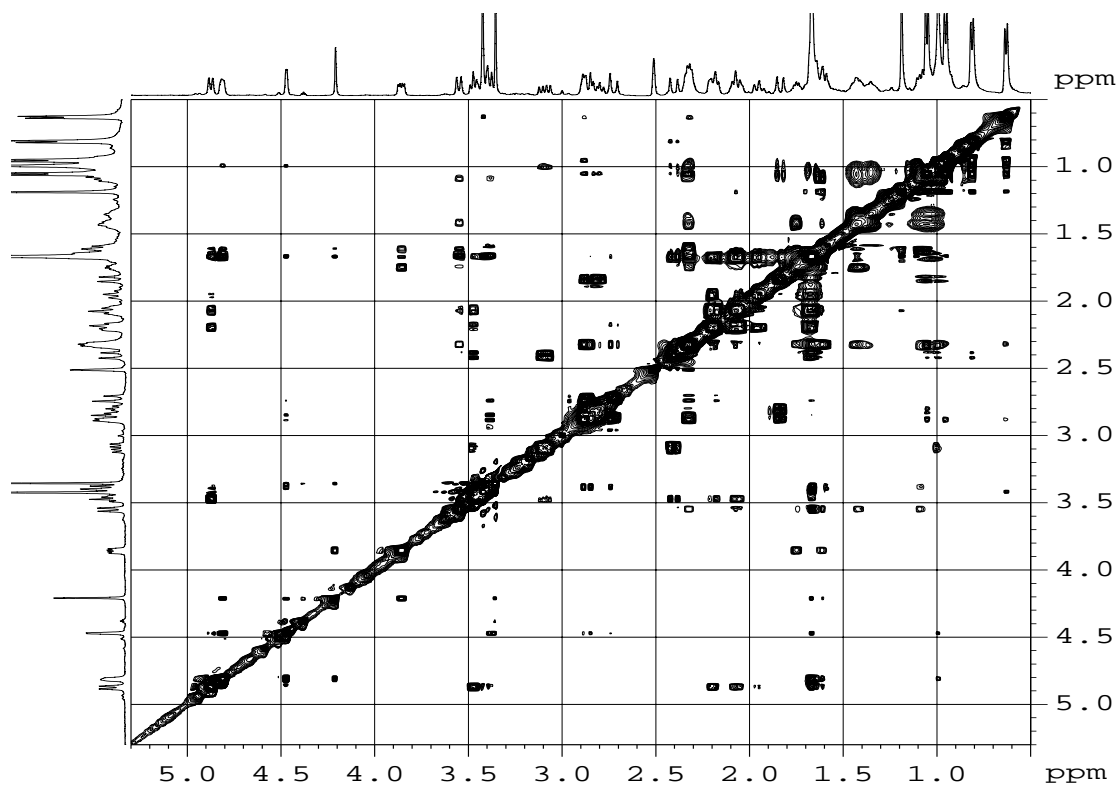


Figure S22 NOESY spectrum of compound 3

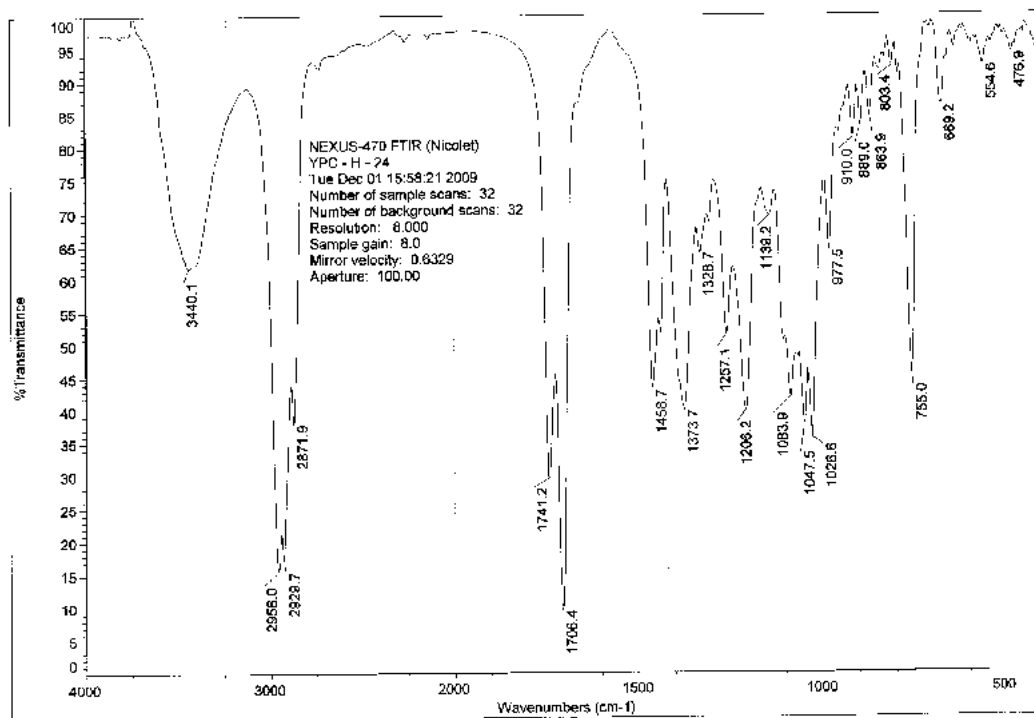


Figure S23 IR spectrum of compound 3

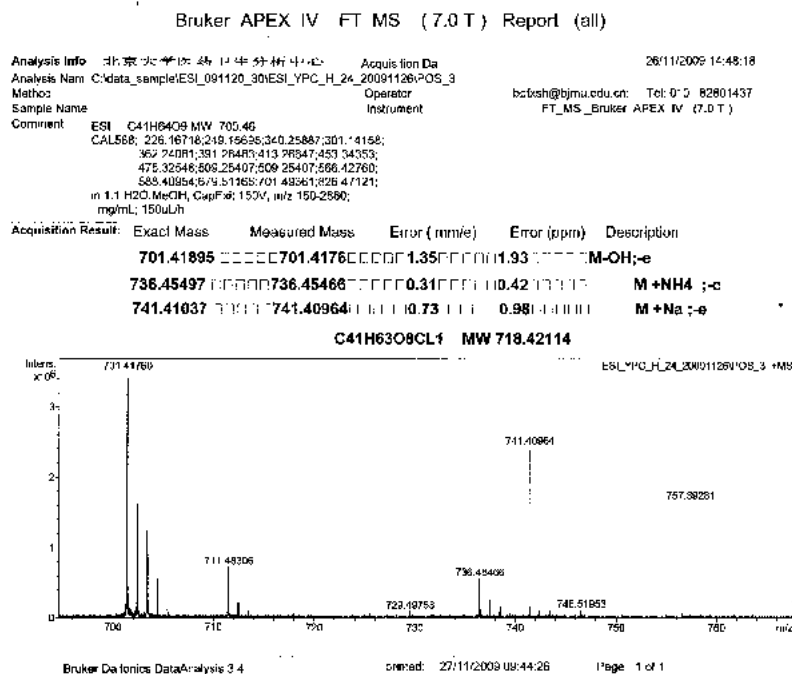


Figure S24 HRESIMS spectrum of compound 3

# Spectra of compound 4

ypc-H-13, DMSO-d6  
1H NMR

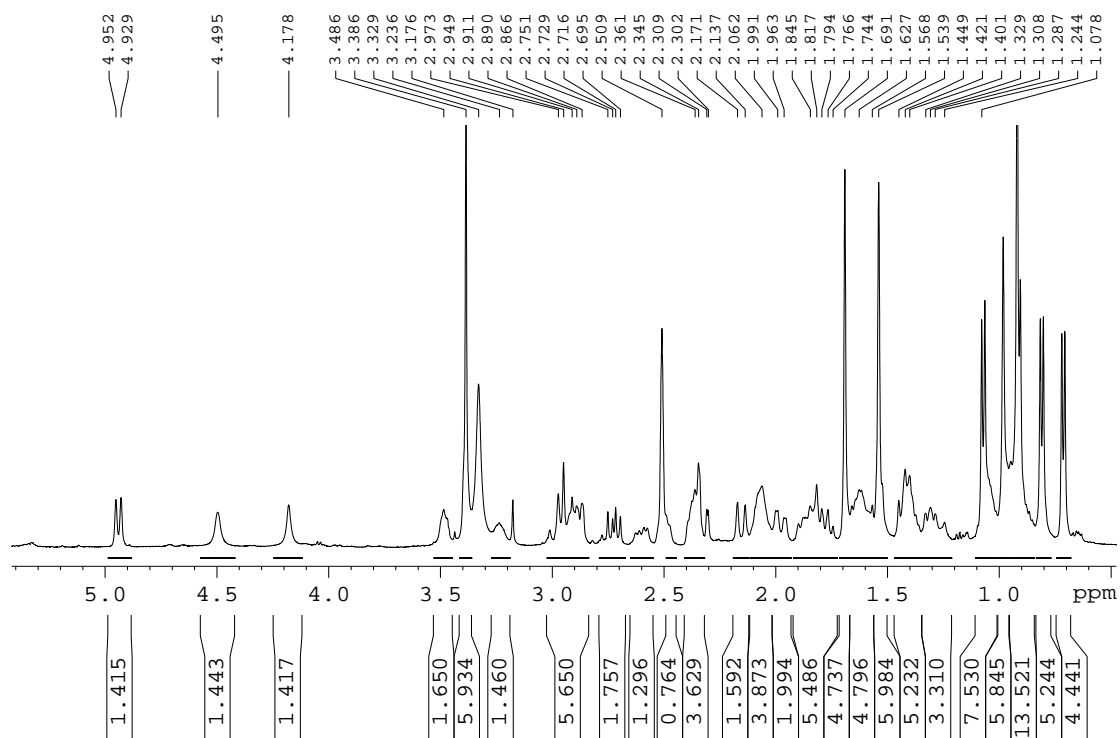


Figure S25 <sup>1</sup>H NMR spectrum of compound 4

ypc-H-13, DMSO-d6  
APT 13C NMR

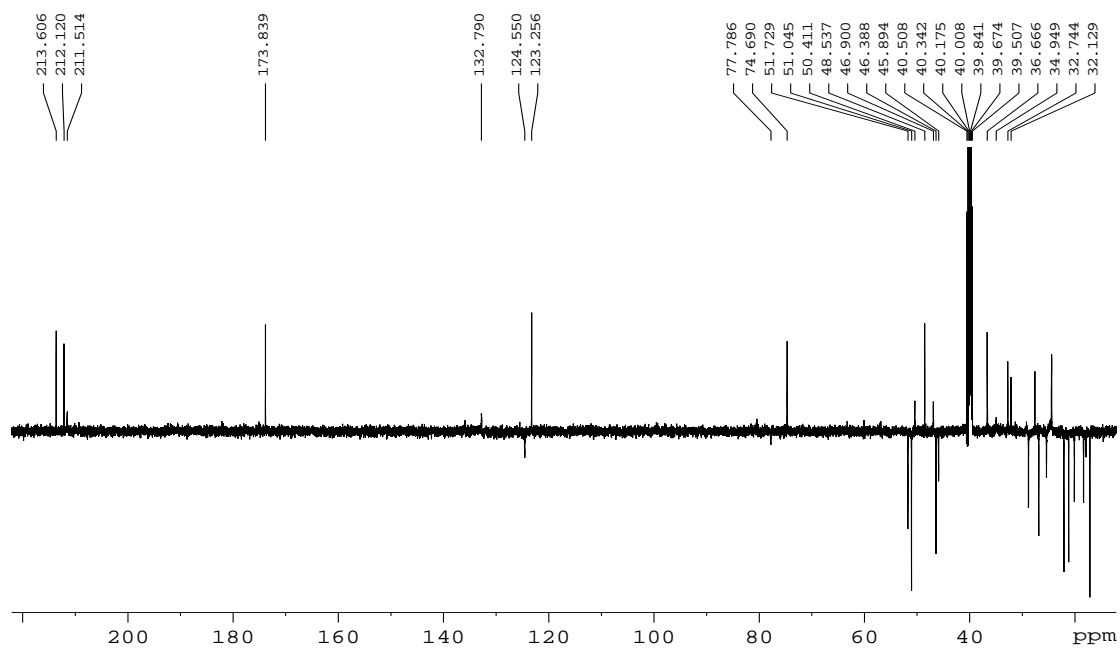


Figure S26 <sup>13</sup>C NMR spectrum of compound 4

ypc-H-13, DMSO-d6  
HMQC

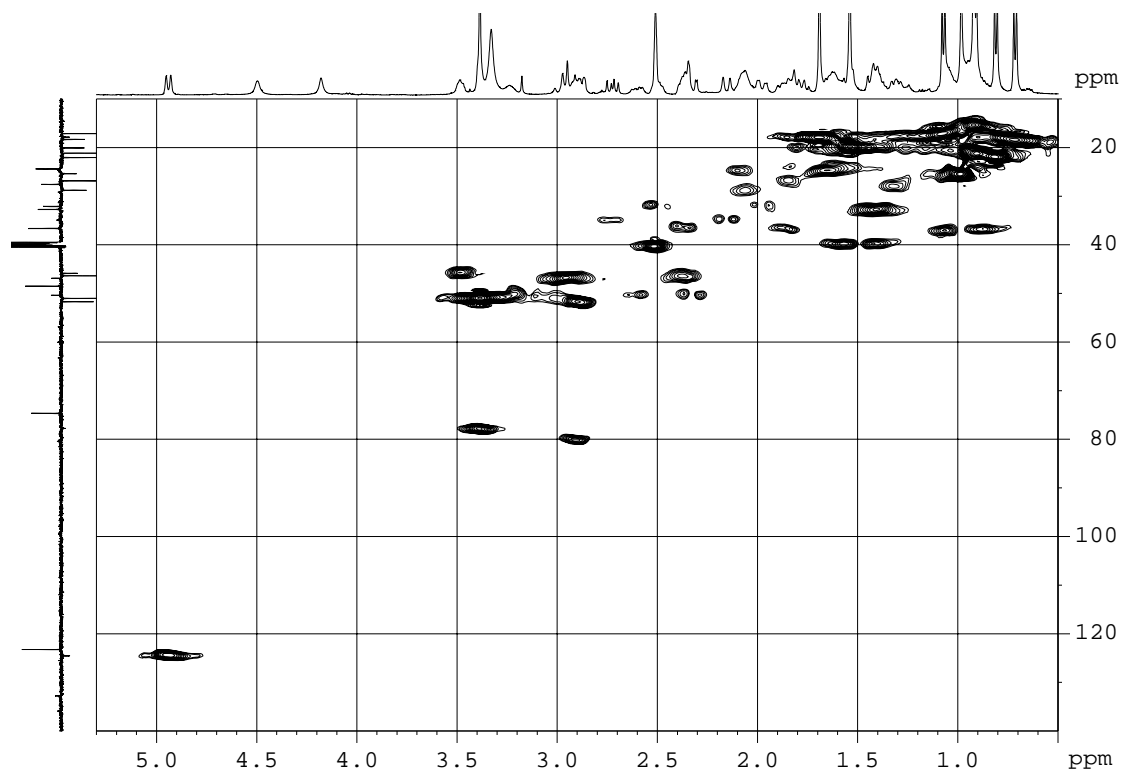


Figure S27 HMQC spectrum of compound 4

Avance DRX 500 Bruker, A&T Center BNU  
Sample: ypc-H-13, Solvent: DMSO-d6  
HMBC

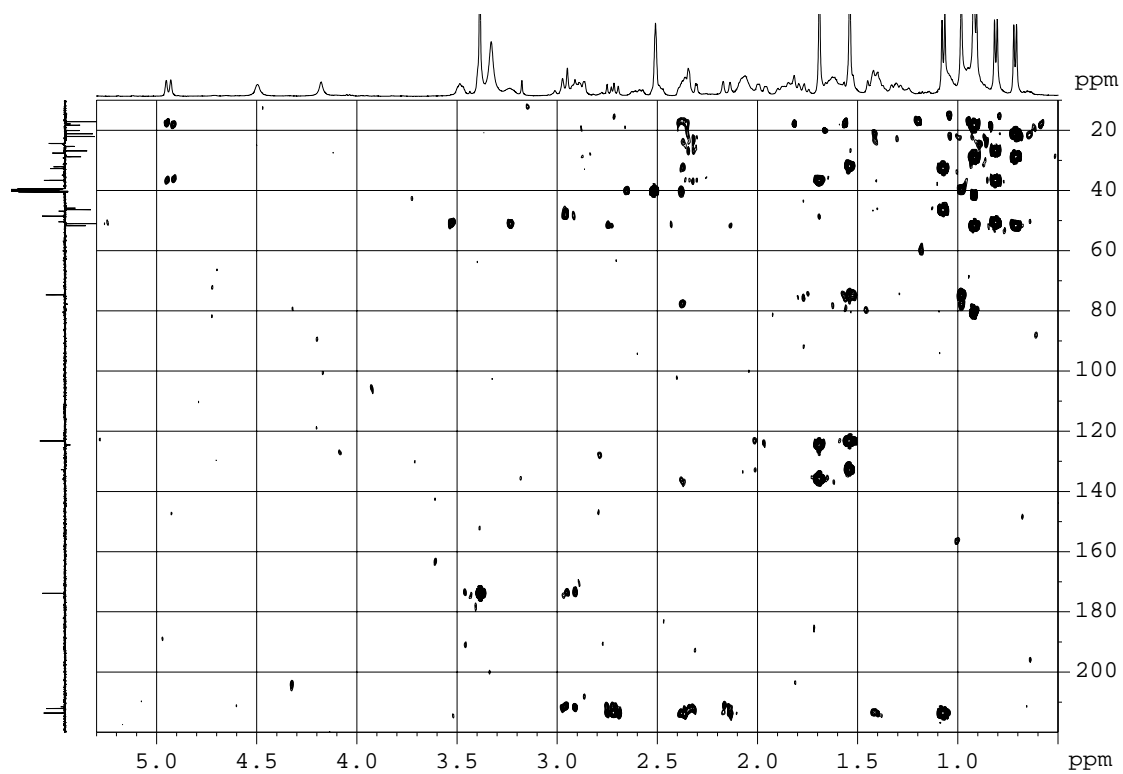


Figure S28 HMBC spectrum of compound 4

ypc-H-13, DMSO-d6  
COSY

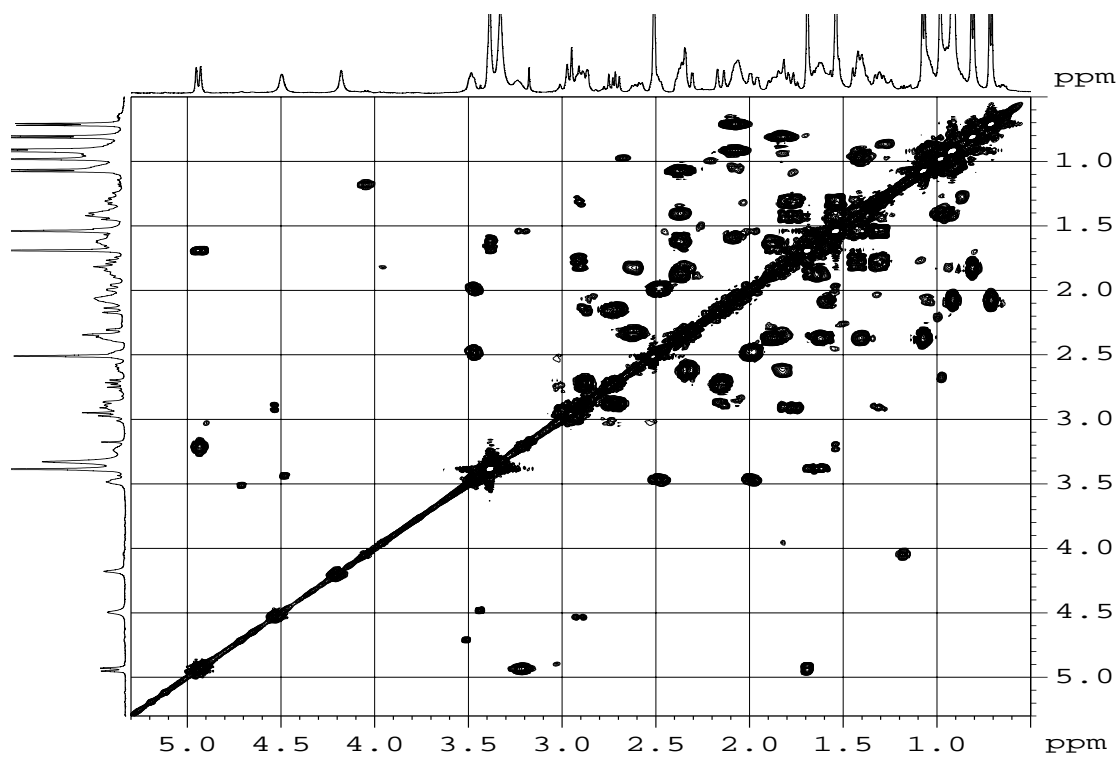


Figure S29 COSY spectrum of compound 4

Avance DRX 500 Bruker, A&T Center BNU  
Sample: ypc-H-13, Solvent: DMSO  
NOESY

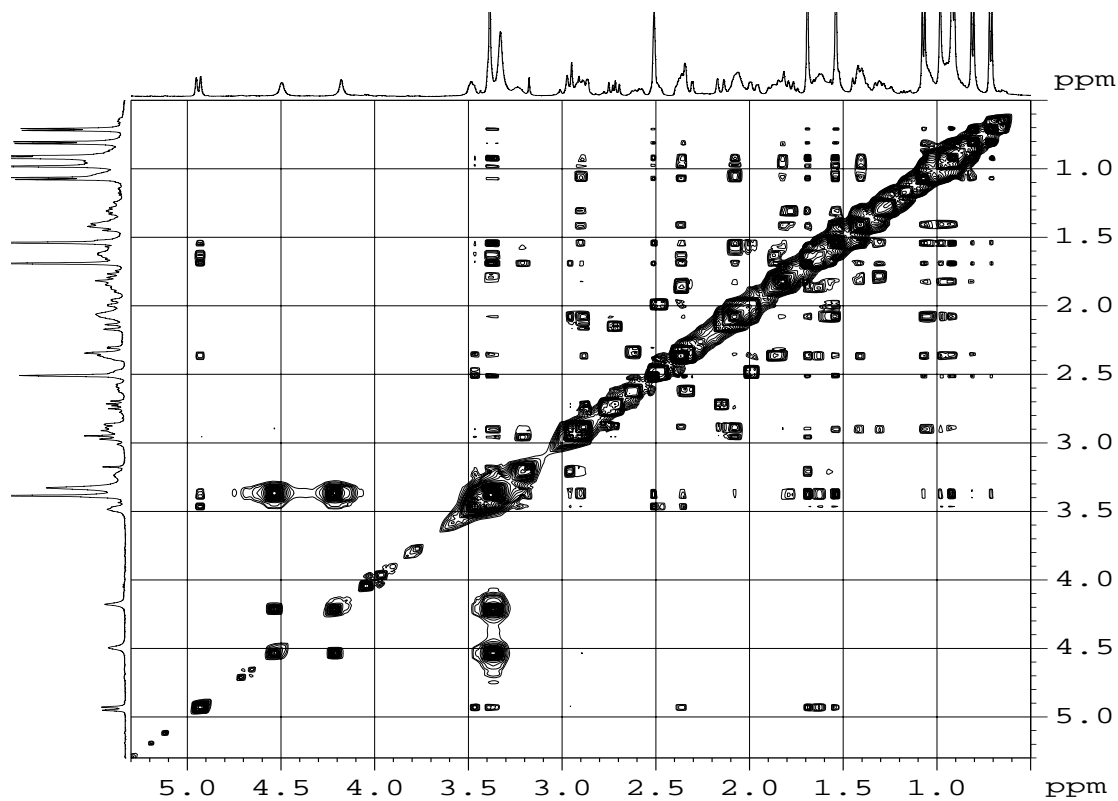


Figure S30 NOESY spectrum of compound 4



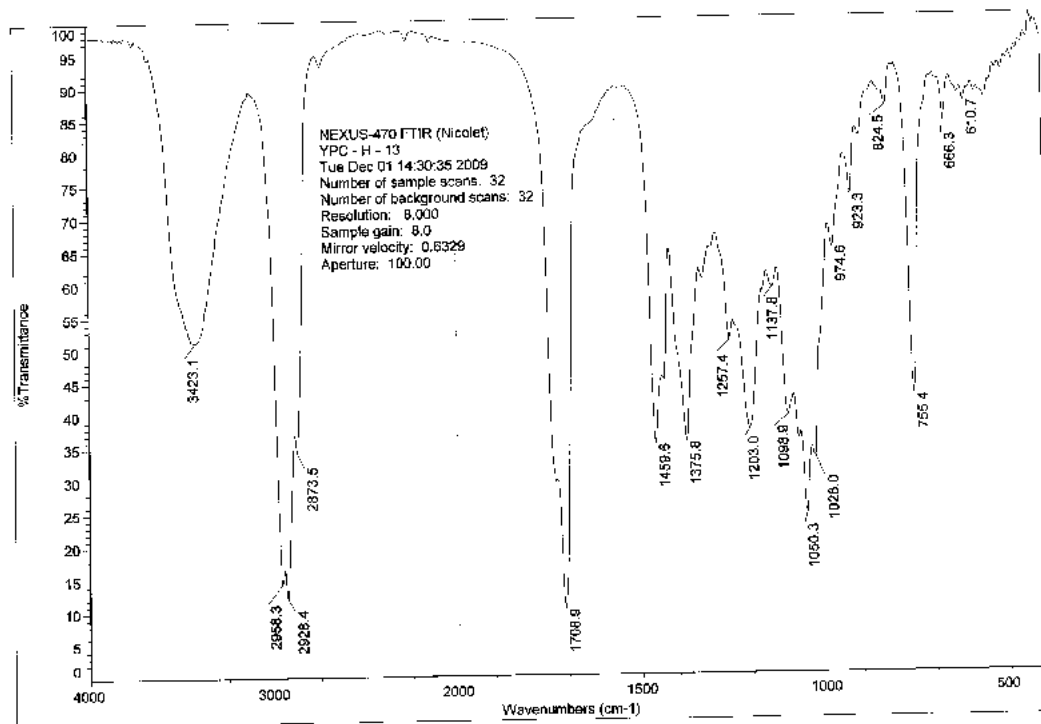


Figure S31 IR spectrum of compound 4

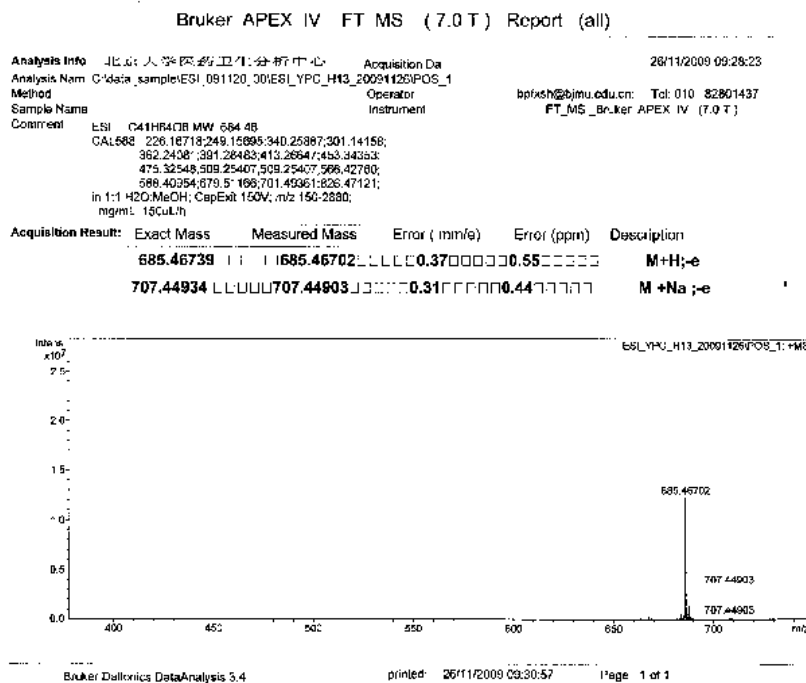


Figure S32 HRESIMS spectrum of compound 4

## Spectra of compound 5

advance 500 Bruker, A&T Center BNU  
sample:ypc-H-27a; Solvent:DMSO-d6  
1H NMR

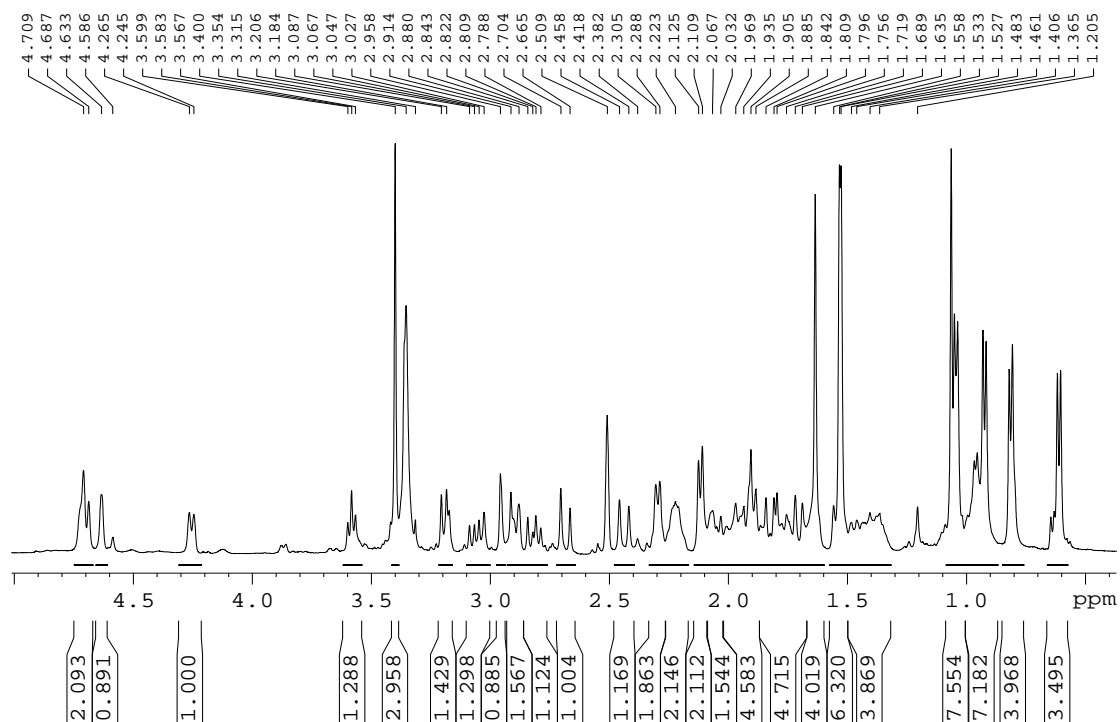


Figure S33  $^1\text{H}$  NMR spectrum of compound 5

Avance DRX 500 Bruker A&T Center BNU  
Sample:ypc-H-27a, Solvent:DMSO-d6  
APT 13C NMR

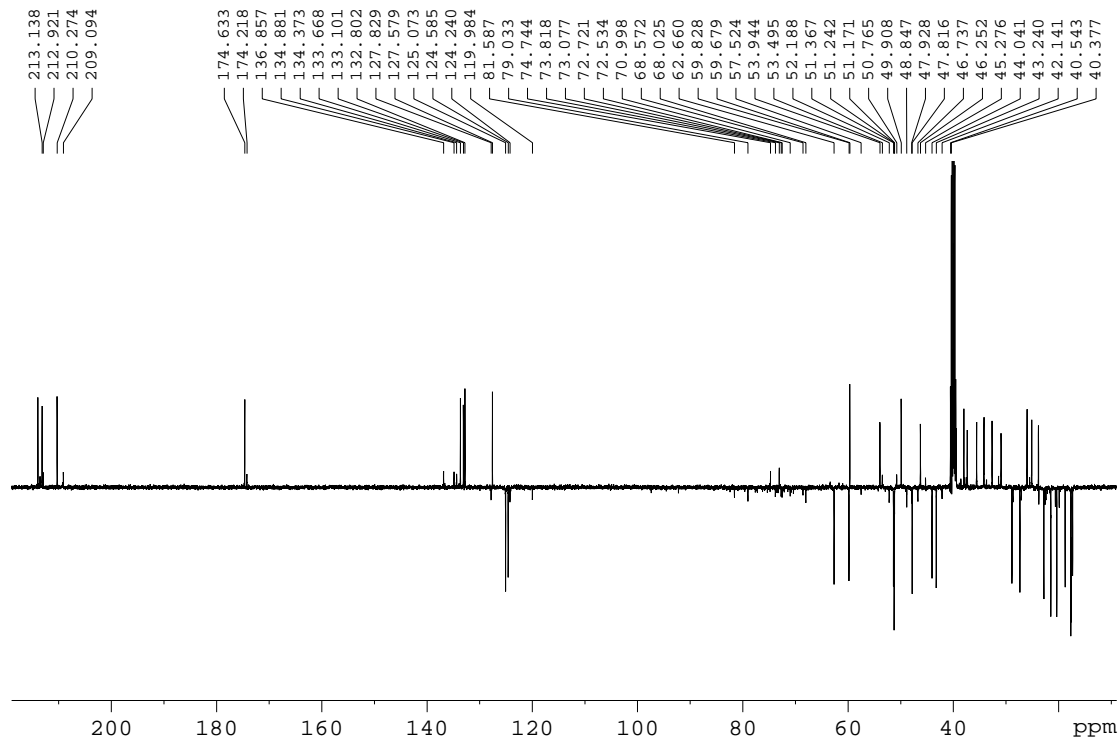


Figure S34  $^{13}\text{C}$  NMR spectrum of compound 5

Avance DRX 500 Bruker A&T Center BNU  
Sample: ypc-H-27a, DMSO-d6.  
HMQC

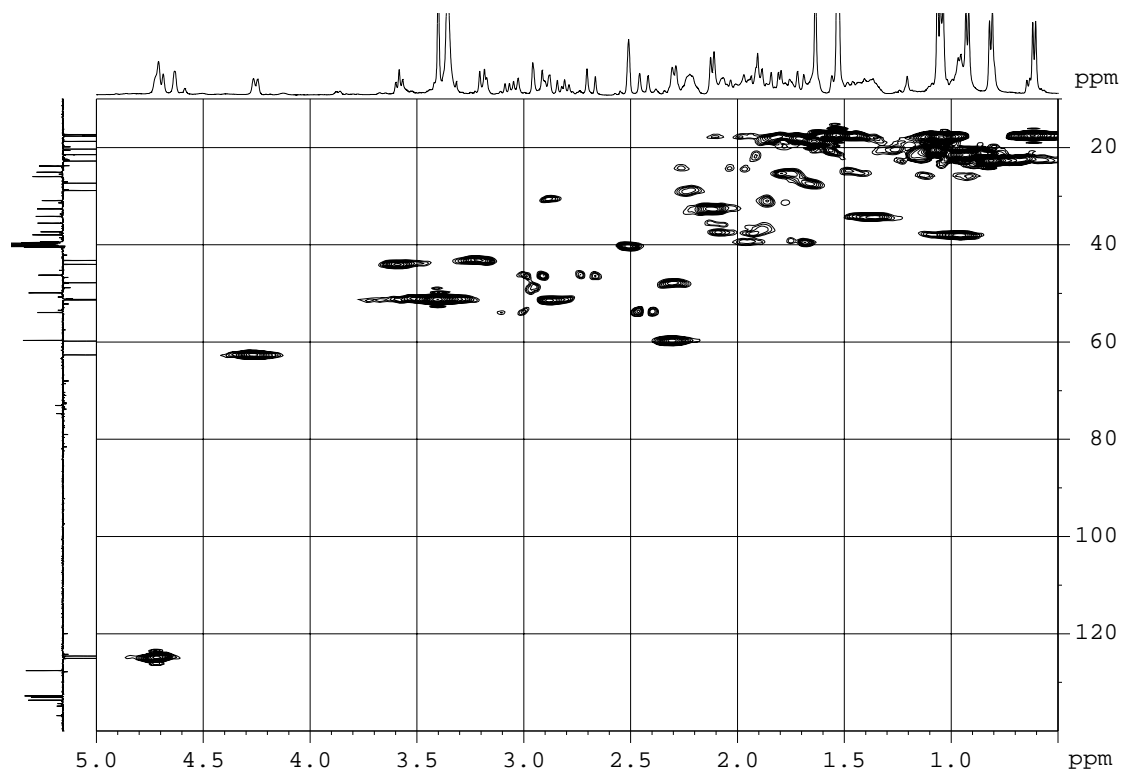


Figure S35 HMQC spectrum of compound 5

ypc-H-27a, DMSO-d6  
HMBC

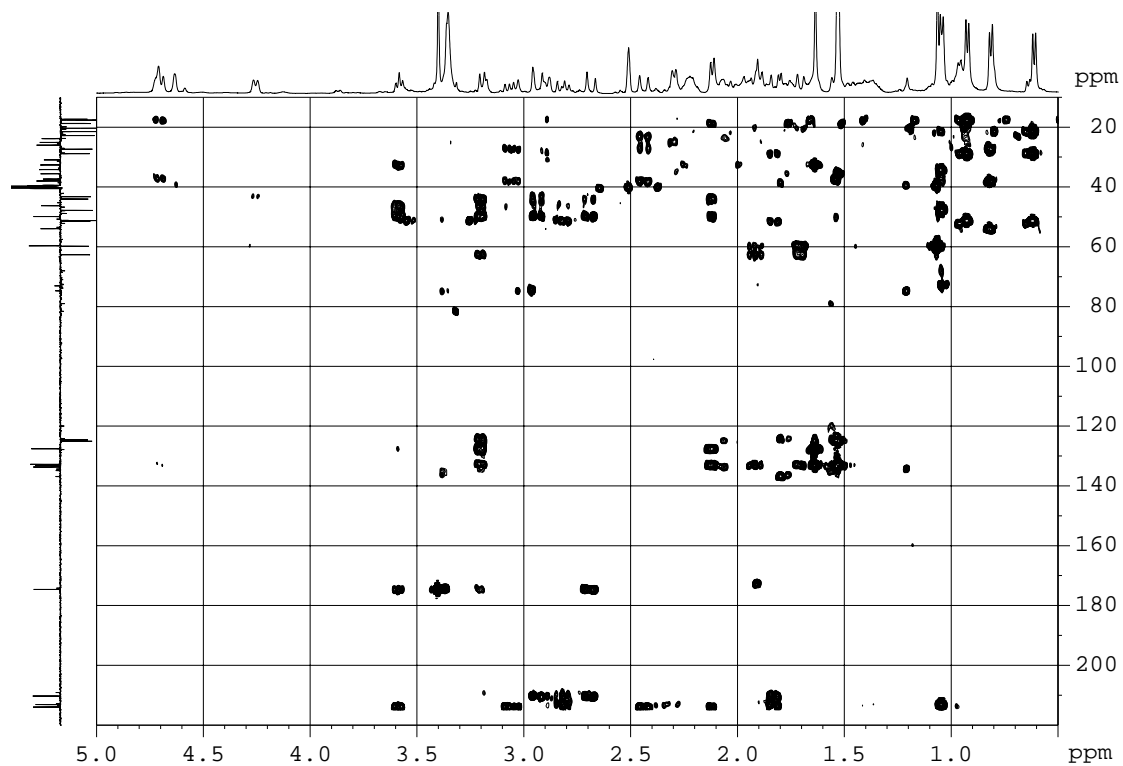


Figure S36 HMBC spectrum of compound 5

Avance DRX 500 Bruker A&T Center BNU  
Sample: ypc-H-27a, Solvent: DMSO-d6  
COSY

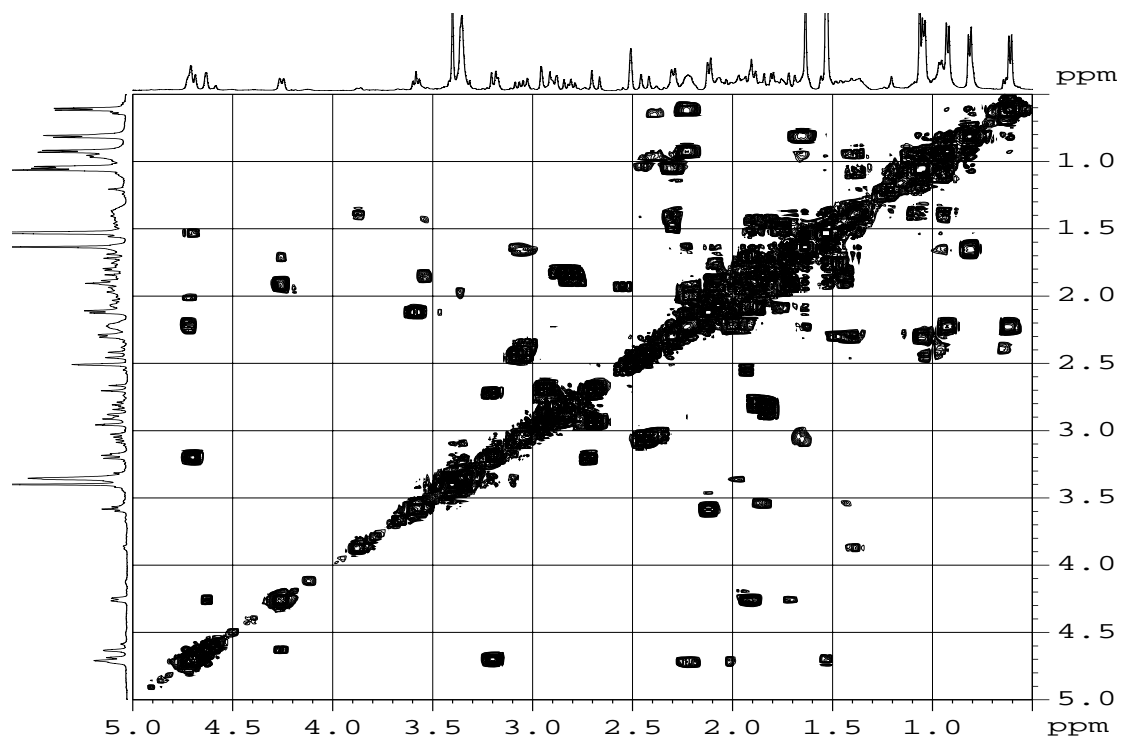


Figure S37 COSY spectrum of compound 5

ypc-H-27a, DMSO-d6  
NOESY

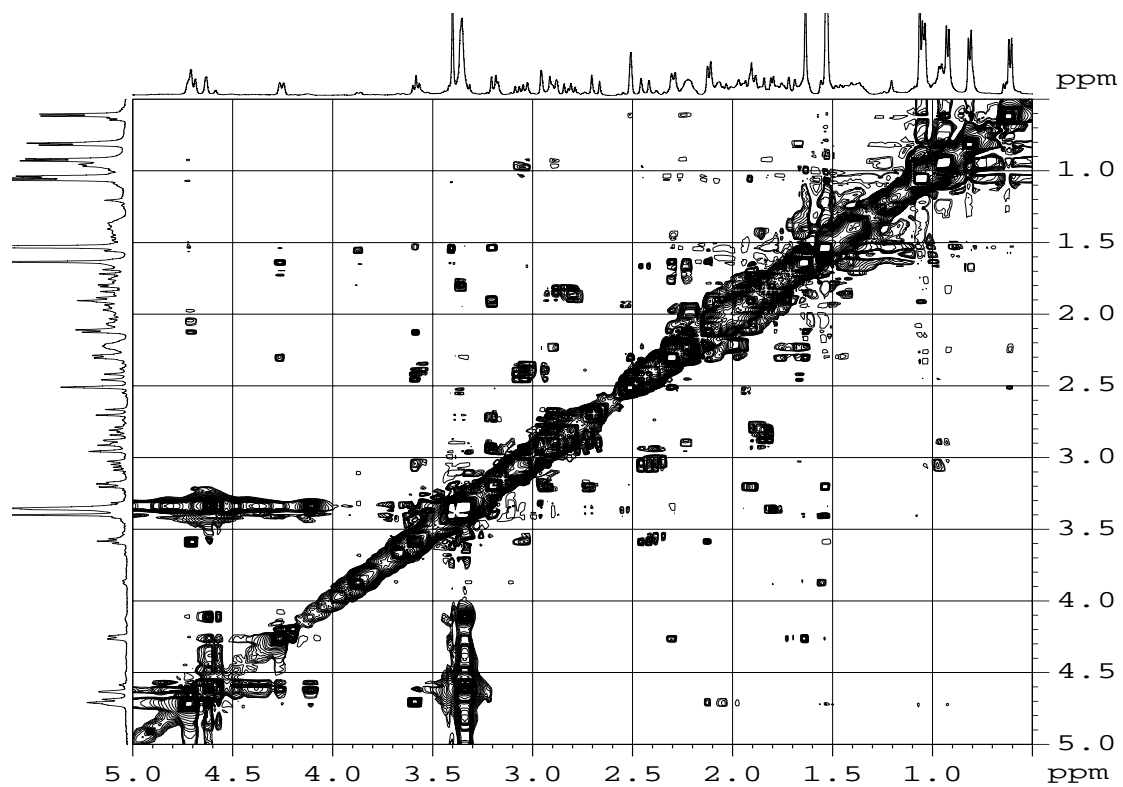


Figure S38 NOESY spectrum of compound 5

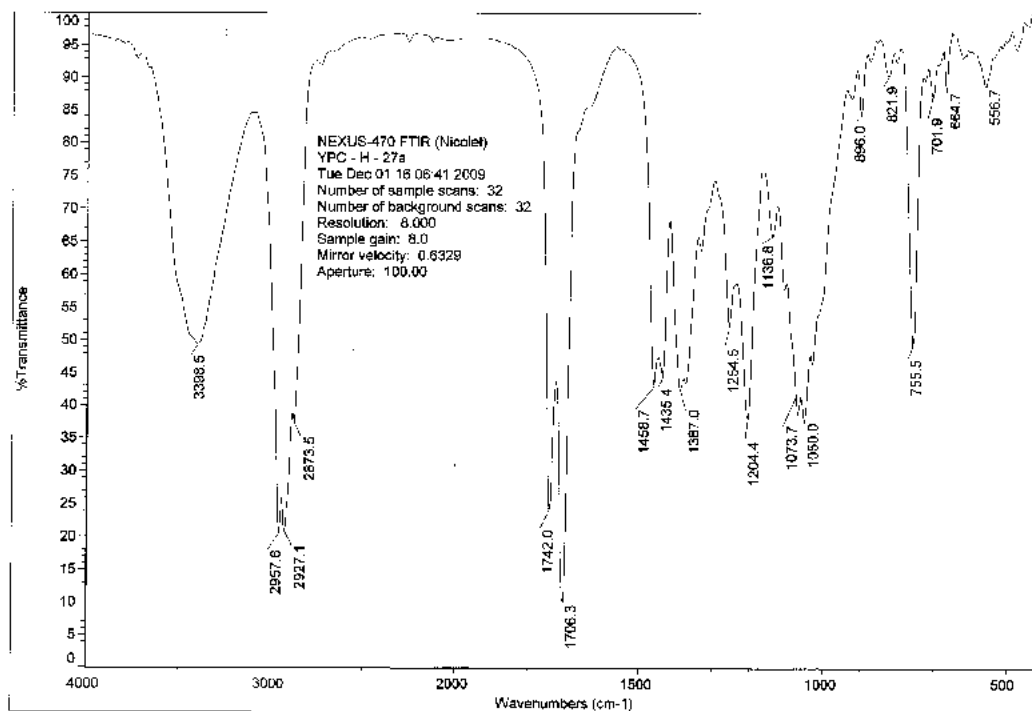


Figure S39 IR spectrum of compound 5

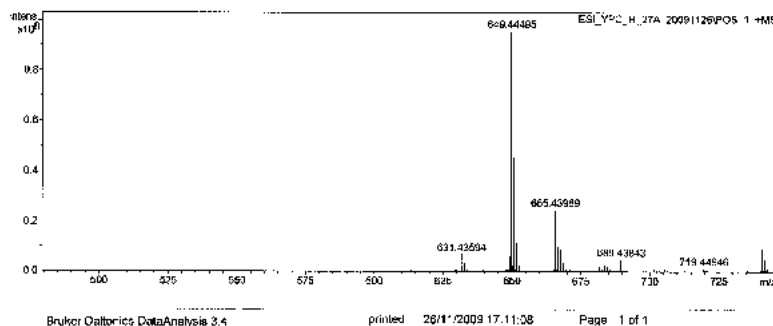
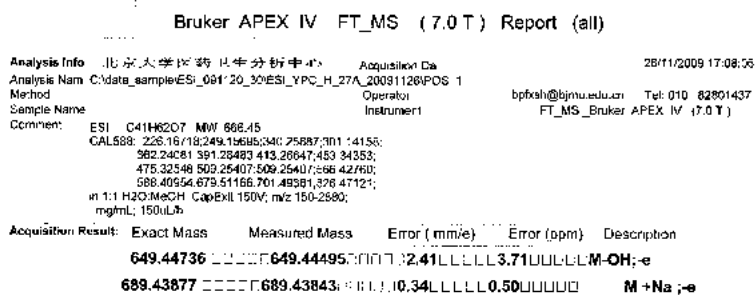


Figure S40 HRESIMS spectrum of compound 5

## Spectra of compound 6

CNU VNMRs 600MHz  
ypc-H-59, DMSO-d6  
1H NMR

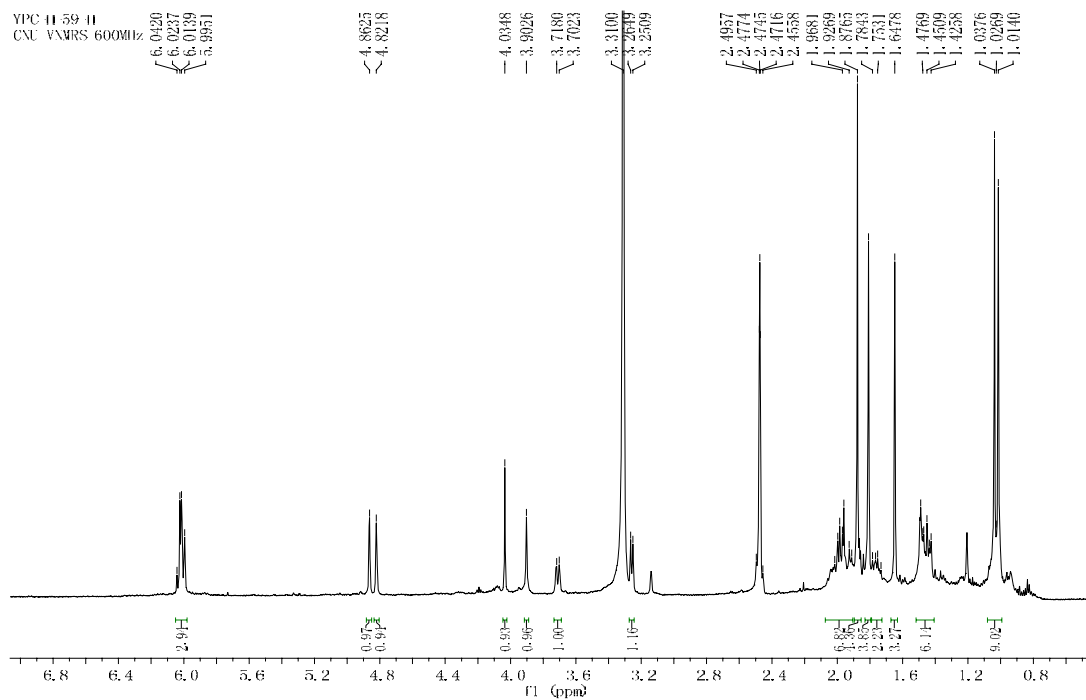


Figure S41 <sup>1</sup>H NMR spectrum of compound 6

CNU VNMRs 600MHz  
ypc-H-59, DMSO-d6  
APT 13C NMR

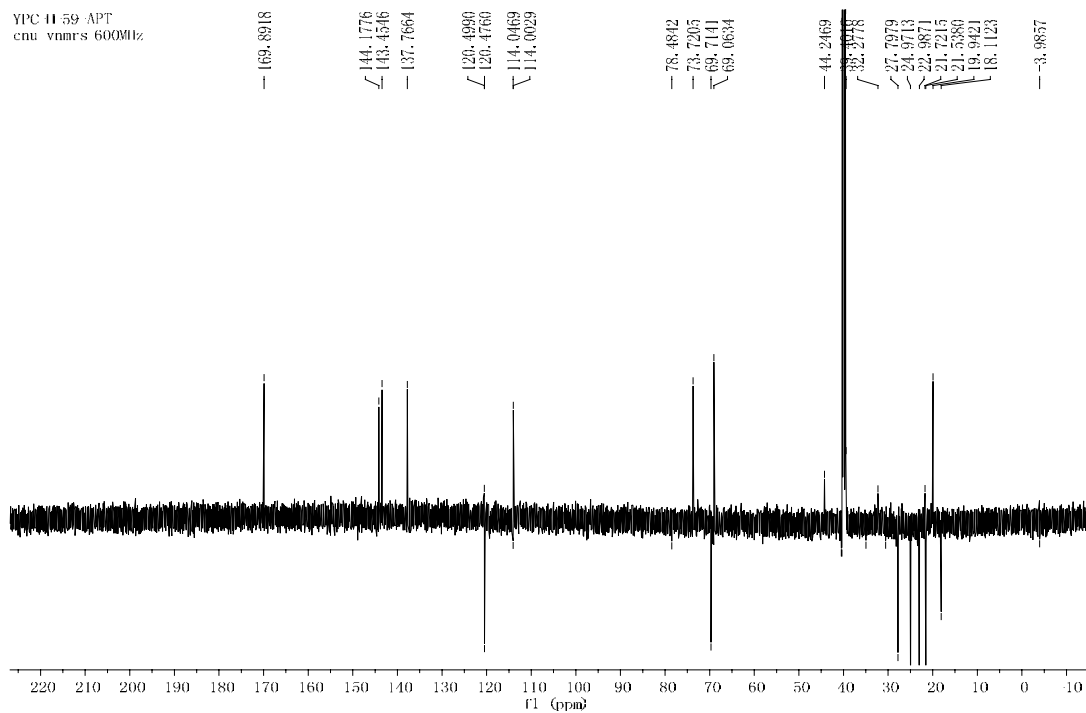


Figure S42 <sup>13</sup>C NMR spectrum of compound 6

CNU VNMR5 600MHz  
ypc-H-59, DMSO-d6  
HSQC

YPC-H-59-gHSQC  
CNU VNMR5 600MHz

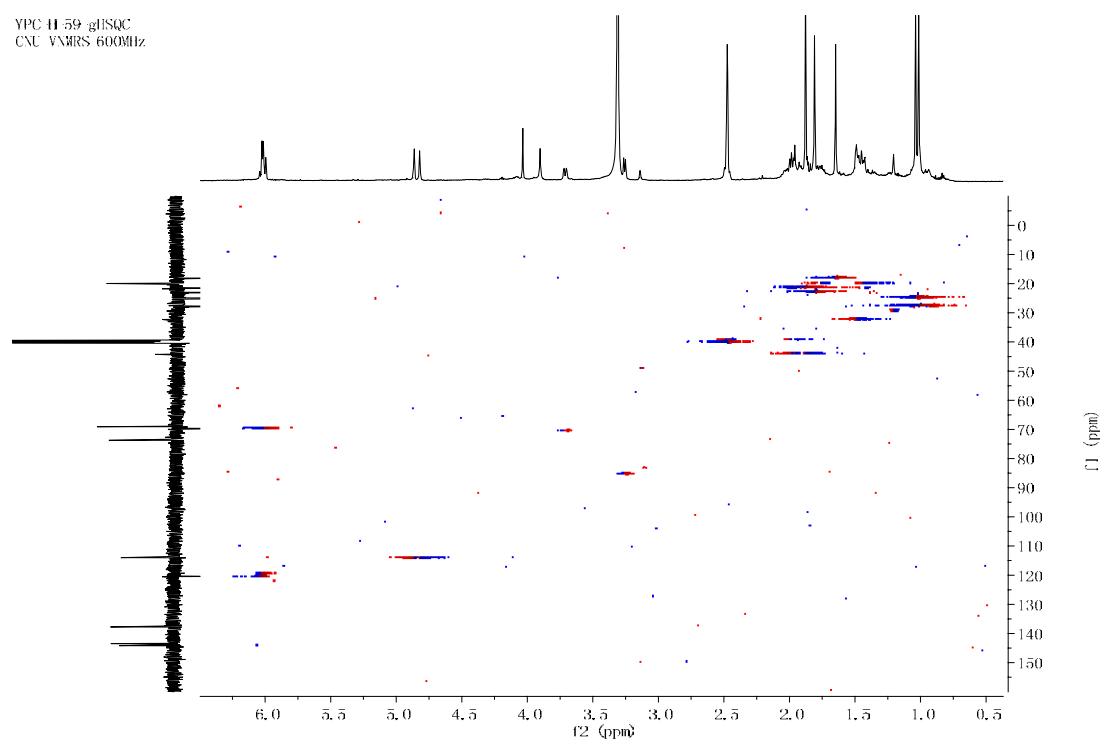


Figure S43 HSQC spectrum of compound **6**

CNU VNMR5 600MHz  
ypc-H-59, DMSO-d6  
HMBC

YPC-H-59-gHMBC  
CNU VNMR5 600MHz

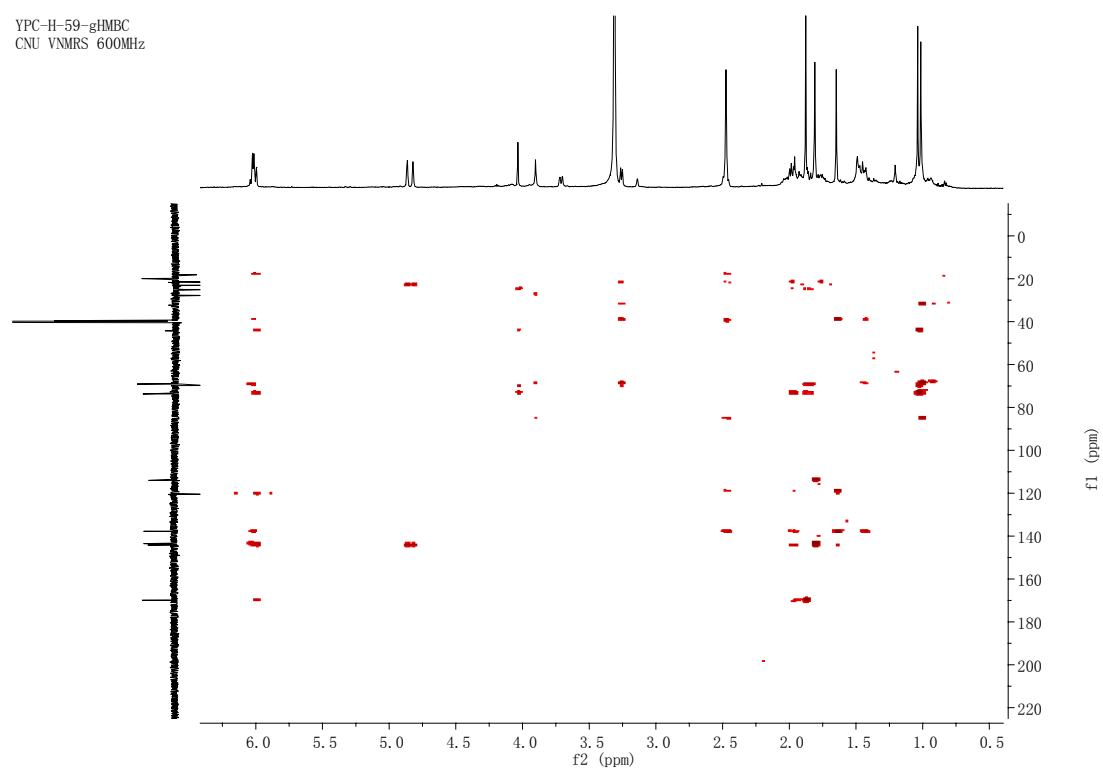


Figure S44 HMBC spectrum of compound **6**

CNU VNMRS 600MHz  
ypc-H-59, DMSO-d6  
COSY

YPC H 59 gCOSY  
CNU VNMRS 600MHz

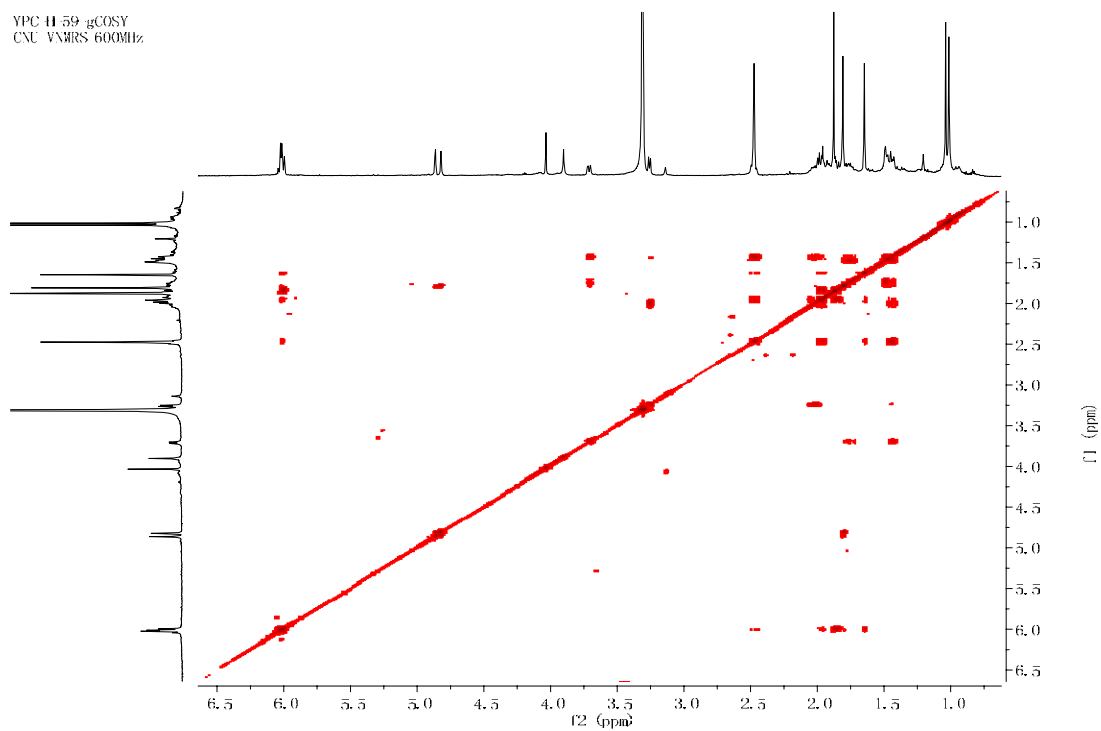


Figure S45 COSY spectrum of compound **6**

CNU VNMRS 600MHz  
ypc-H-59, DMSO-d6  
NOESY

YPC H 59 NOESY  
CNU VNMRS 600MHz

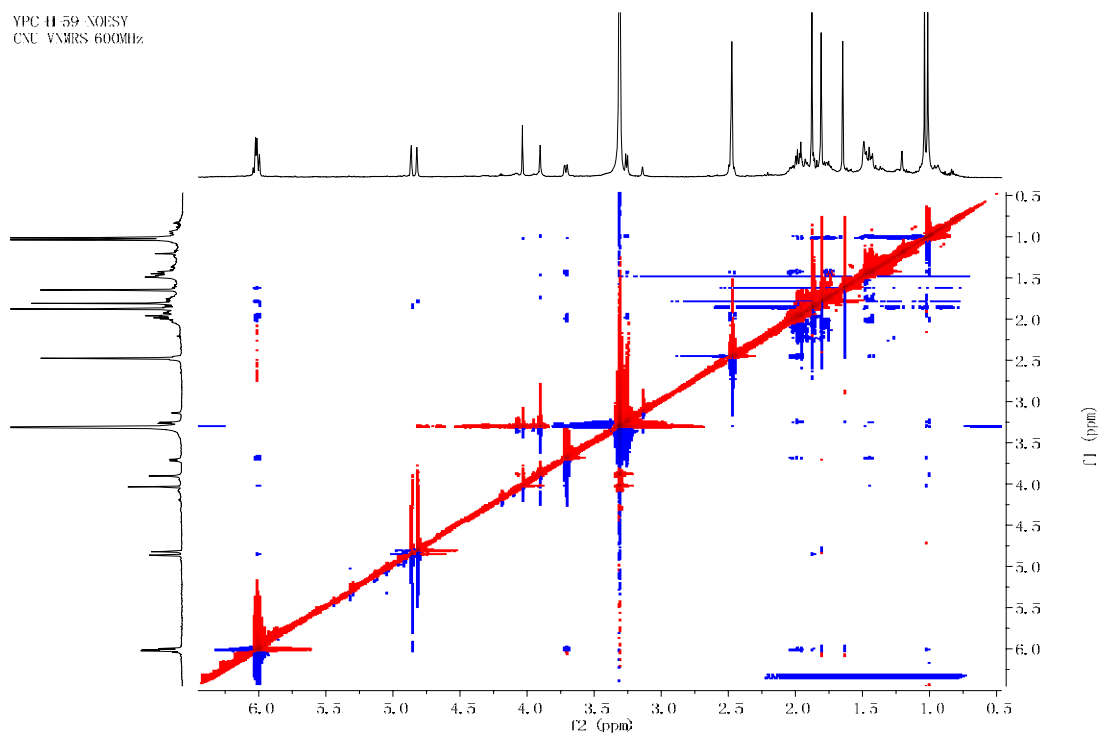


Figure S46 NOESY spectrum of compound **6**



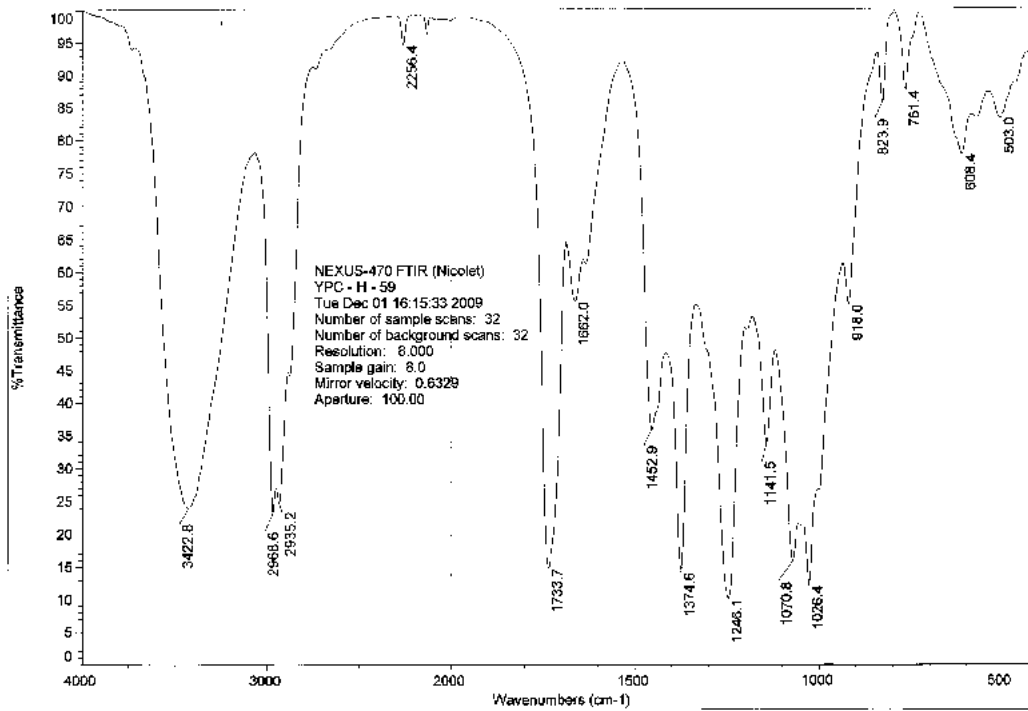


Figure S47 IR spectrum of compound 6

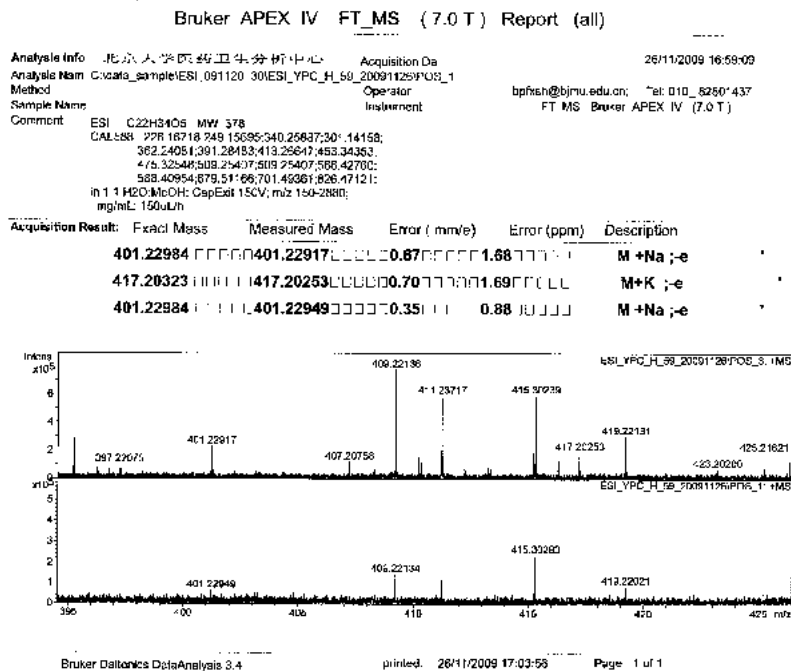


Figure S48 HRESIMS spectrum of compound 6