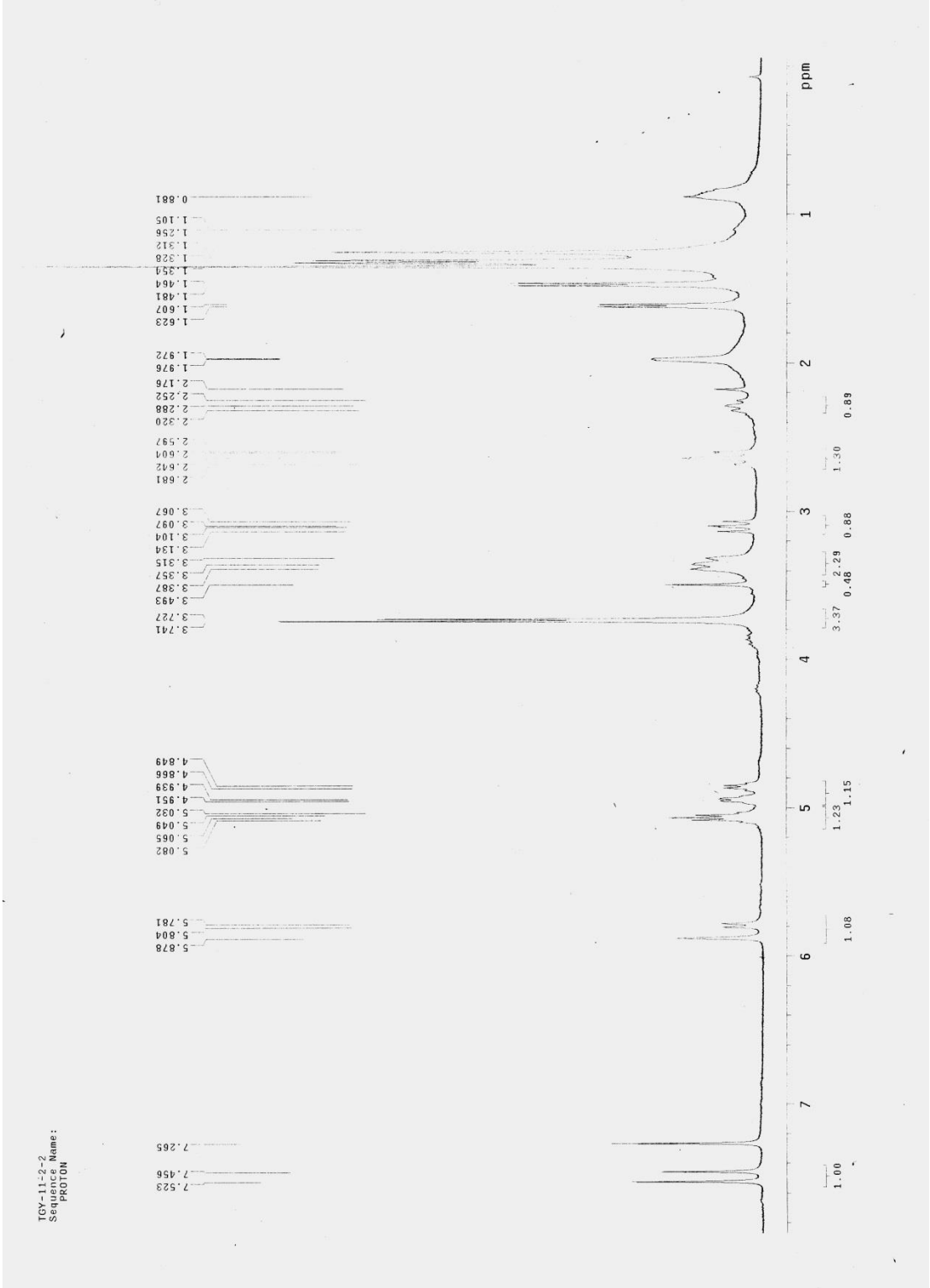
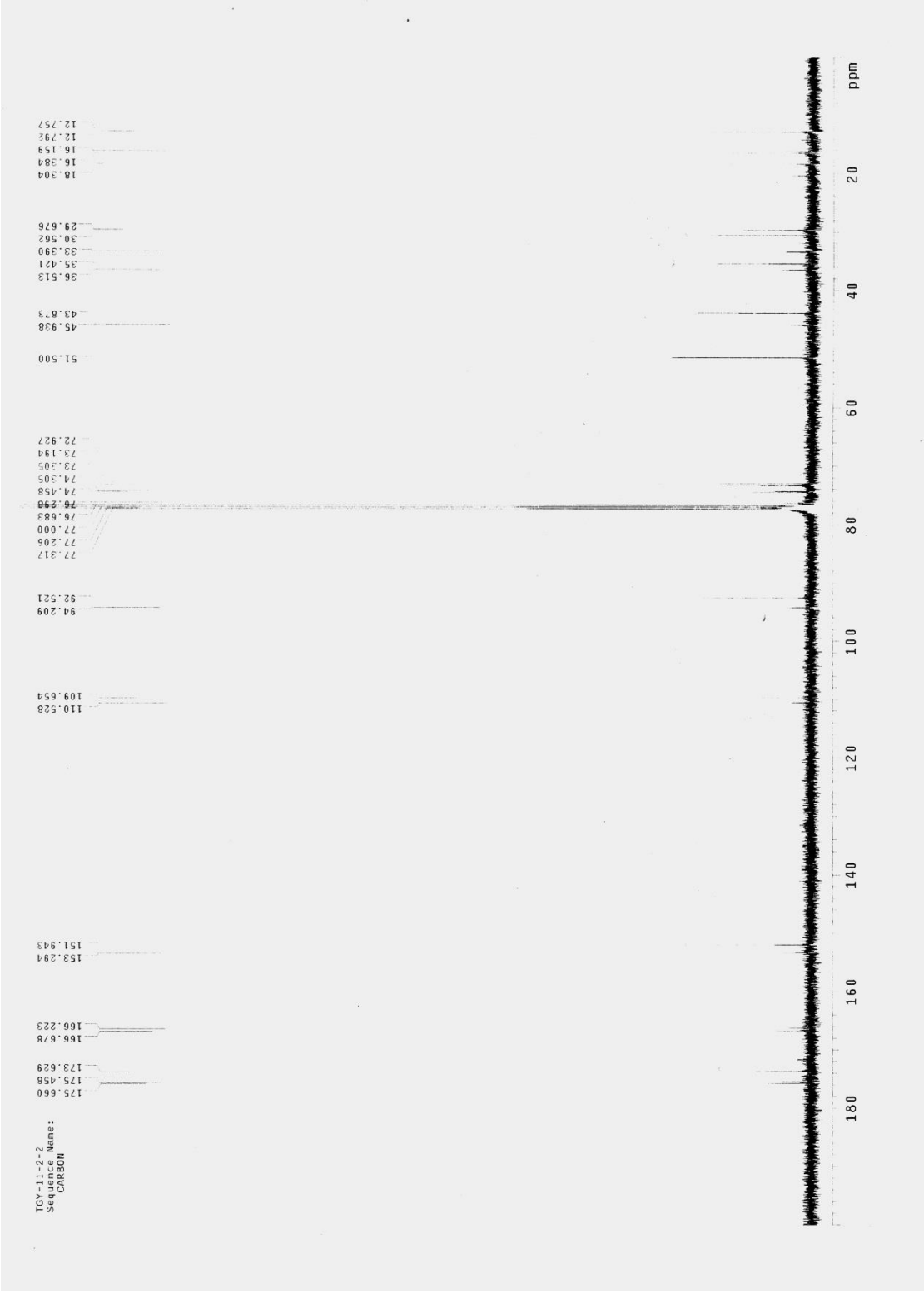
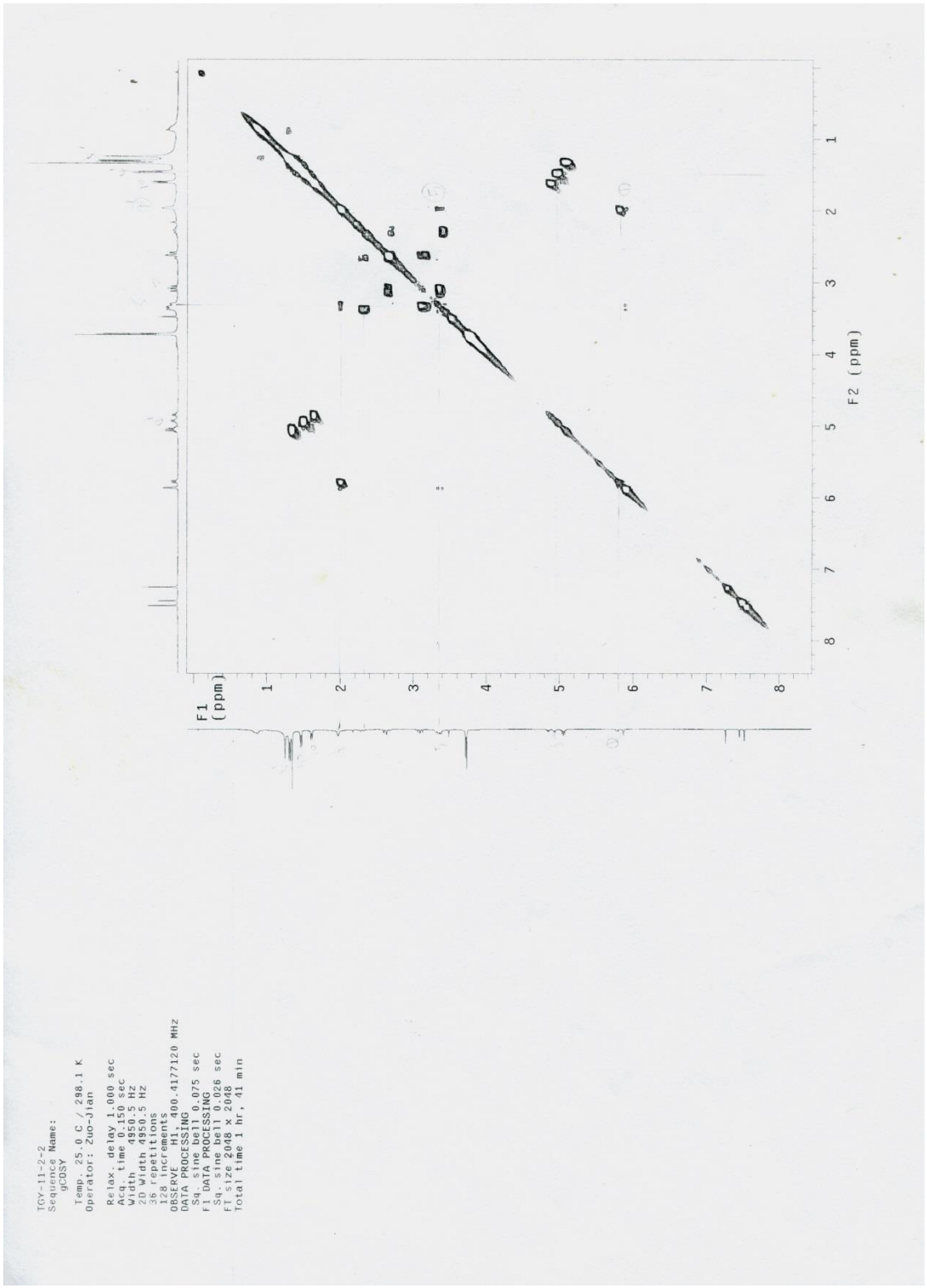
^{1}H NMR spectrum of Gonocarin A （1）



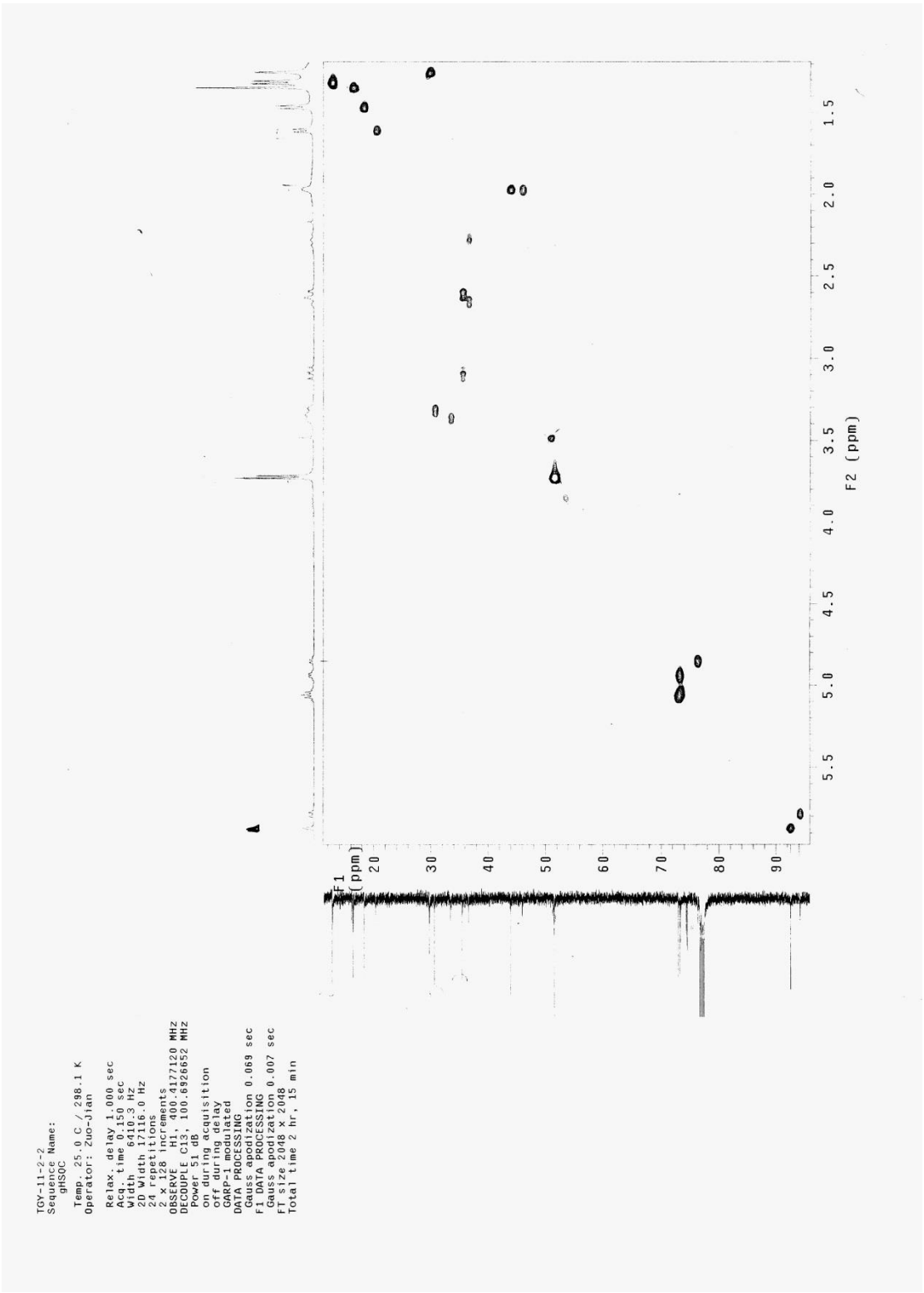
^{13}C NMR spectrum of Gonocarin A （1）



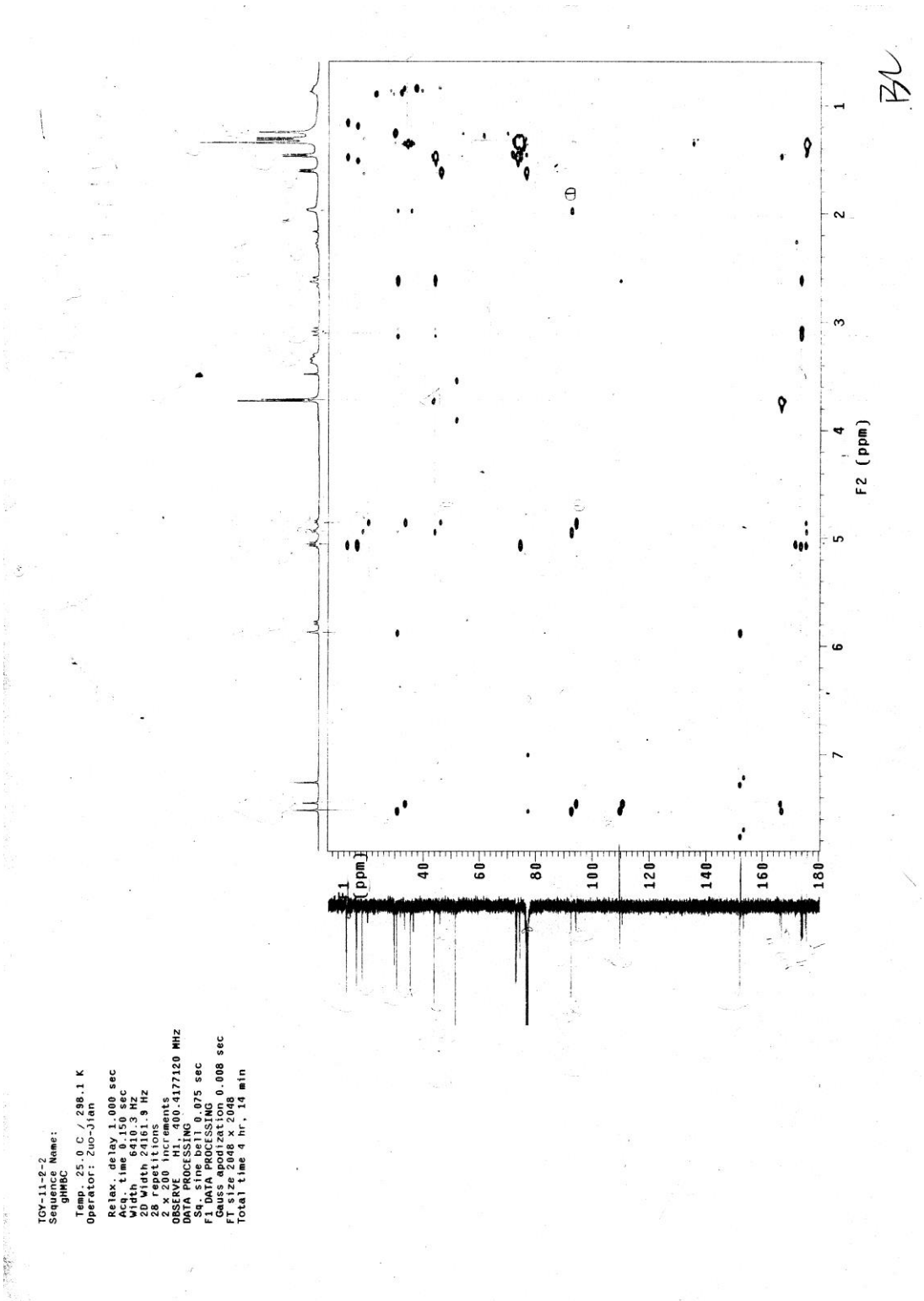
COSY spectrum of　Gonocarin A （1）



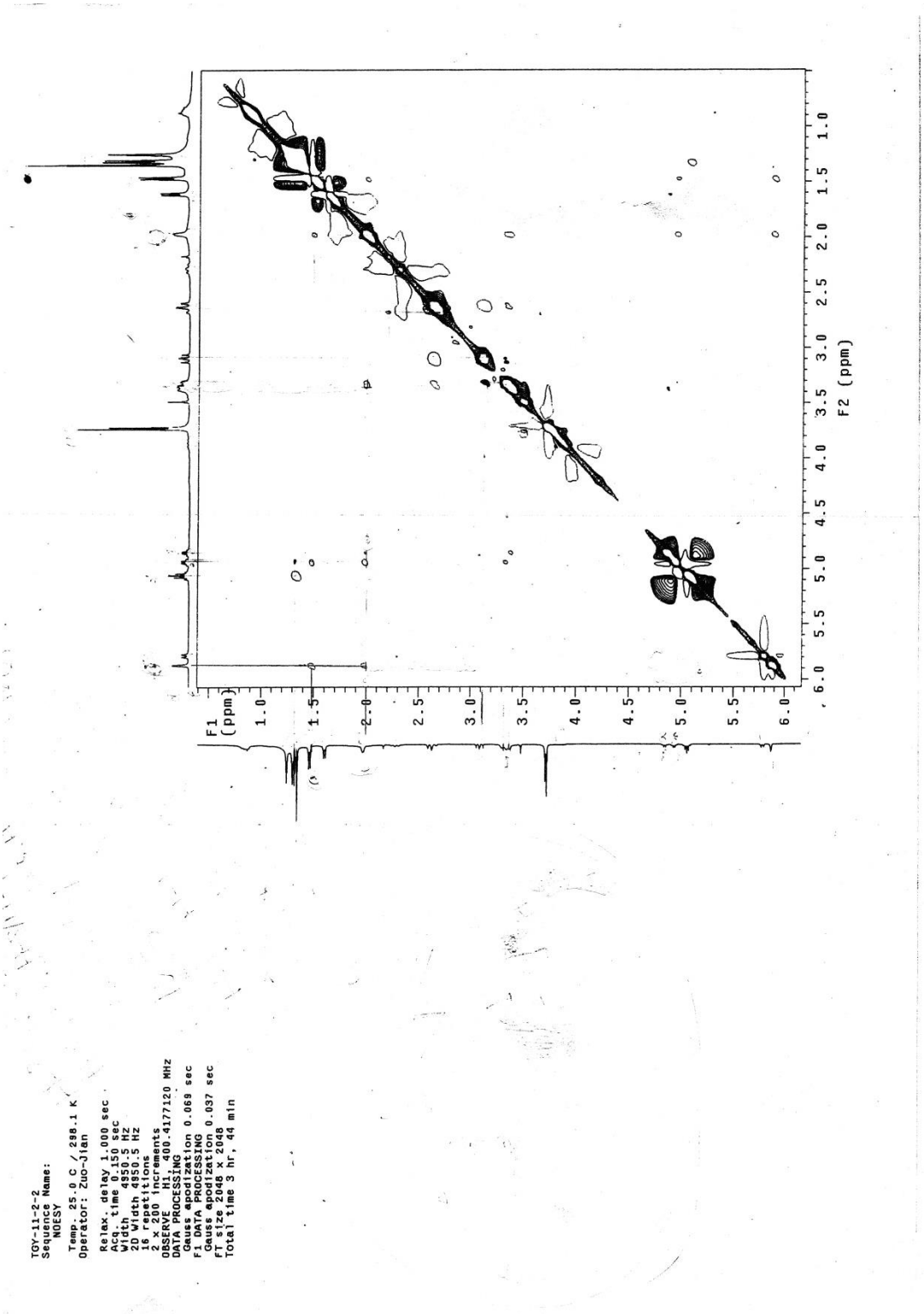
HMQC spectrum of　Gonocarin A （1）



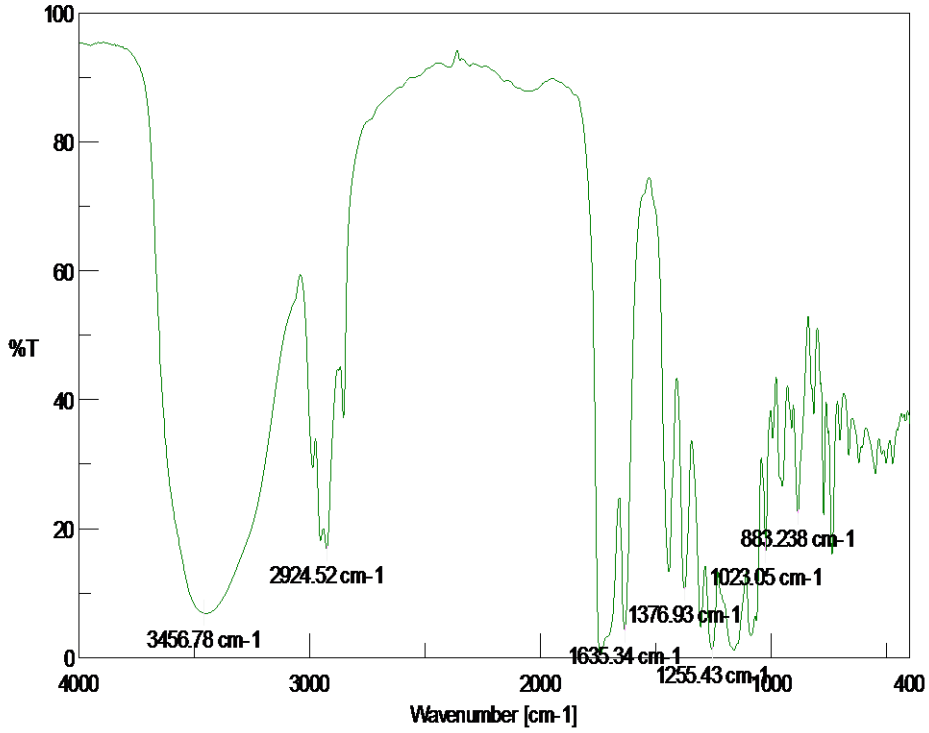
HMBC spectrum of Gonocarin A （1）



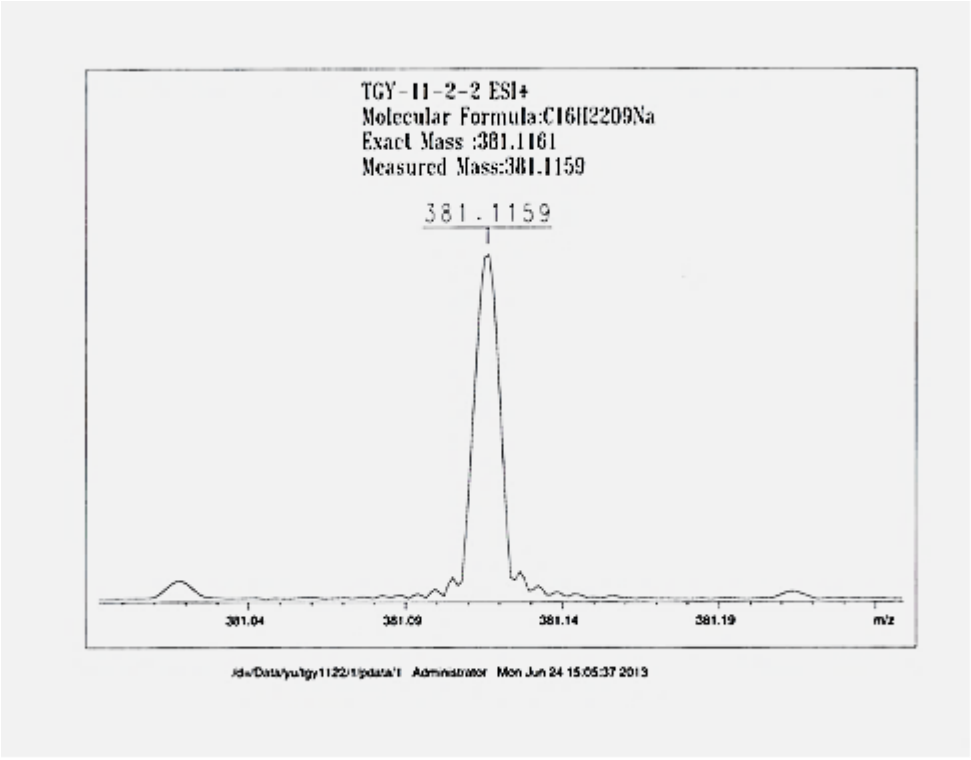
NOESY spectrum of Gonocarin A （1）



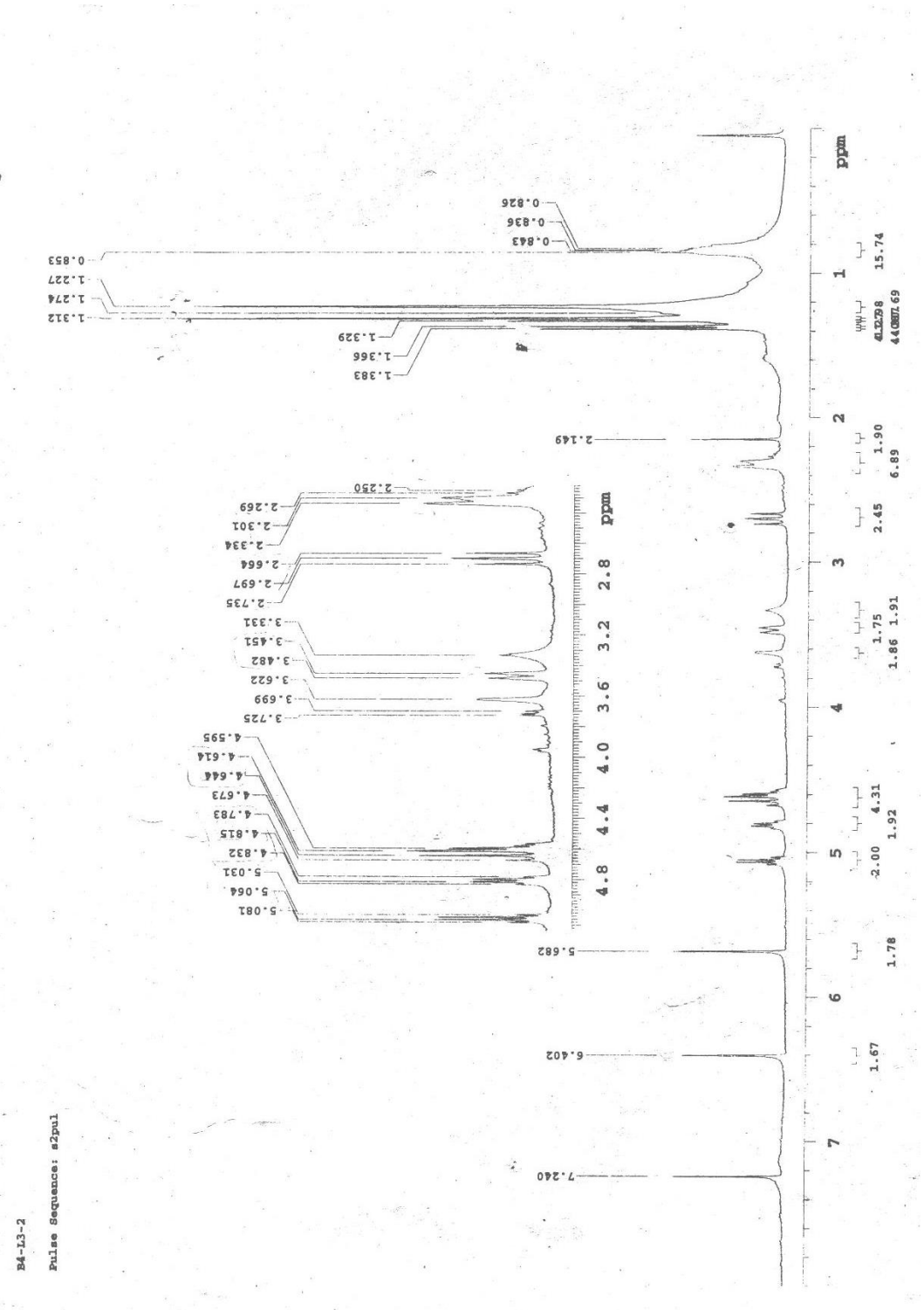
IR spectrum of Gonocarin A （1）



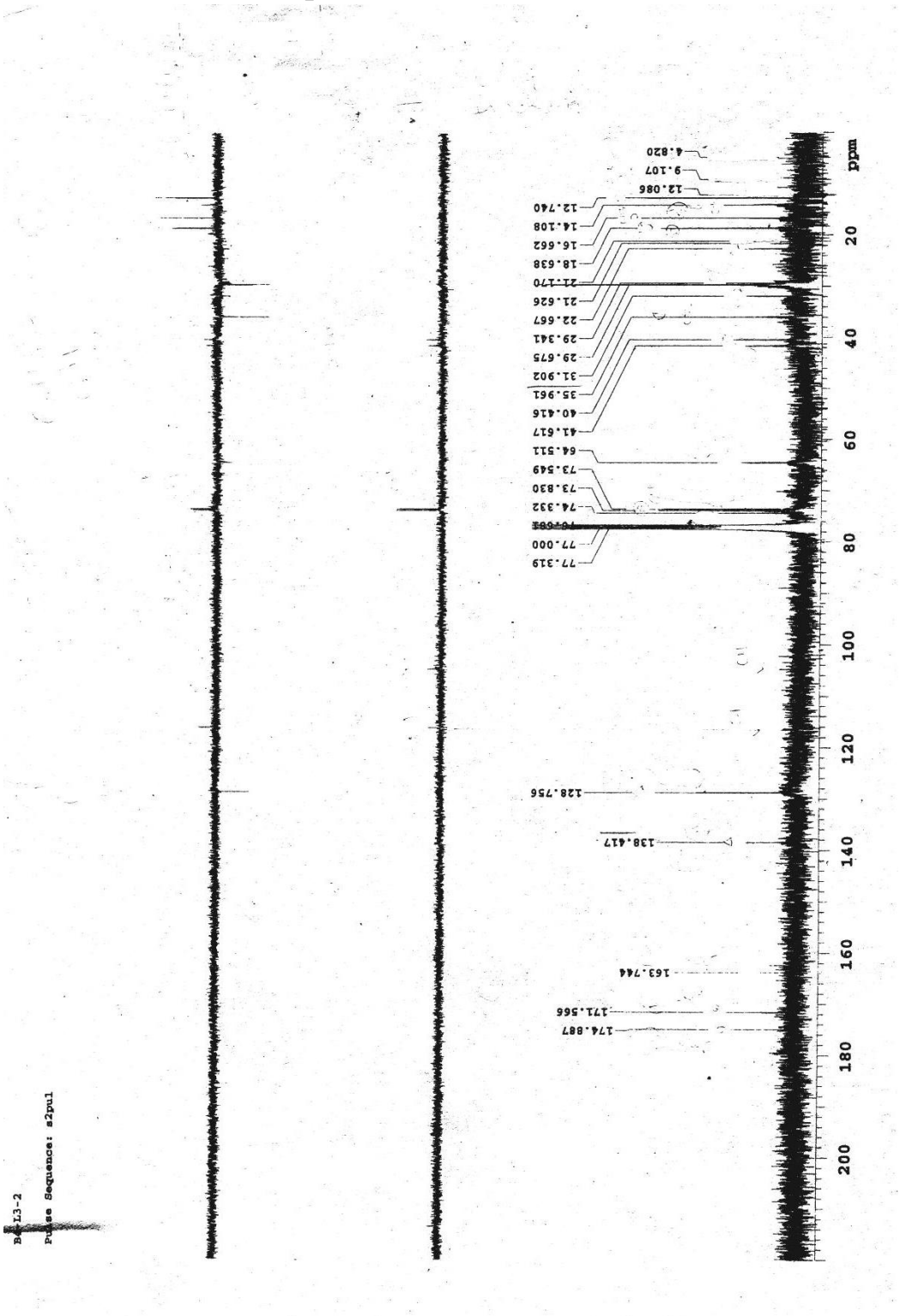
HRESIMS spectrum of Gonocarin A （1）



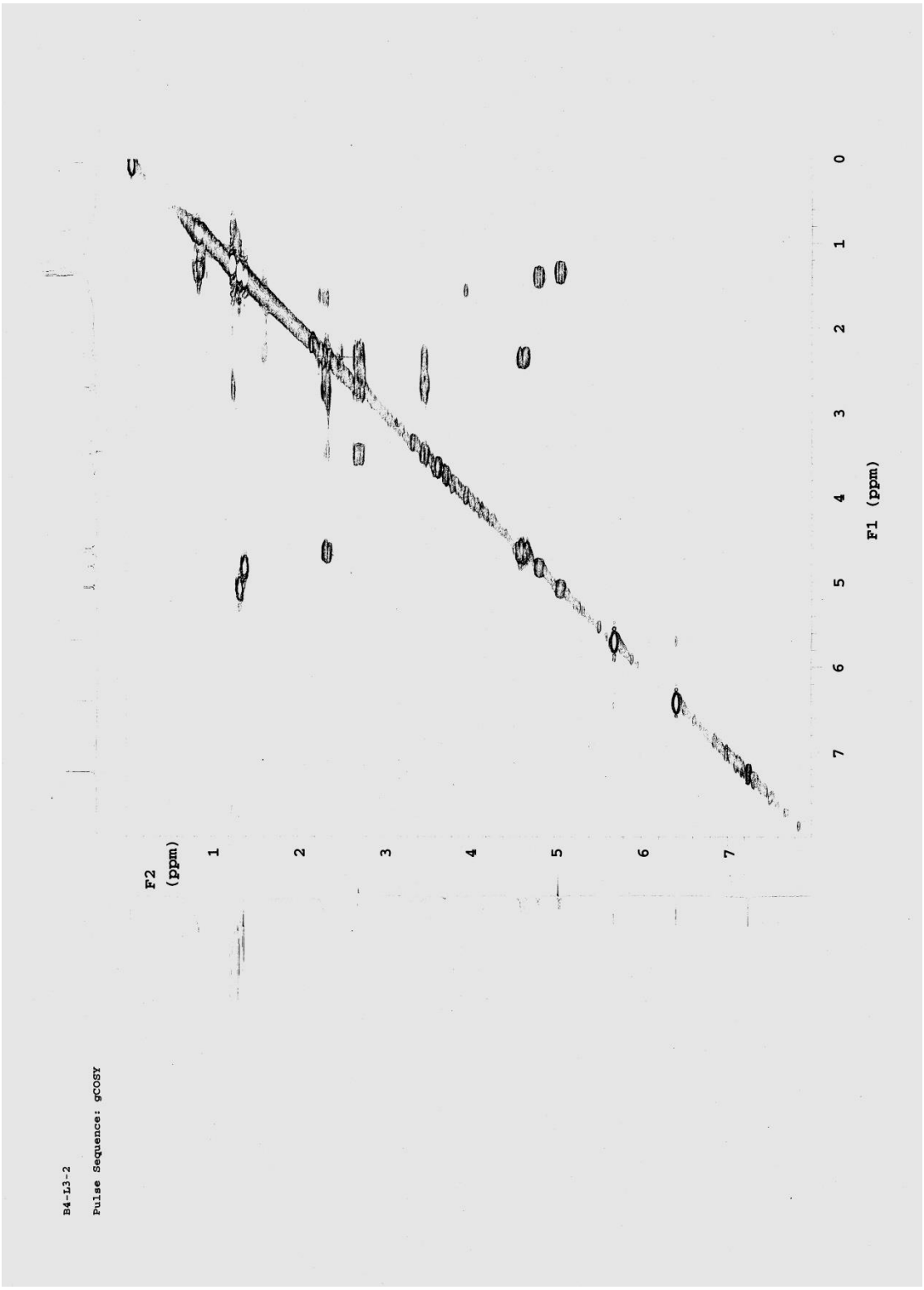
^{1}H NMR spectrum of Gonocarin B （2）



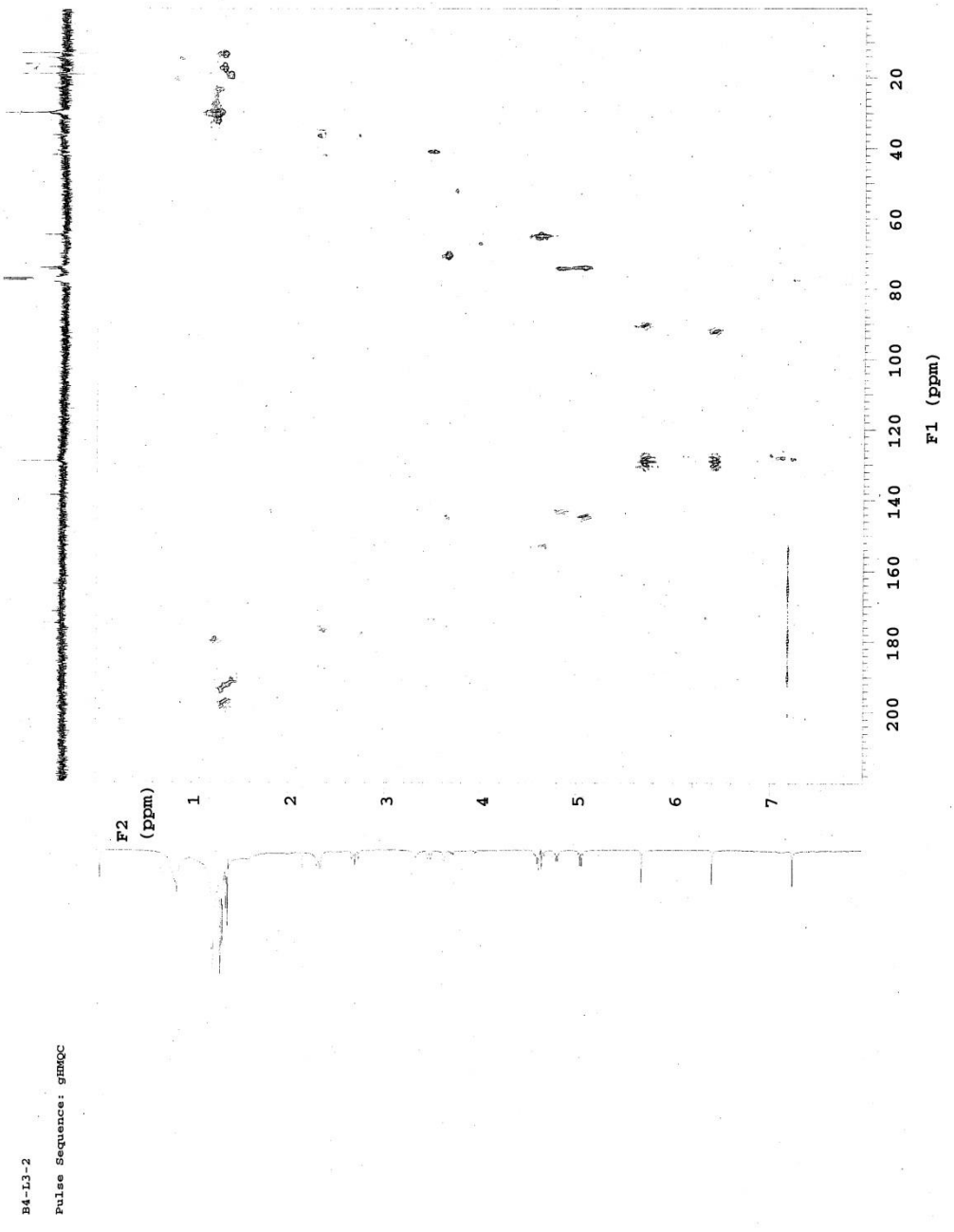
^{13}C NMR and DEPT spectrum of Gonocarin B （2）



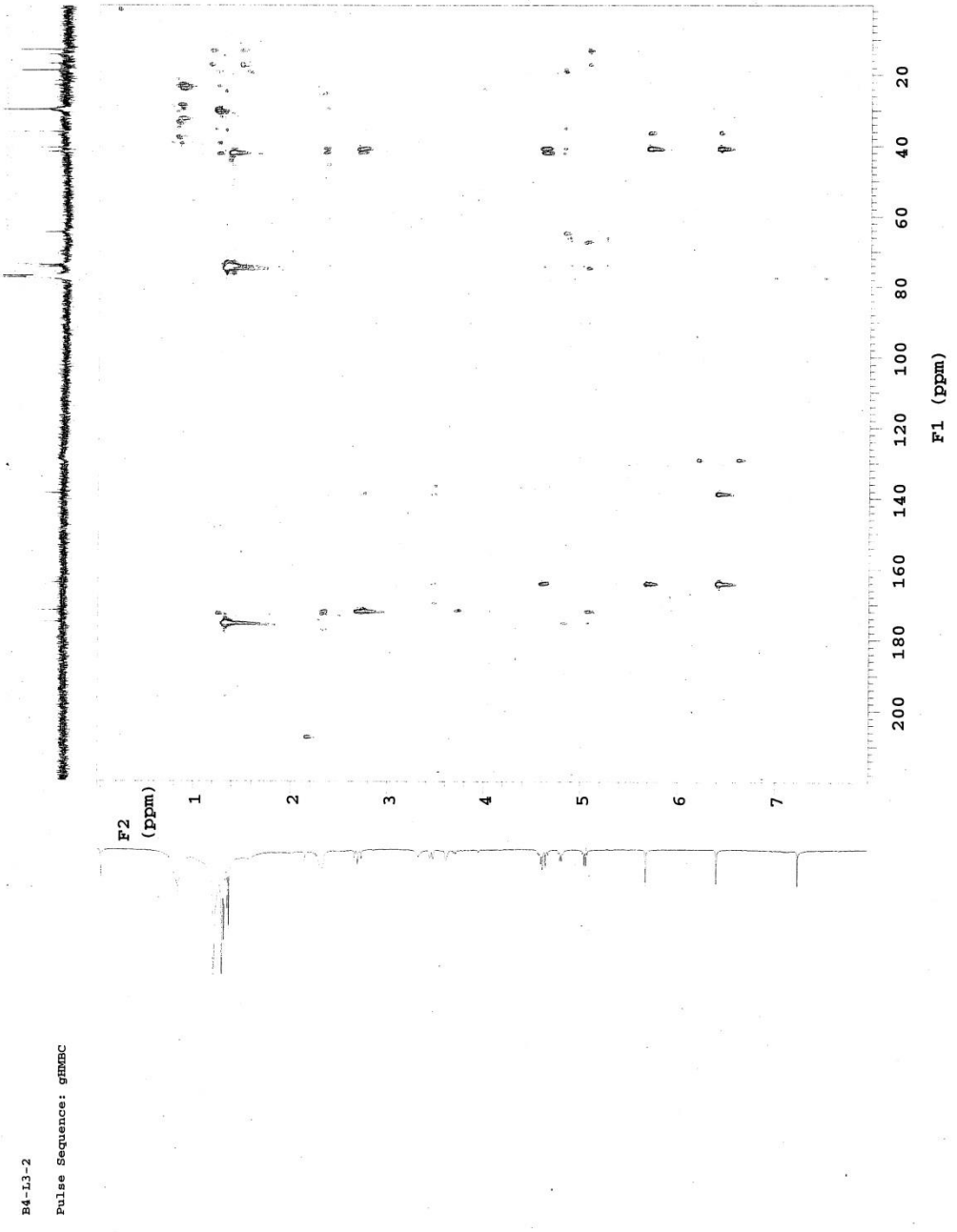
COSY spectrum of　Gonocarin B （2）



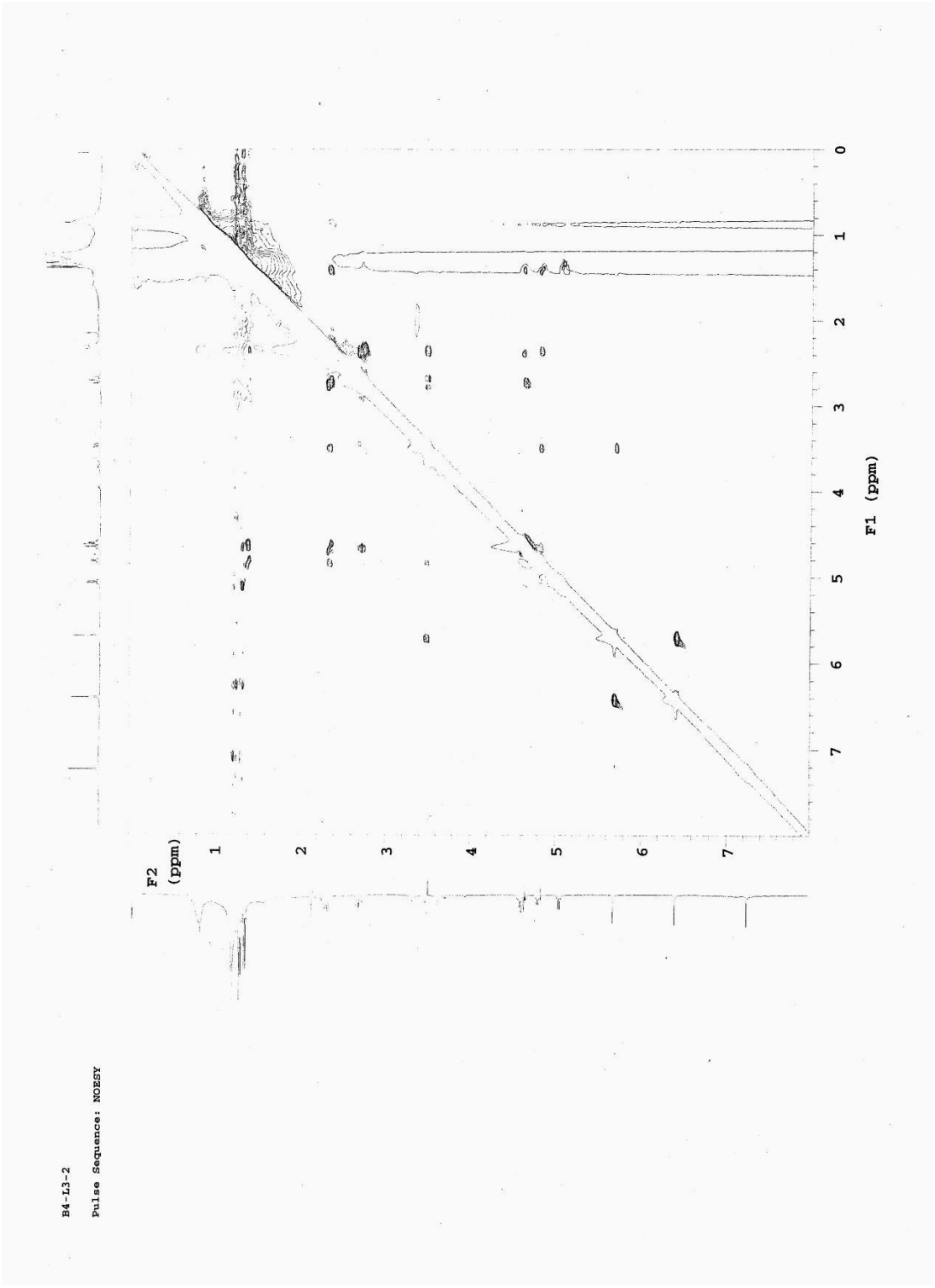
HMQC spectrum of　Gonocarin B （2）



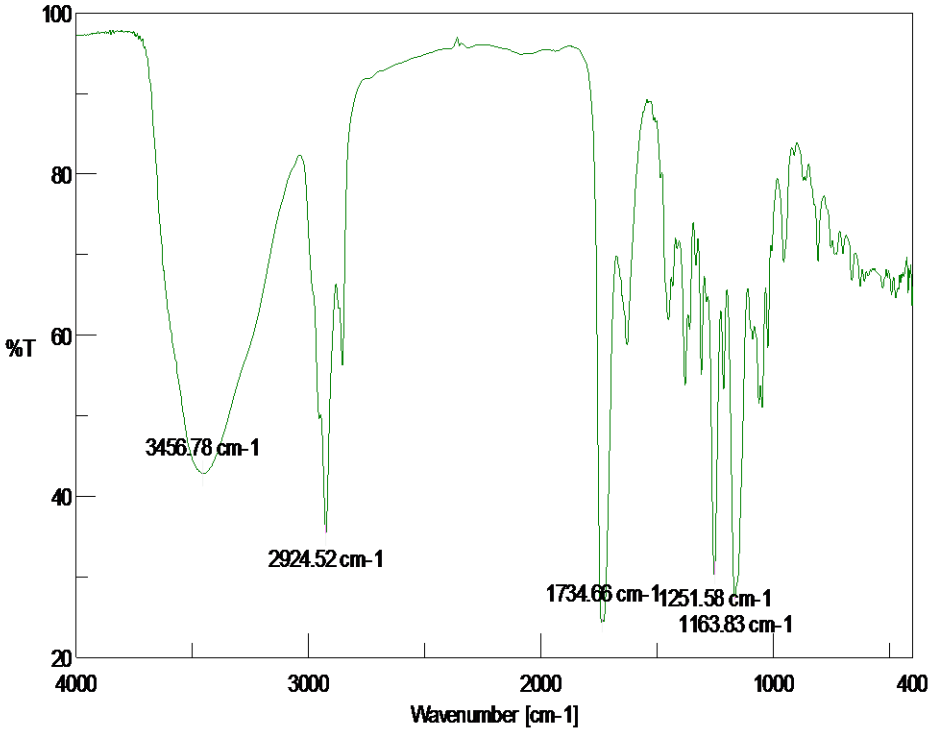
HMBC spectrum of　Gonocarin B （2）



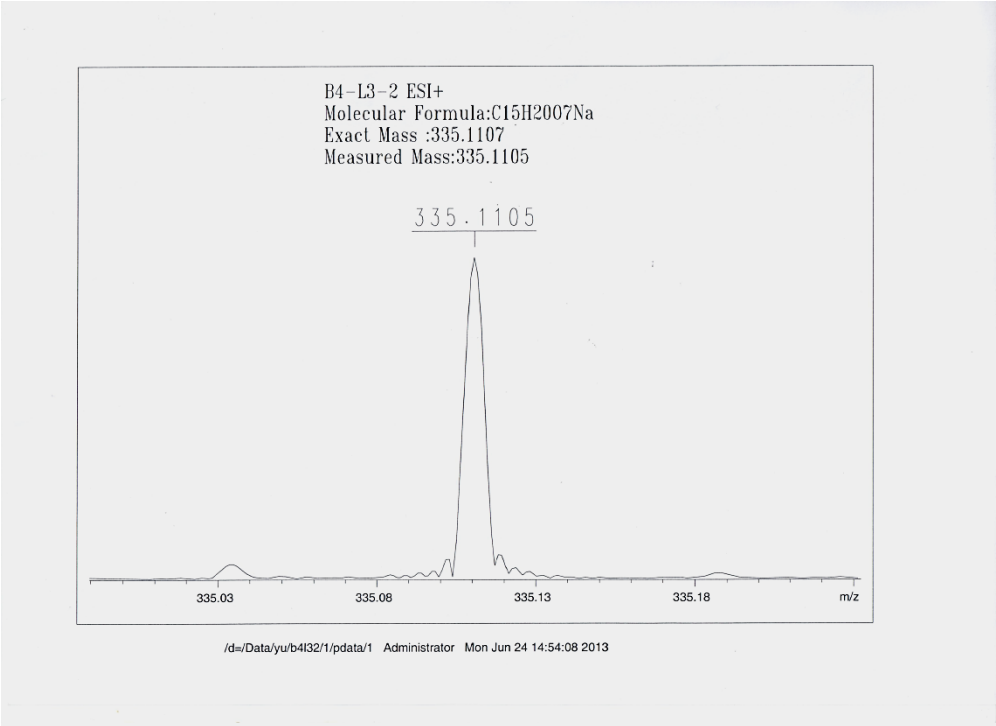
NOESY spectrum of　Gonocarin B （2）



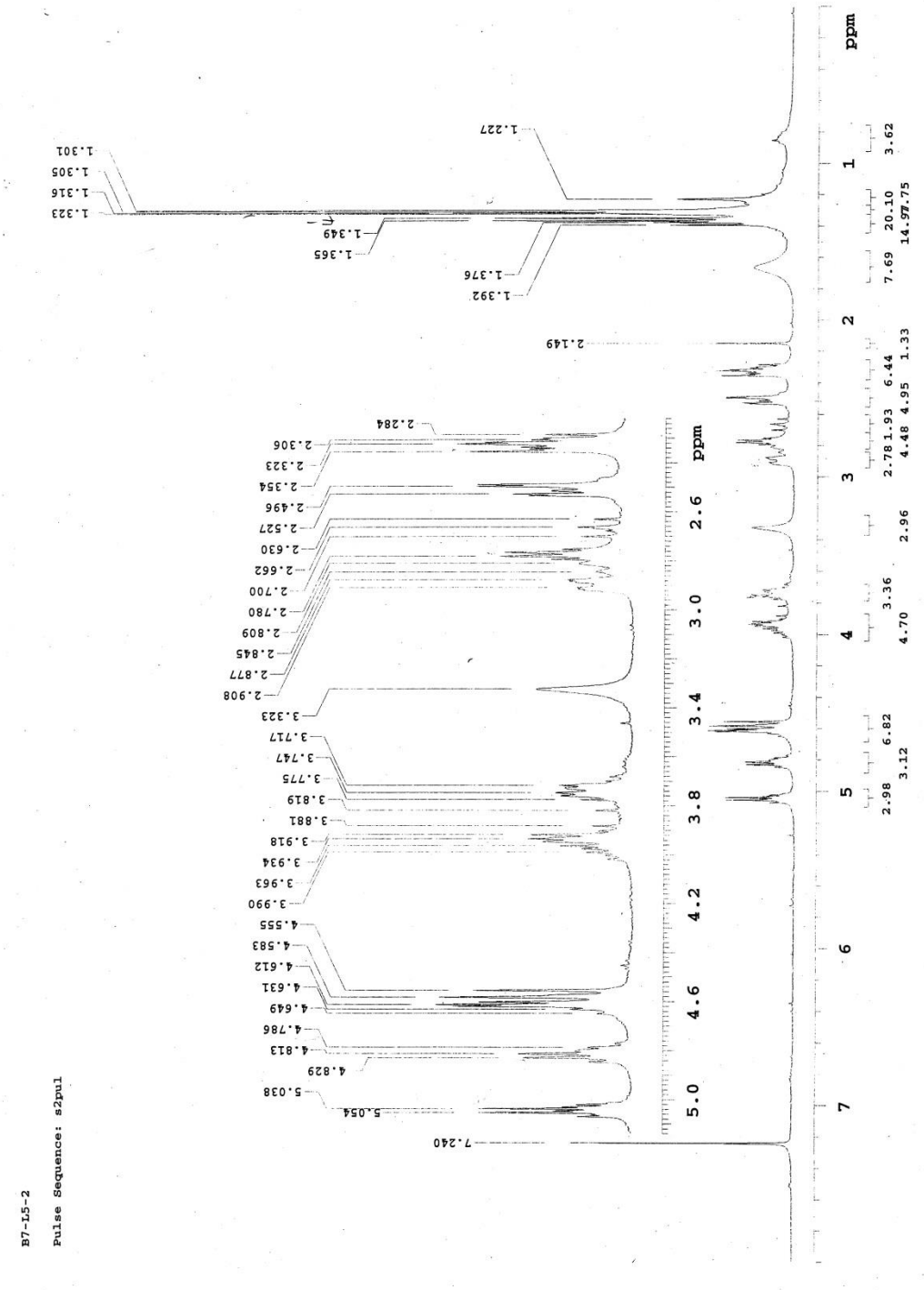
IR spectrum of Gonocarin B （2）



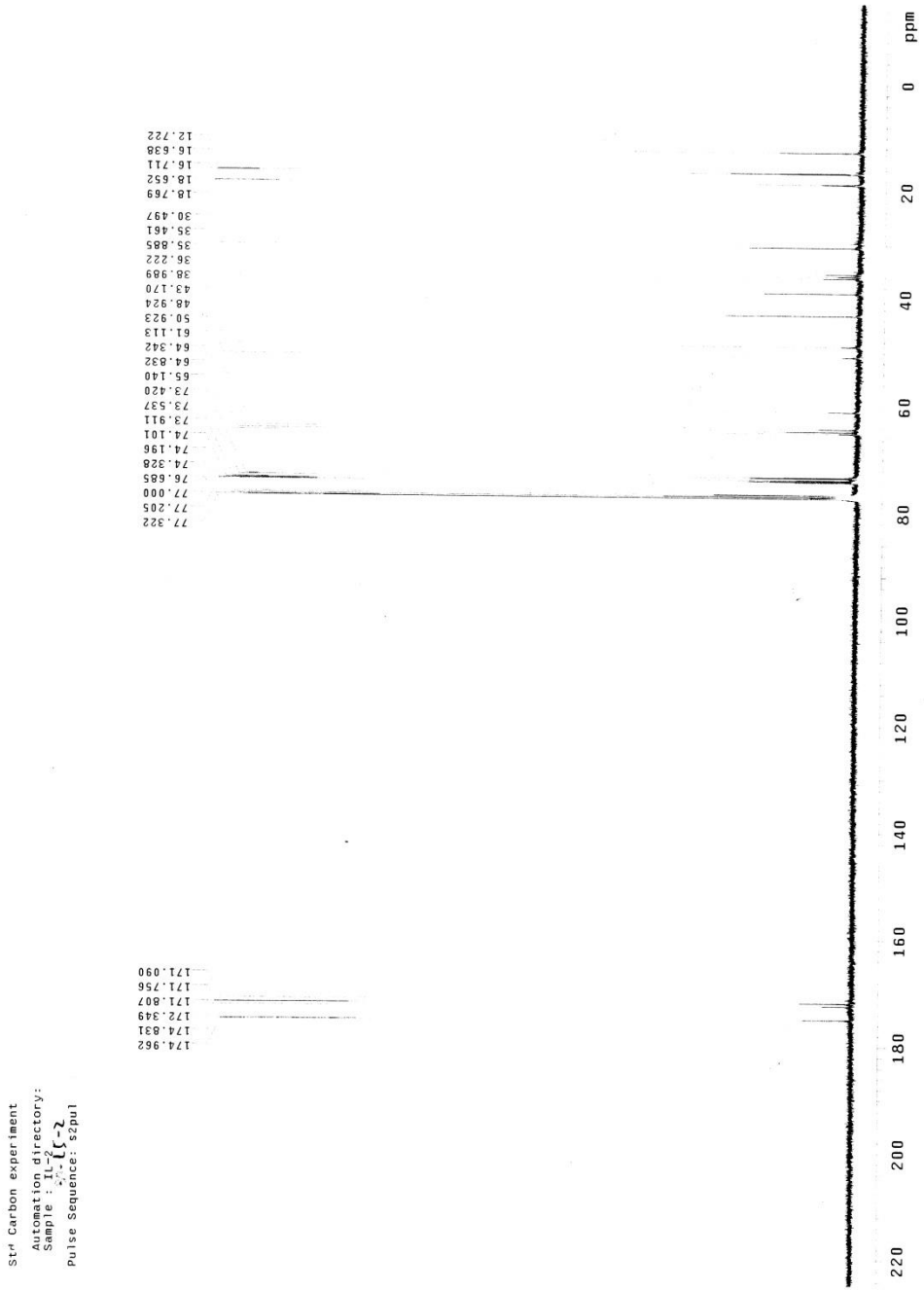
HR-ESI-MS spectrum of Gonocarin B （2）



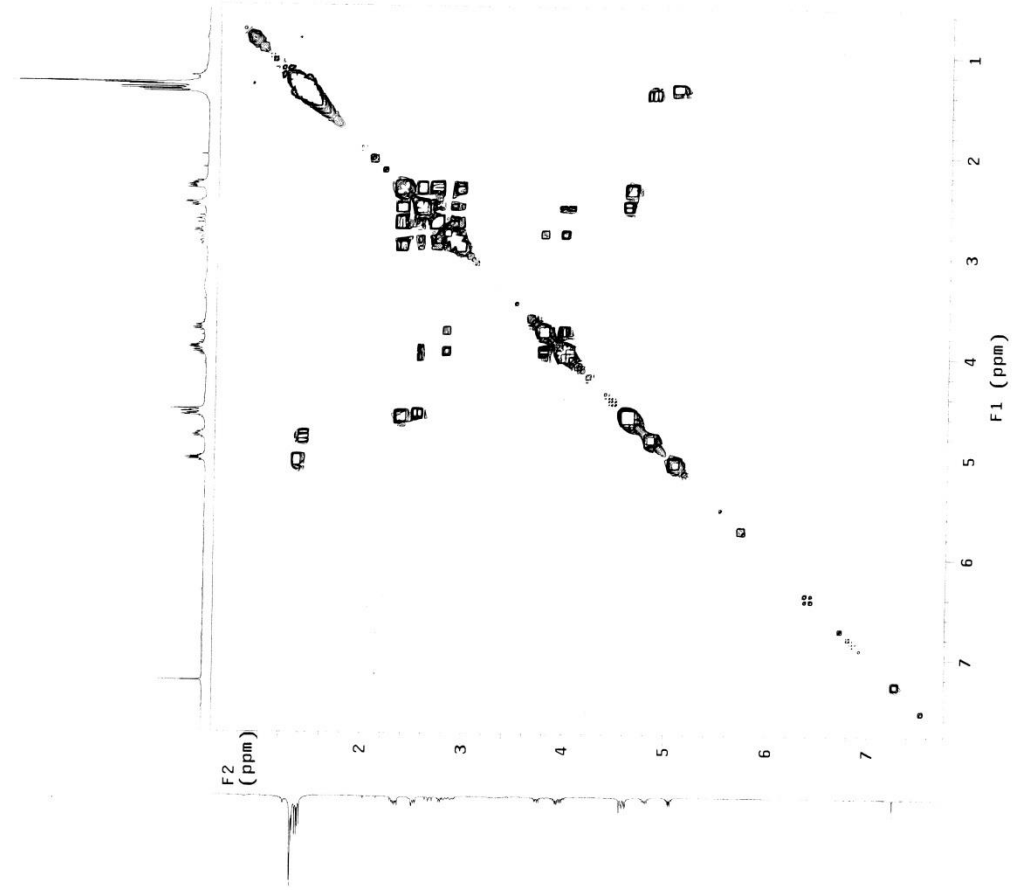
^{1}H NMR spectrum of Gonocarin C （3）



^{13}C NMR spectrum of Gonocarin C （3）



COSY spectrum of Gonocarin C （3）



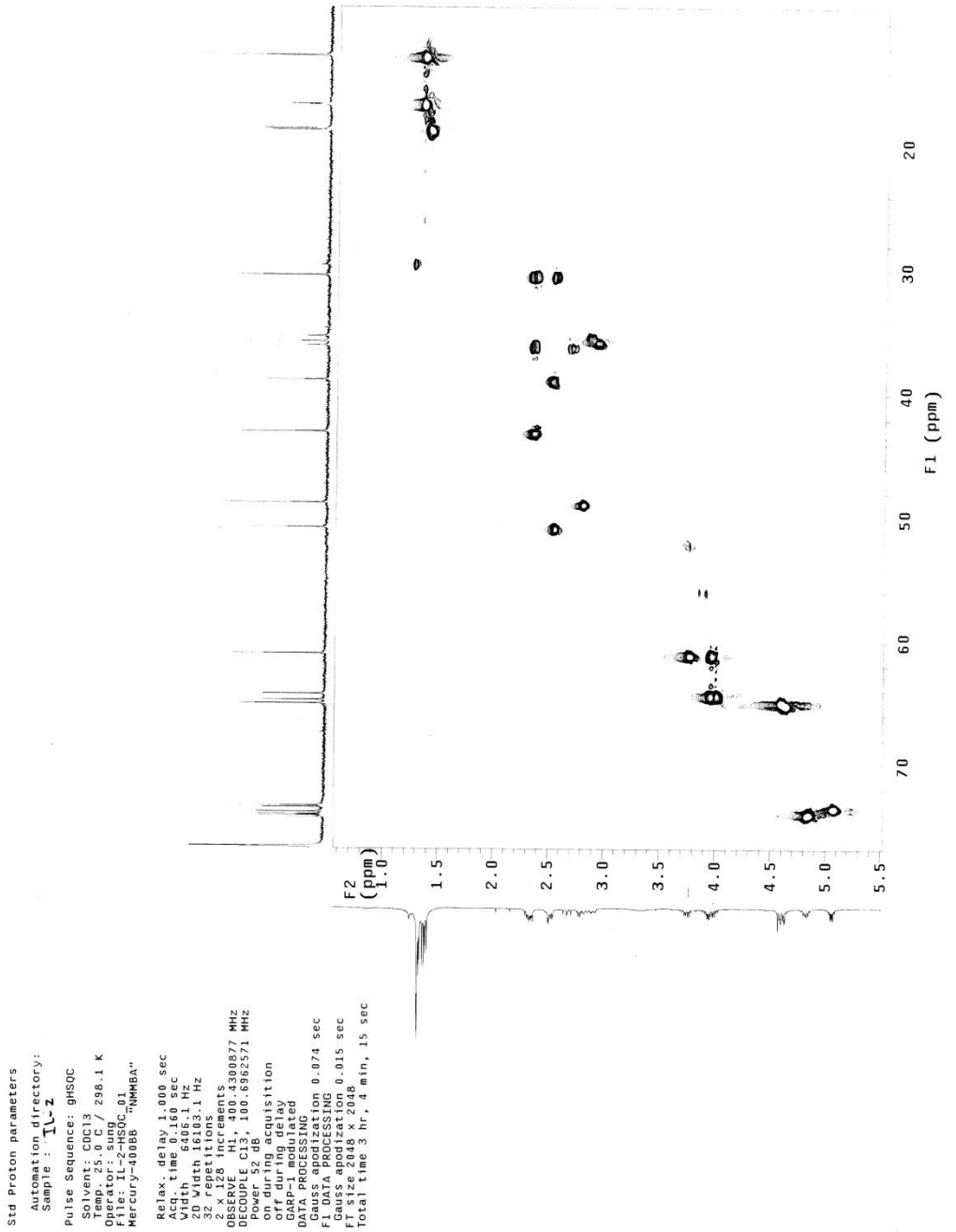
Std Proton parameters

Automation directory:
Sample : ~~wei-ci-3-110-470-f2-M~~ IL-2

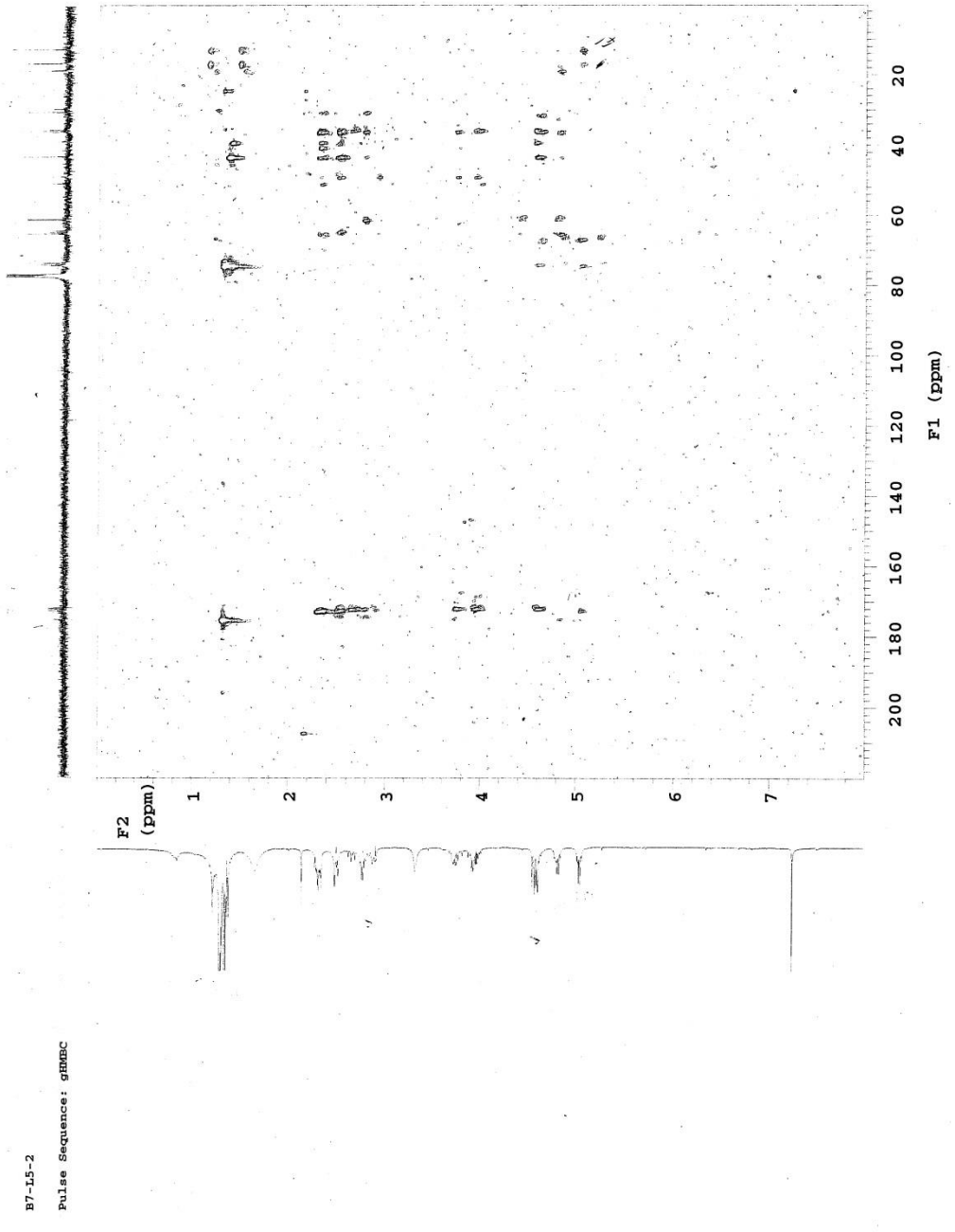
Pulse Sequence: gCOSY
Solvent: CDCl3
Temp. 25.0 C / 298.1 K
Operator: sung "NMMBA"
Mercury-400BB

Relax. delay 1.000 sec
Acq. time 0.160 sec
Width 6406.1 Hz
2D Width 6406.1 Hz
32 repetitions
128 increments
OBSERVE H1, 400.4300877 MHz
DATA PROCESSING
Sq. sine bell 0.080 sec
F1 DATA PROCESSING
Sq. sine bell 0.020 sec
FT size 2048 x 2048
Total time 1 hr, 28 min, 48 sec

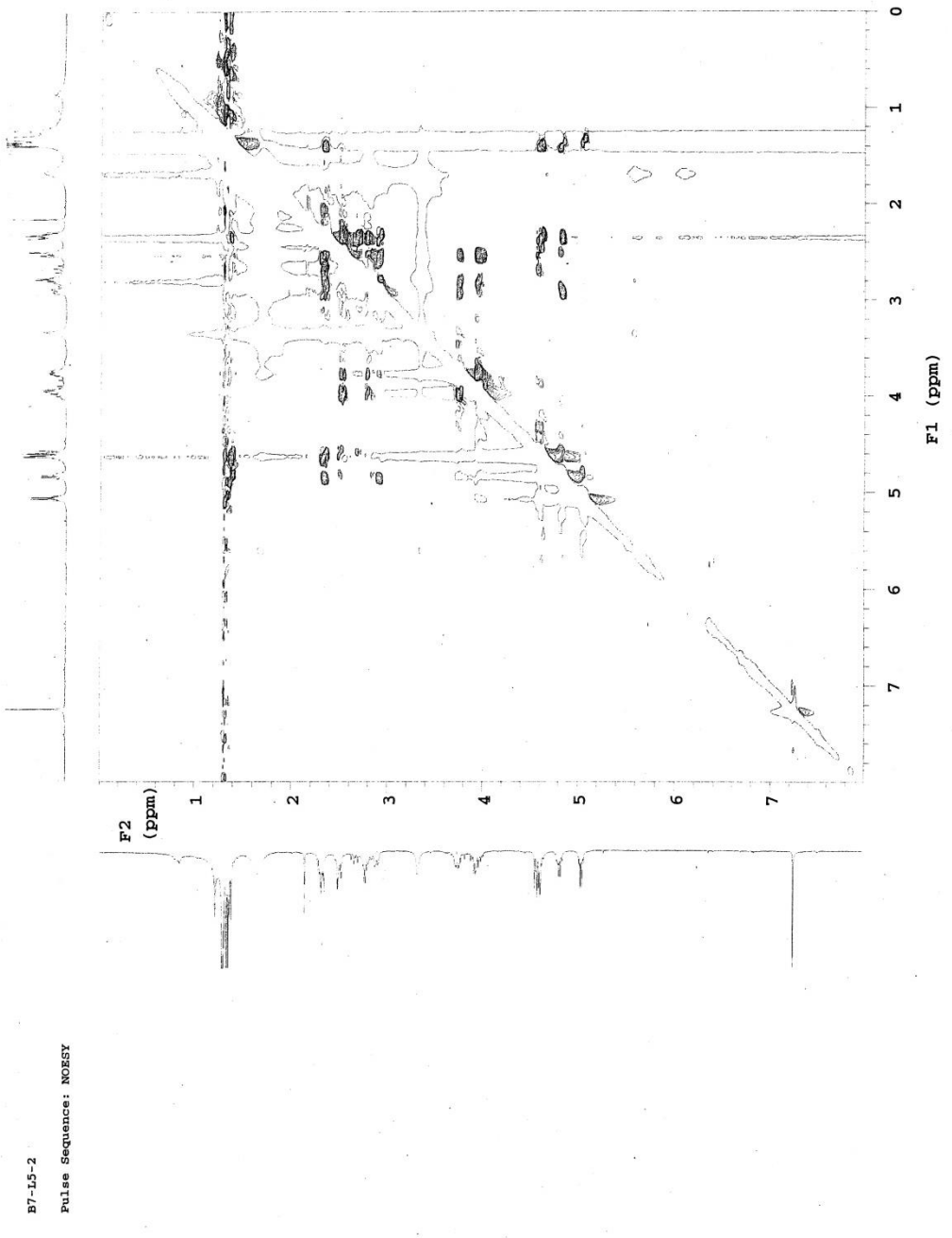
HMQC spectrum of Gonocarin C （3）



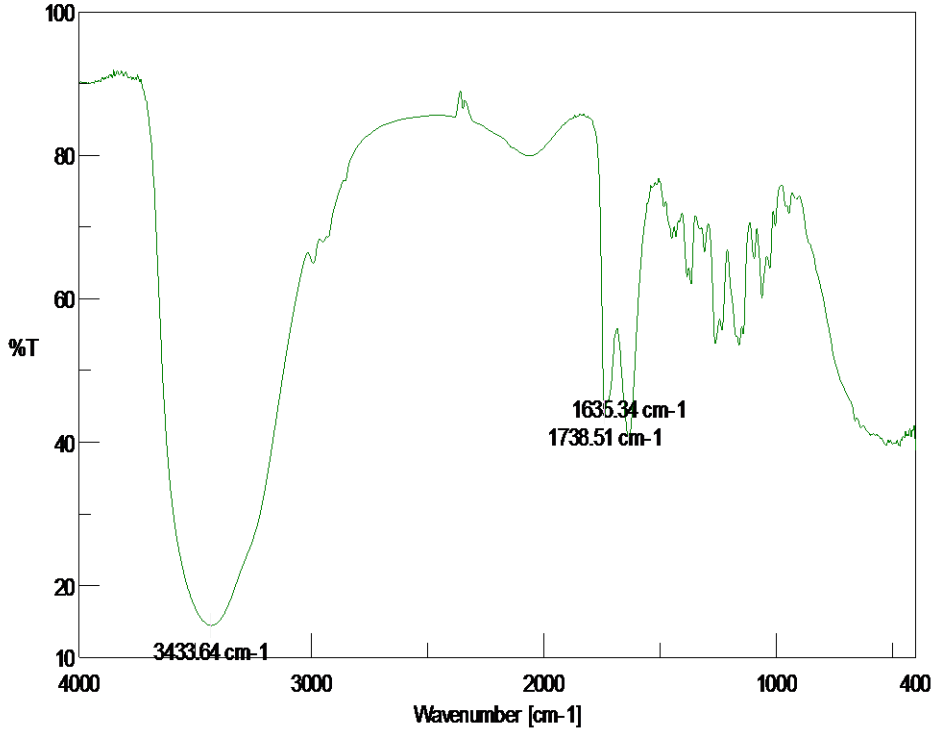
HMBC spectrum of　Gonocarin C （3）



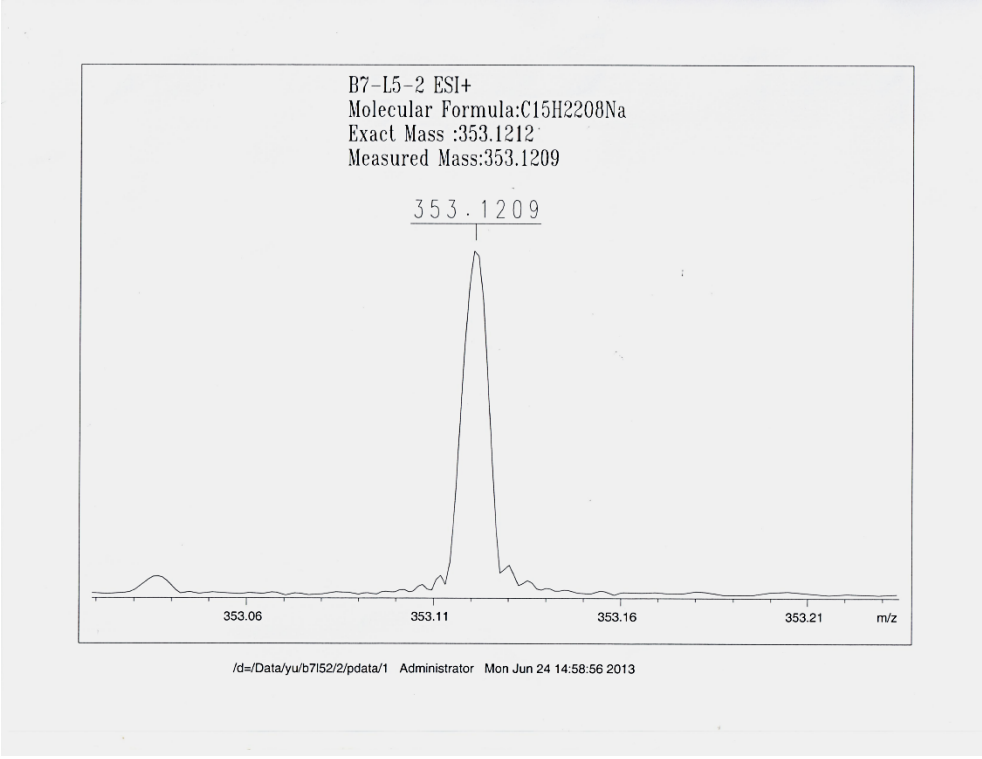
NOESY spectrum of　Gonocarin C （3）



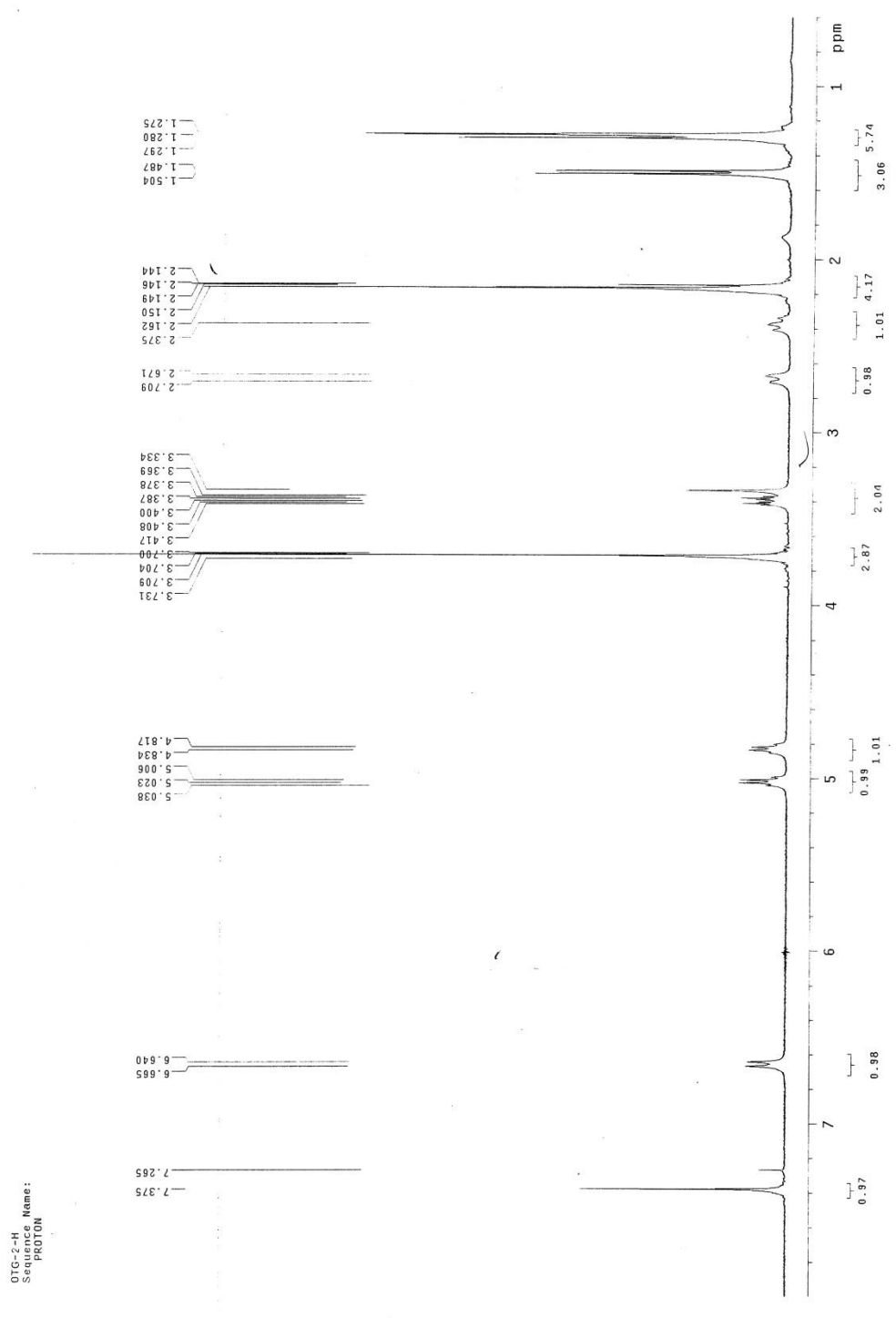
IR spectrum of Gonocarin C （3）



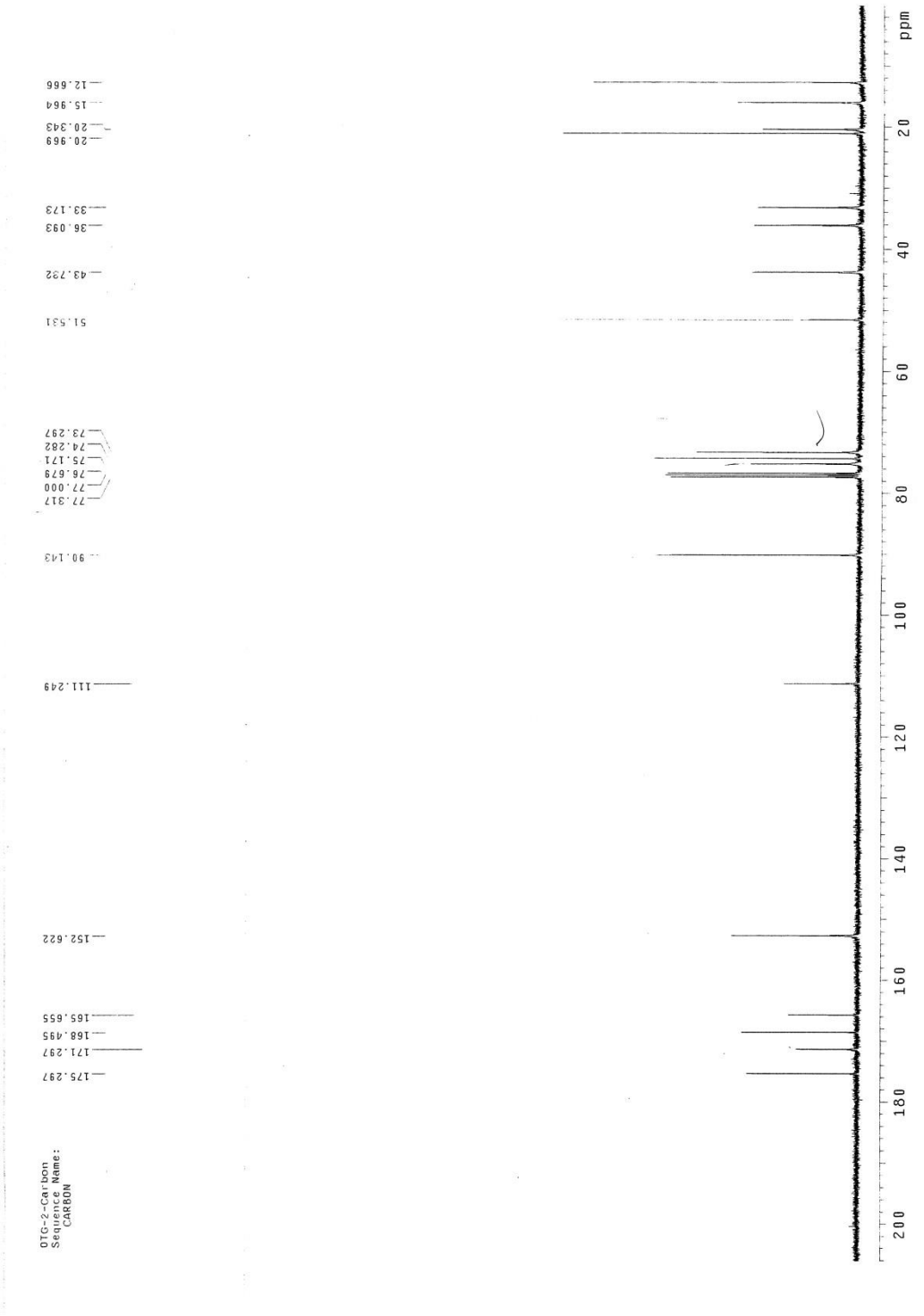
HR-ESI-MS spectrum of Gonocarin C （3）



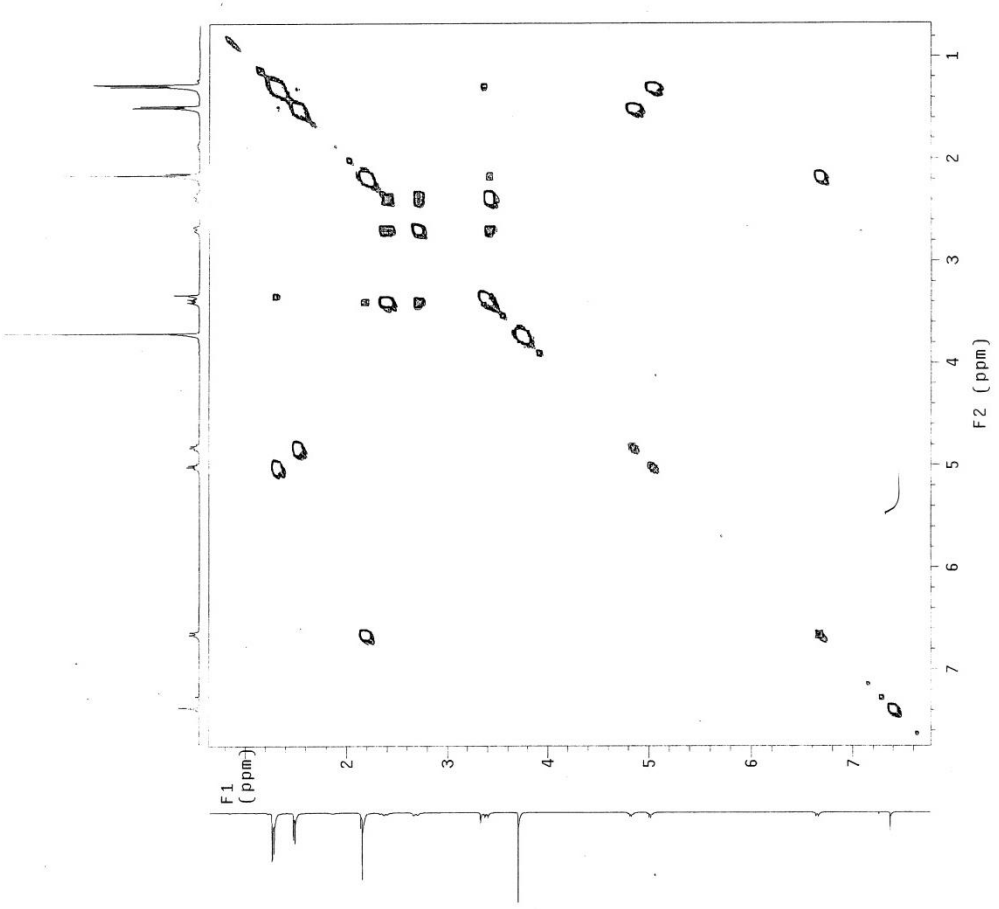
^{1}H NMR spectrum of Gonocarin A monoacetate （4）



^{13}C NMR spectrum of Gonocarin A monoacetate （4）



COSY spectrum of Gonocarin A monoacetate （4）

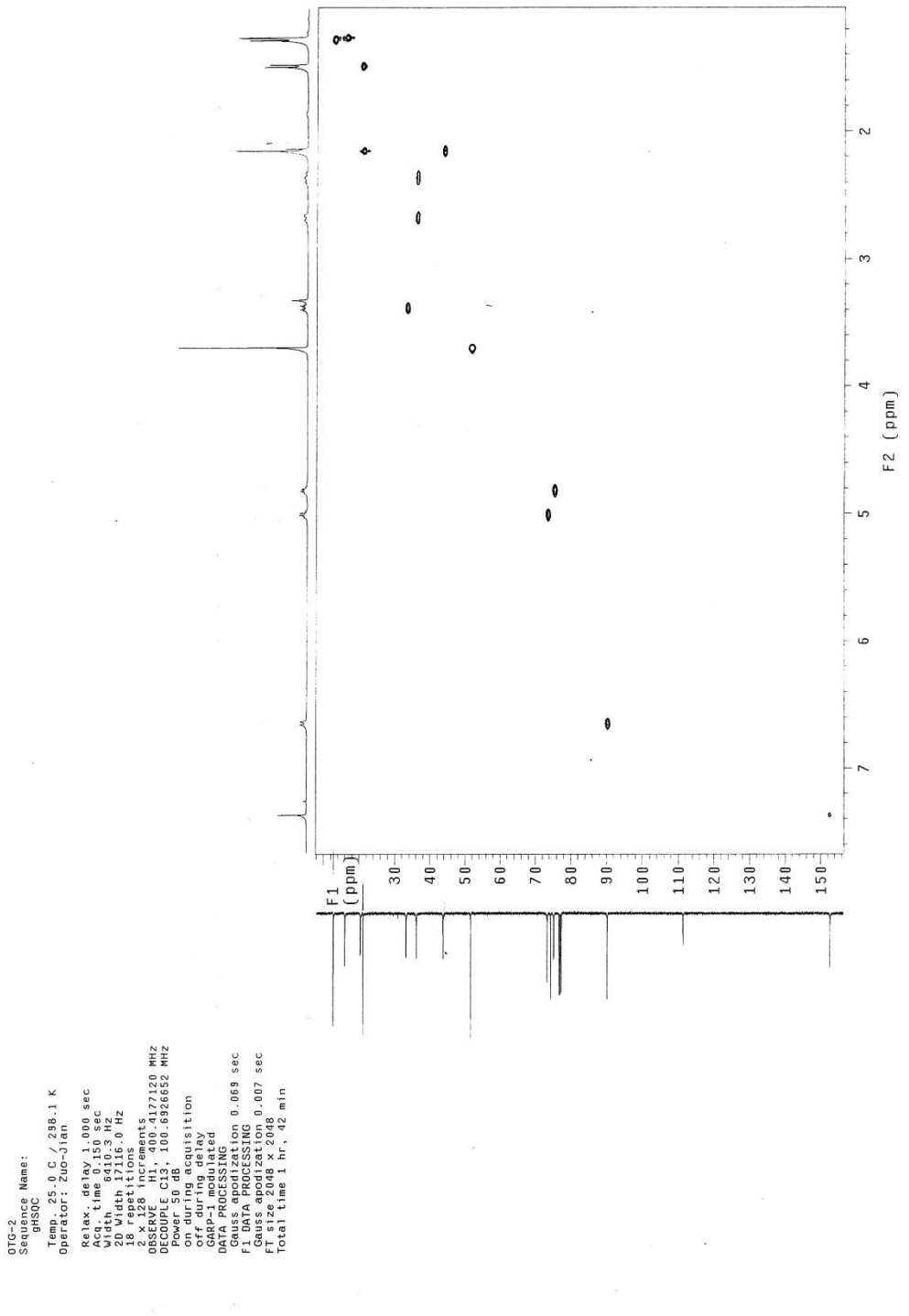


OTG-2
Sequence Name:
gCOSY

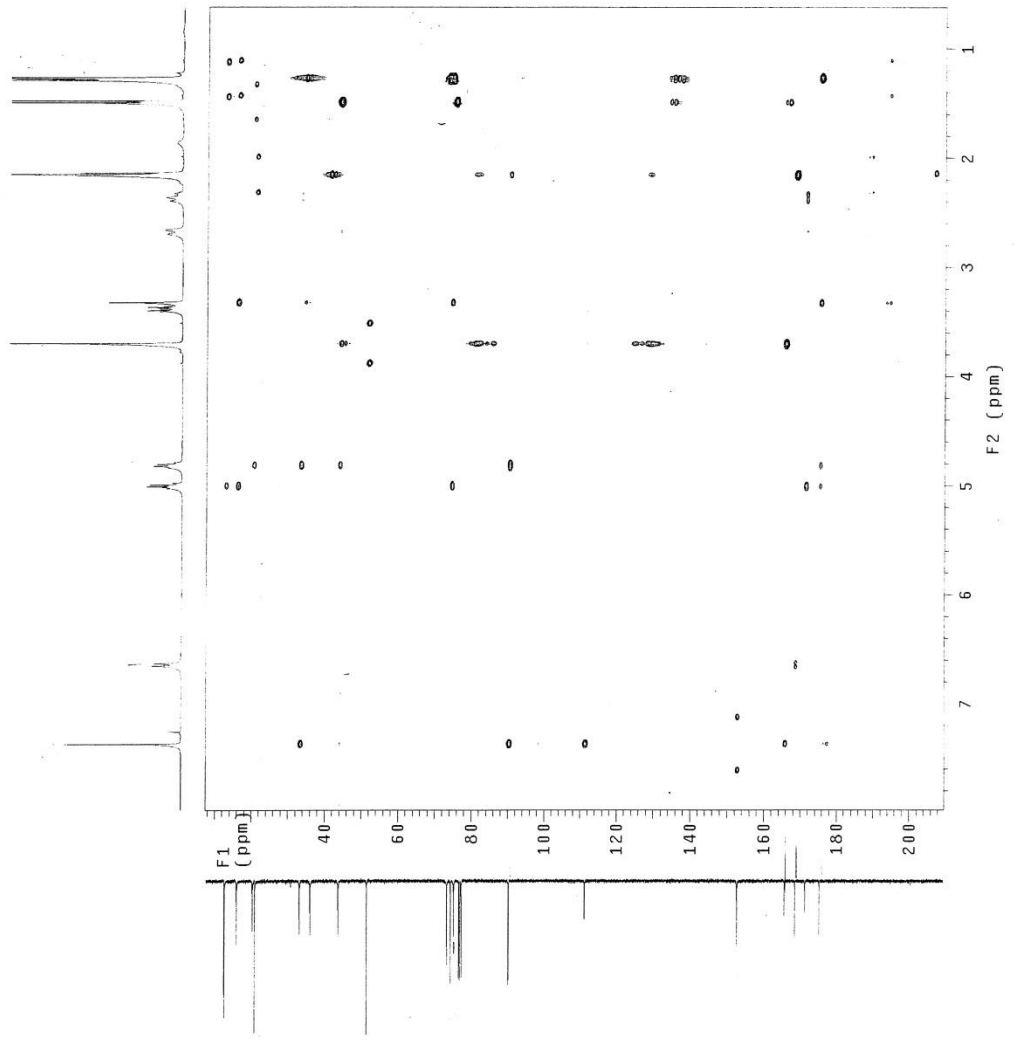
Temp. 25.0 C / 298.1 K
Operator: Zuo-Jian

Relax. delay 1.000 sec
Acq. time 0.150 sec
Width 3846.2 Hz
2D Width 3846.2 Hz
32 repetitions
128 increments
OBSERVE H1, 400.4177120 MHz
DATA PROCESSING
Sq. sine bell 0.075 sec
F1 DATA PROCESSING
Sq. sine bell 0.033 sec
FT size 2048 x 2048
Total time 1 hr, 30 min

HMQC spectrum of Gonocarin A monoacetate （4）



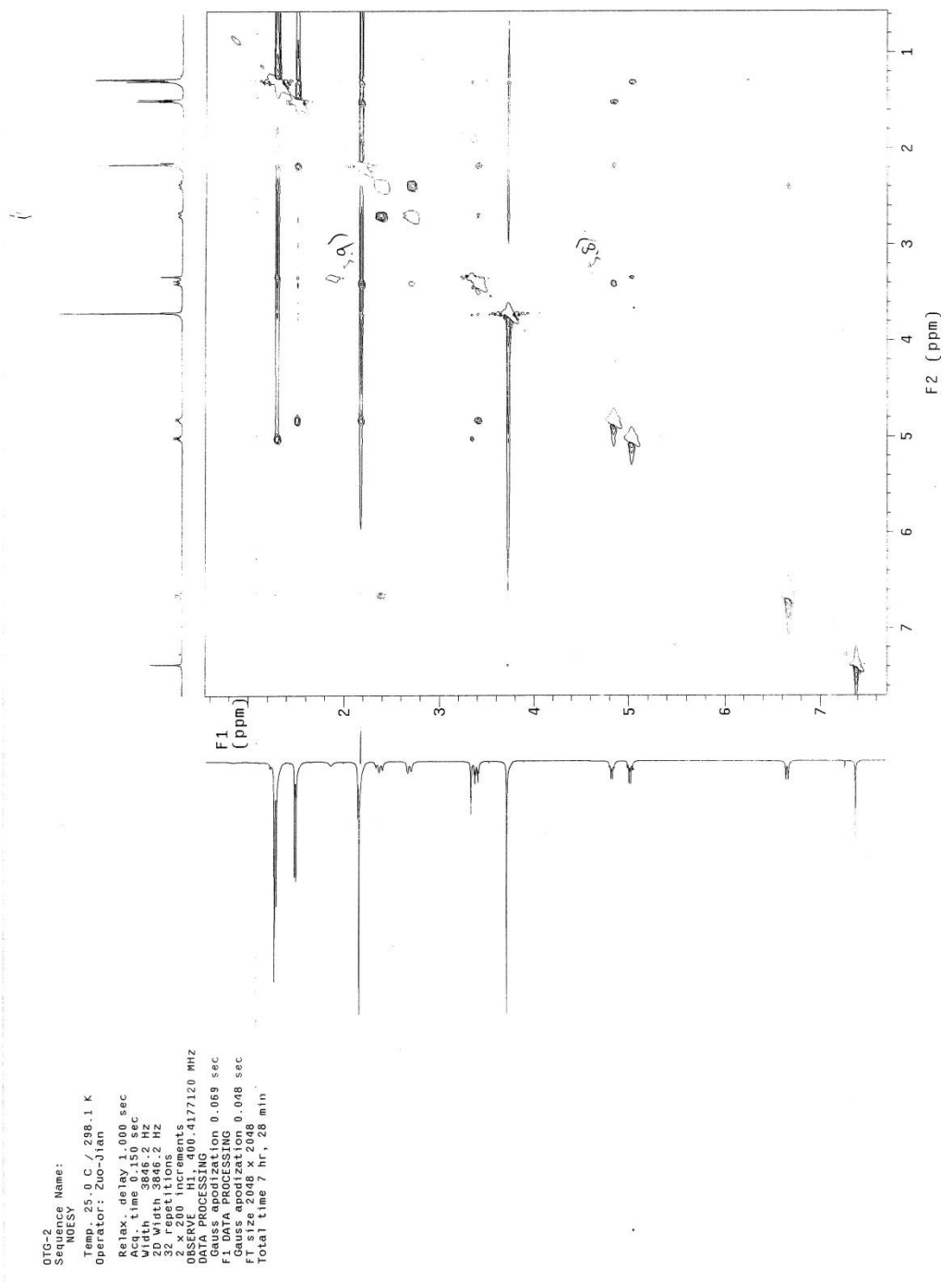
HMBC spectrum of Gonocarin A monoacetate （4）



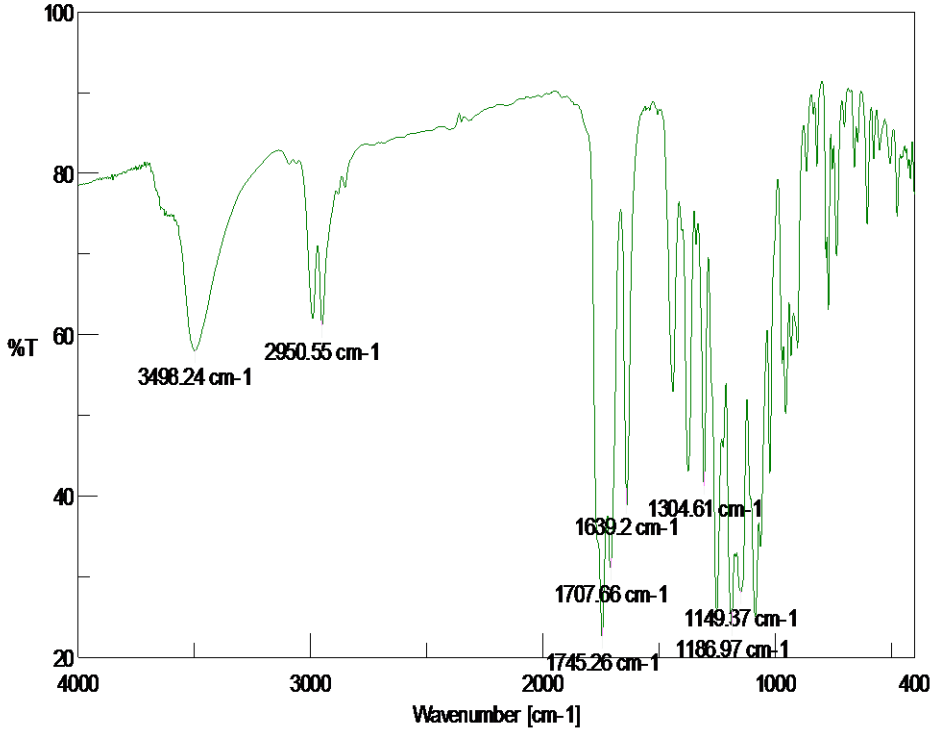
OTG-2
Sequence Name:
gHMBC
Temp. 25.0 C / 298.1 K
Operator: Zuo-Jian

Relax. delay 1.000 sec
Acq. time 0.150 sec
Width 6410.3 Hz
2D Width 24161.9 Hz
24 repetitions
256 increments
OBSERVE H1, 400.4177120 MHz
DATA PROCESSING
Sq. sine bell 0.075 sec
F1 DATA PROCESSING
Gauss apodization 0.008 sec
FT size 2048 x 2048
Total time 3 hr, 38 min

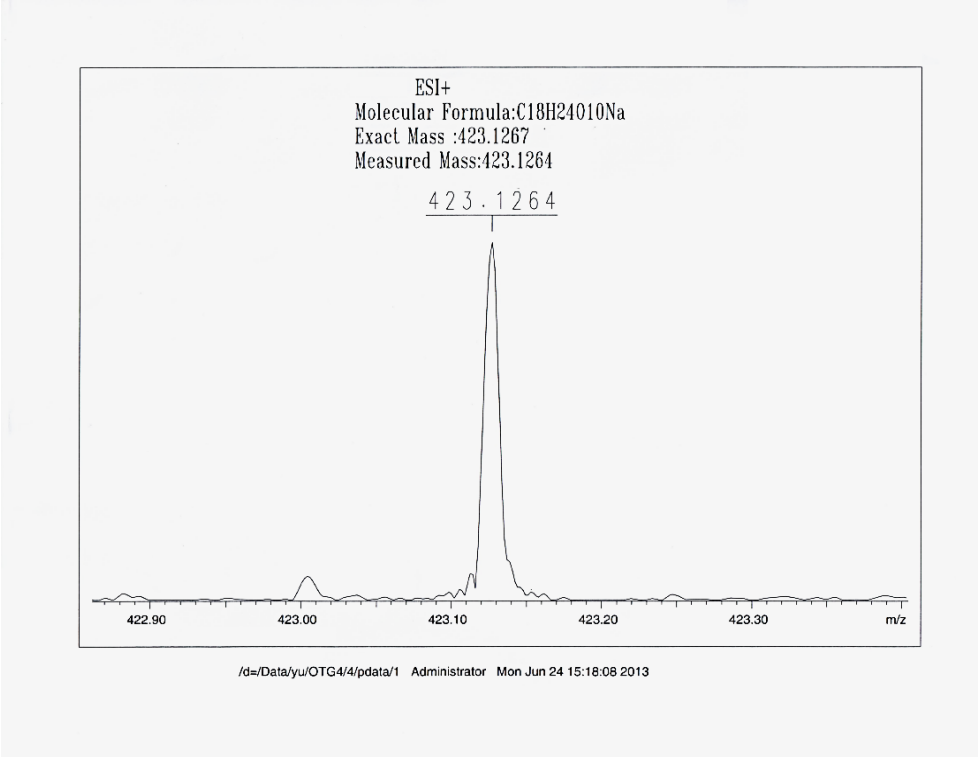
NOESY spectrum of Gonocarin A monoacetate （4）



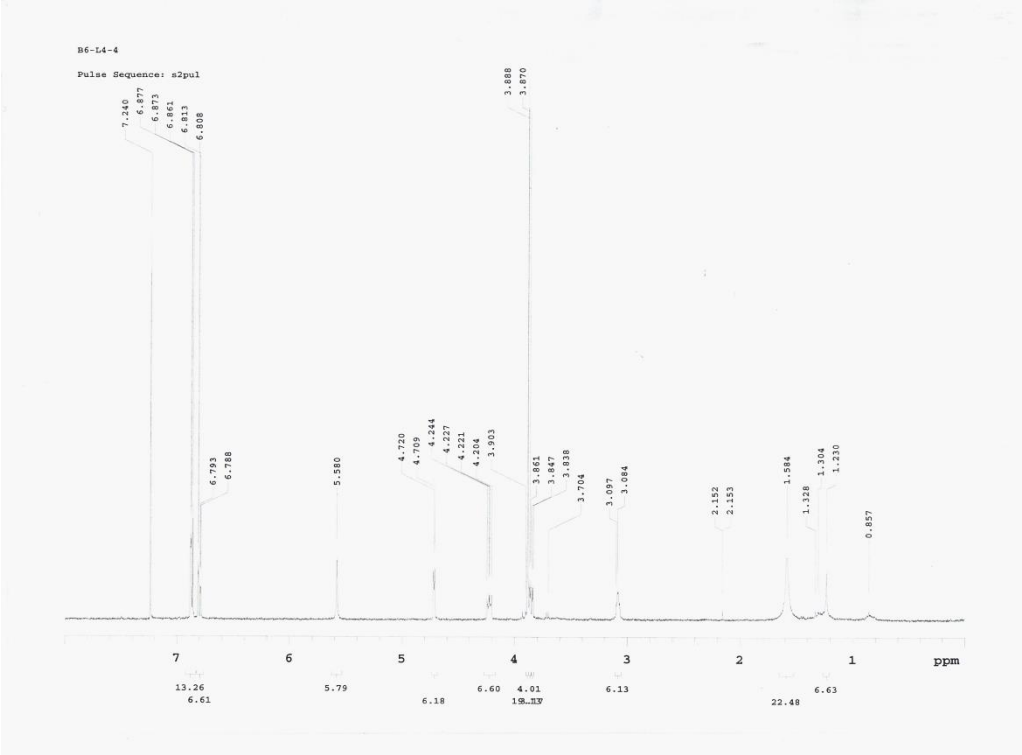
IR spectrum of Gonocarin A monoacetate （4）



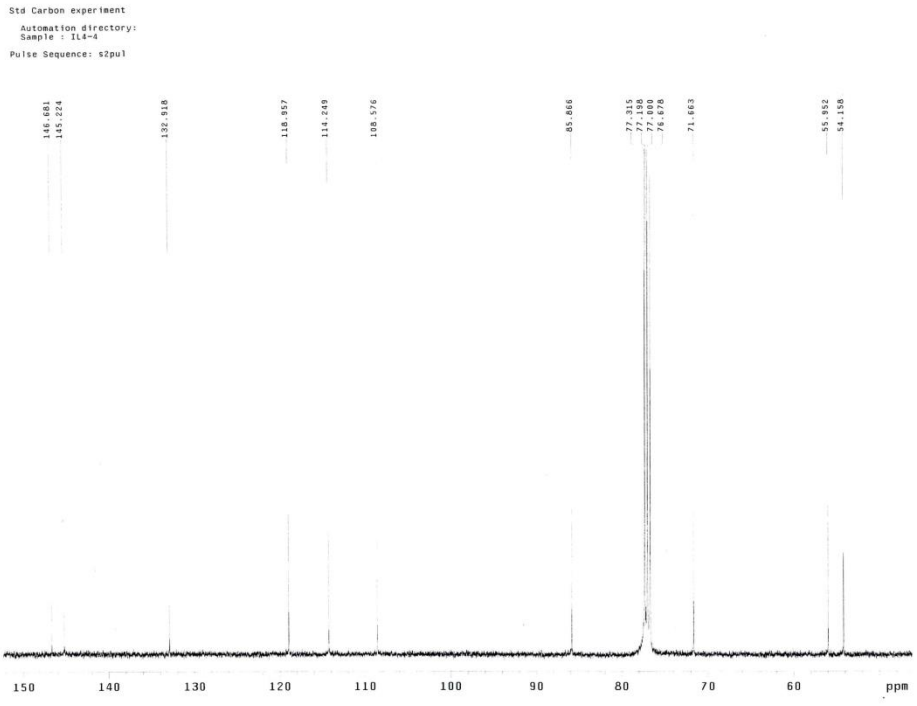
HRESIMS spectrum of Gonocarin A monoacetate （4）



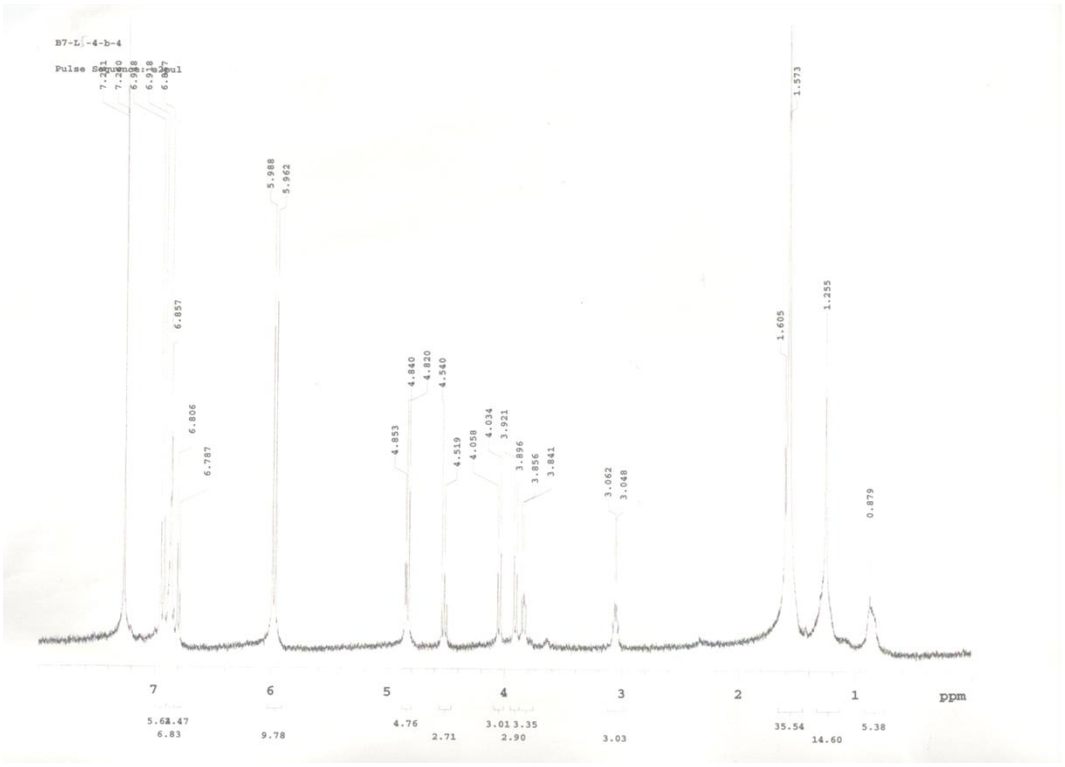
^{1}H NMR spectrum of Pinoresinol （5）



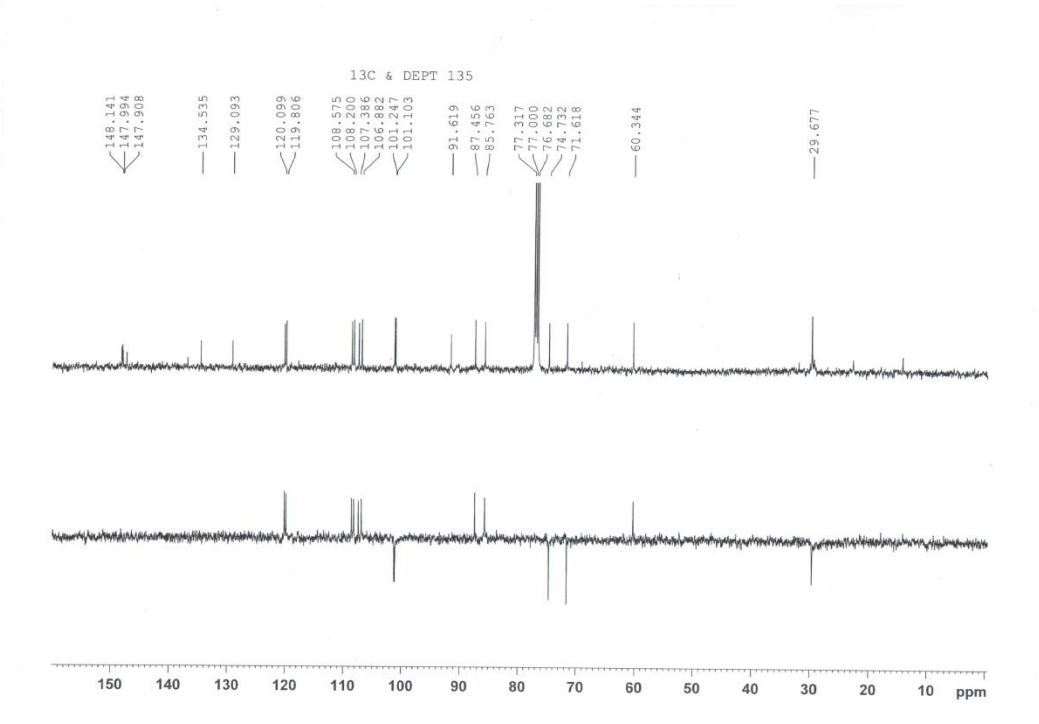
^{13}C NMR spectrum of Pinoresinol （5）



^{1}H NMR spectrum of Paulownin （6）



^{13}C NMR spectrum of Paulownin （6）



A

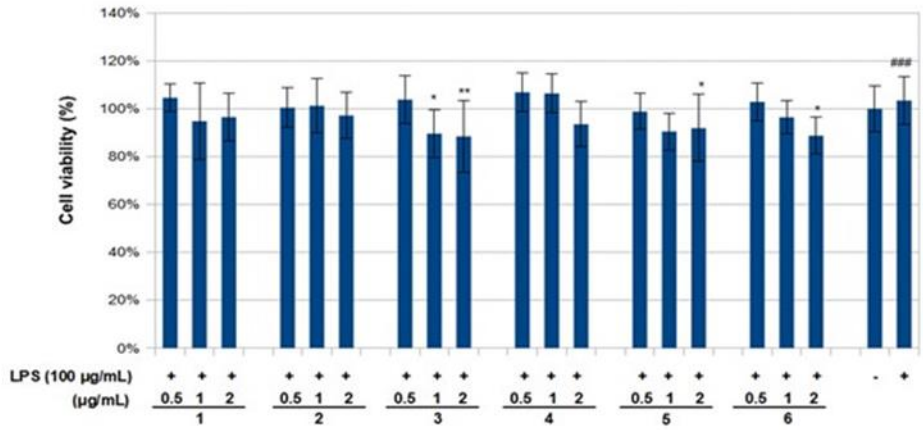


Figure 4. Effects of compounds **1-6** and LPS on the viability of RAW 264.7 macrophages. Cells were treated with LPS for 6 h prior to treatment with indicated concentrations of compounds or LPS alone. Following a 24h incubation period, cell viability was assessed using a MTS assay. Cell viability was calculated as the percentage of surviving cells over control cells (no compounds added). Values are presented as mean ± standard deviation of three independent experiments. $^{###}$ $p < 0.001$ control group as compared to LPS-treated group. *$p < 0.05$, **$p < 0.01$, and ***$p < 0.001$ were compared with the LPS-alone group. - : cells without treatment, + : cells previously treated with LPS.

B

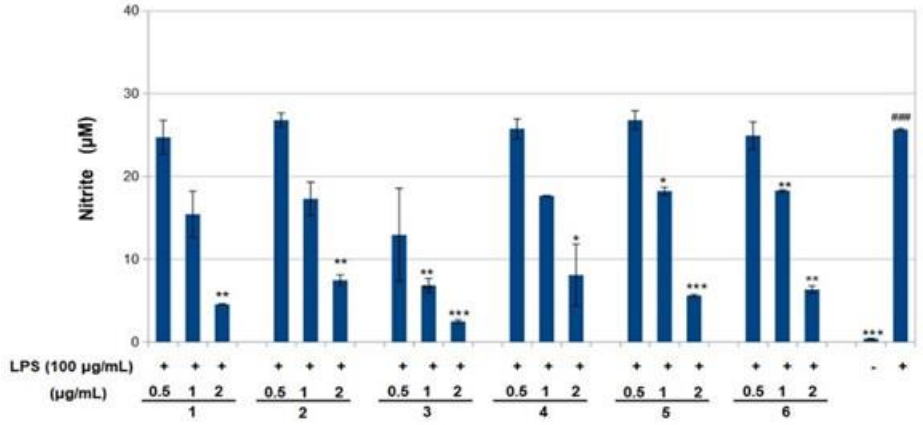


Figure 5. Inhibition of NO production by compounds **1-6** in LPS-stimulated RAW 264.7 macrophages. RAW 264.7 cells were stimulated by LPS (100 ng/ml) for 6h and then tetreated with the indicated concentrations of compounds 1-6 for 24 h. NO was measured using Griess reagent. Values are presented as mean ± standard deviation of three independent experiments. $^{###}$ $p < 0.001$ control group as compared to LPS-treated group. *$p < 0.05$, **$p < 0.01$, and ***$p < 0.001$ were compared with the LPS-alone group. - : cells without treatment, + : cells previously treated with LPS.

C

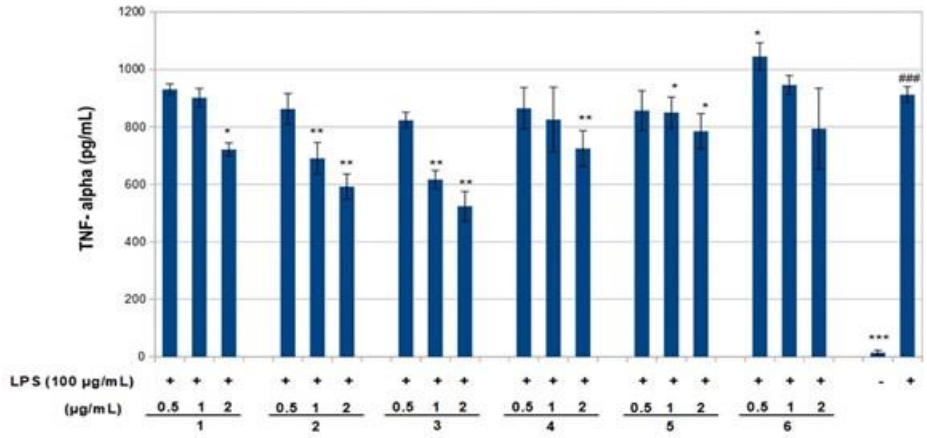


Figure 6. Inhibition of TNF-α production by compounds **1-6** in LPS-stimulated RAW 264.7 macrophages. RAW 264.7 cells were stimulated by LPS (100 ng/ml) for 6 h then treated with various concentrations of compounds 1-6 for 24 h. TNF-α production were measured using the corresponding ELISA kits. Values are presented as mean ± standard deviation of three independent experiments. $^{###}$ $p < 0.001$ control group as compared to LPS-treated group. *$p < 0.05$, **$p < 0.01$, and ***$p < 0.001$ were compared with the LPS-alone group. - : cells without treatment, + : cells previously treated with LPS.