Electronic Supplementary Material (ESI) for Organic & Biomolecular Chemistry.

Spiroconyone A, a new phytosterol with spiro [5,6] ring system from *Conyza japonica*

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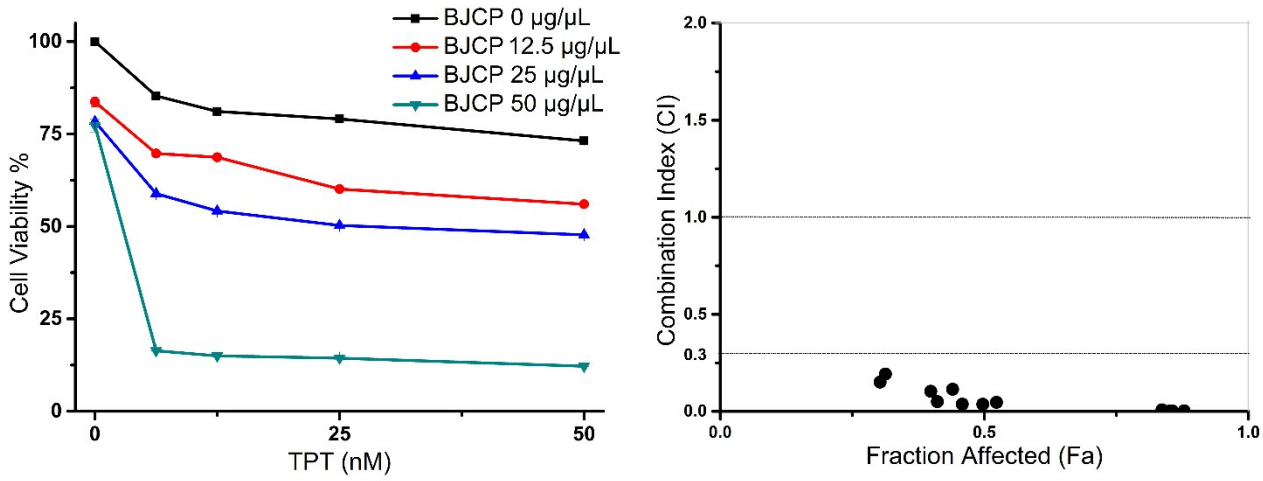

Fig. S1 Synergistic effect of petroleum ether extract of *C. japonica*.

Synergistic effect of petroleum ether extract (BJCP) of *C. japonica* with TPT in MCF-7 cells. Left panel: dose response curves for combination treatment. Right panel: Combination Index (CI) vs. Fraction Affected (Fa) plot for the dose response graphs in the left panel.

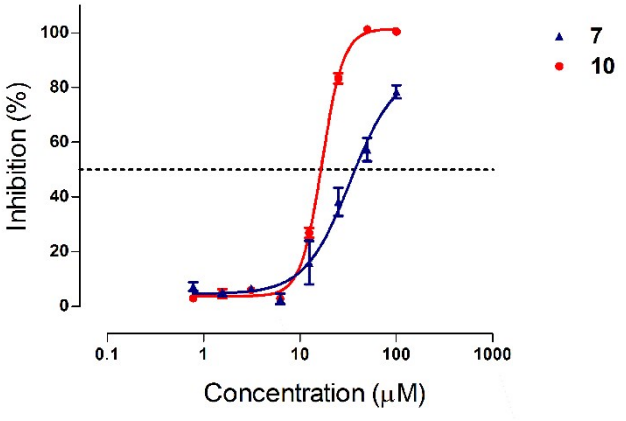

Fig. S2 TDP1 inhibition curves of compounds **7** and **10**.

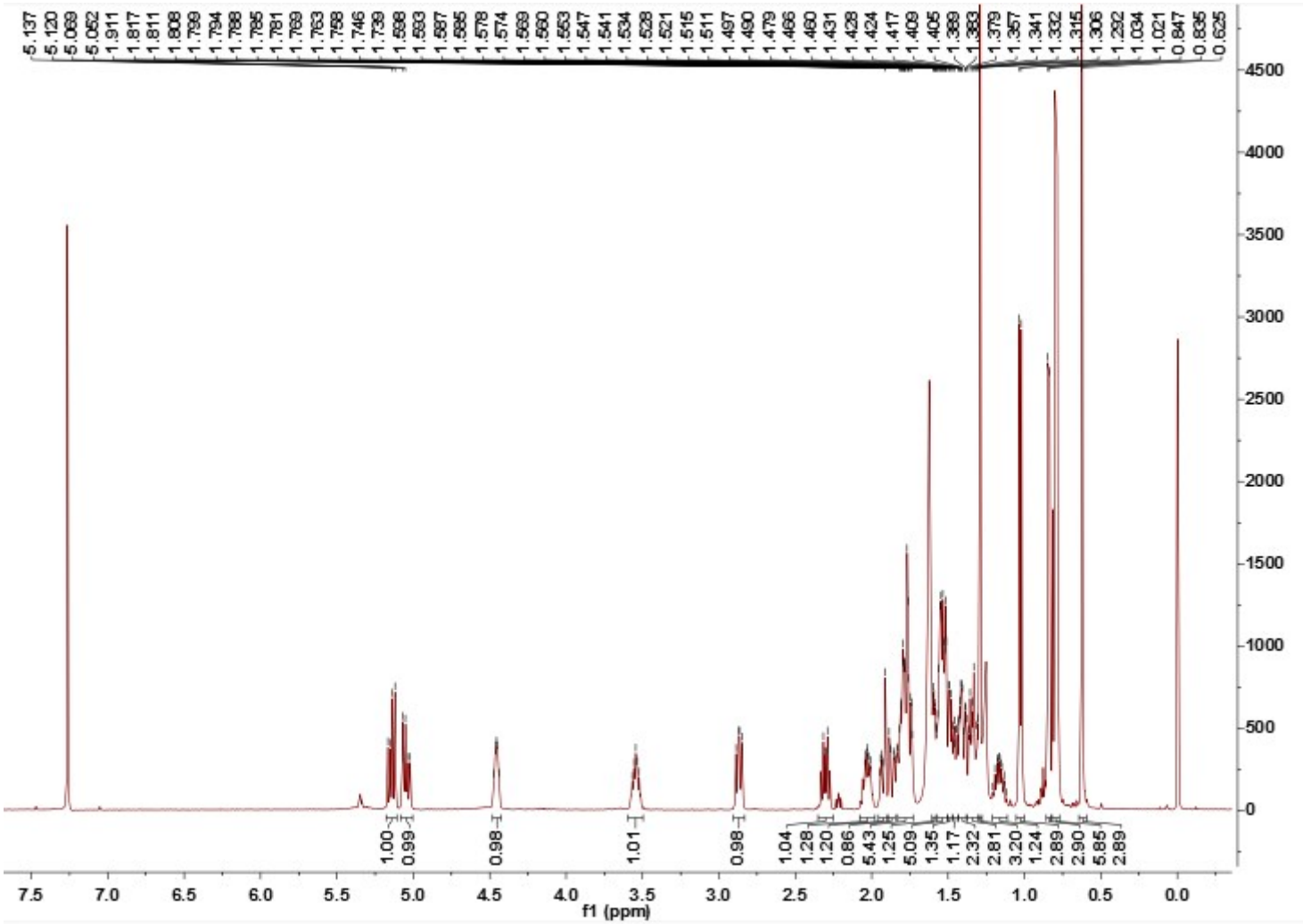

Fig. S3 ^{1}H NMR spectrum (500 MHz) of compound **1** in $CDCl_3$.

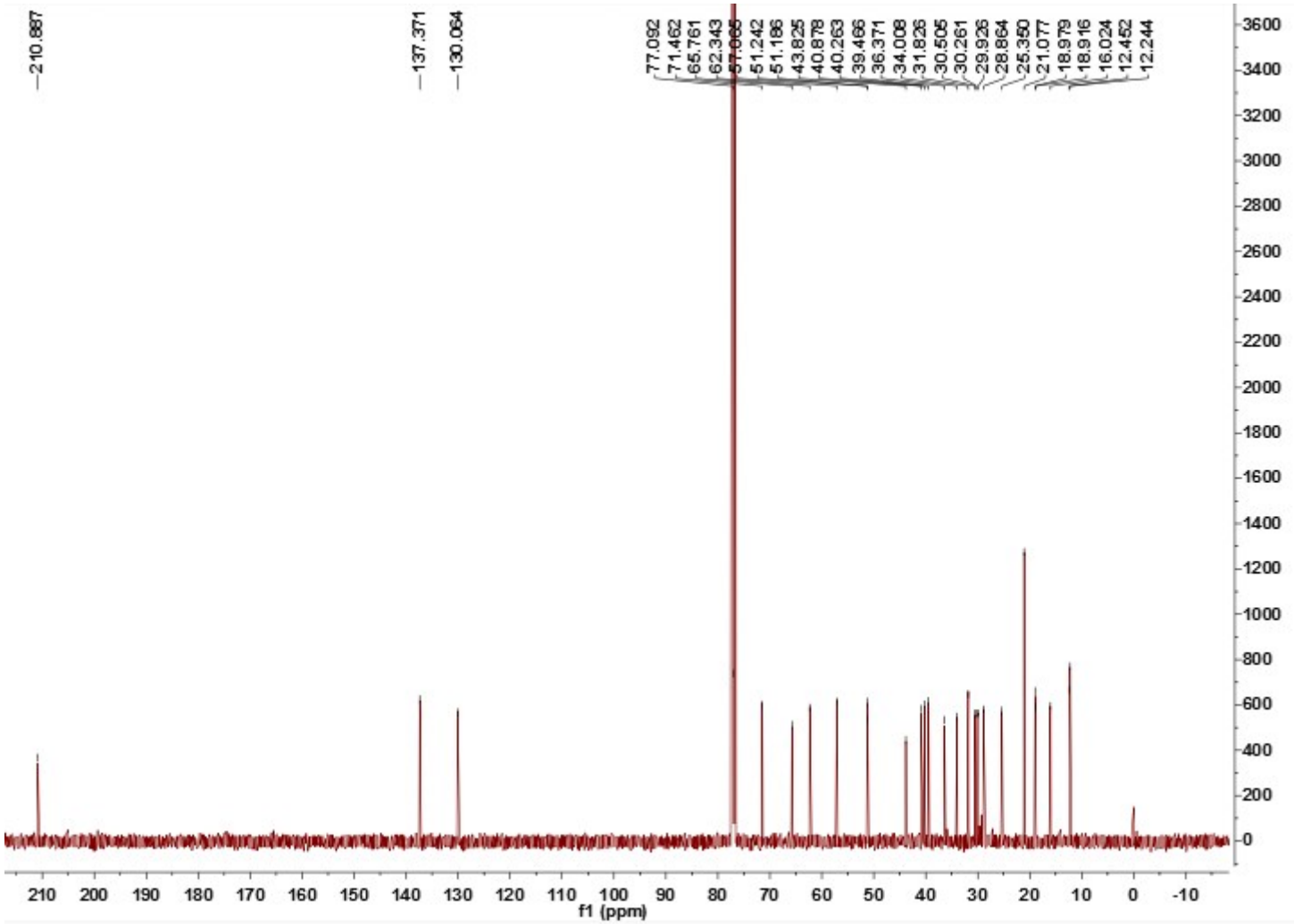

Fig. S4 ^{13}C NMR spectrum (125 MHz) of compound **1** in $CDCl_3$.

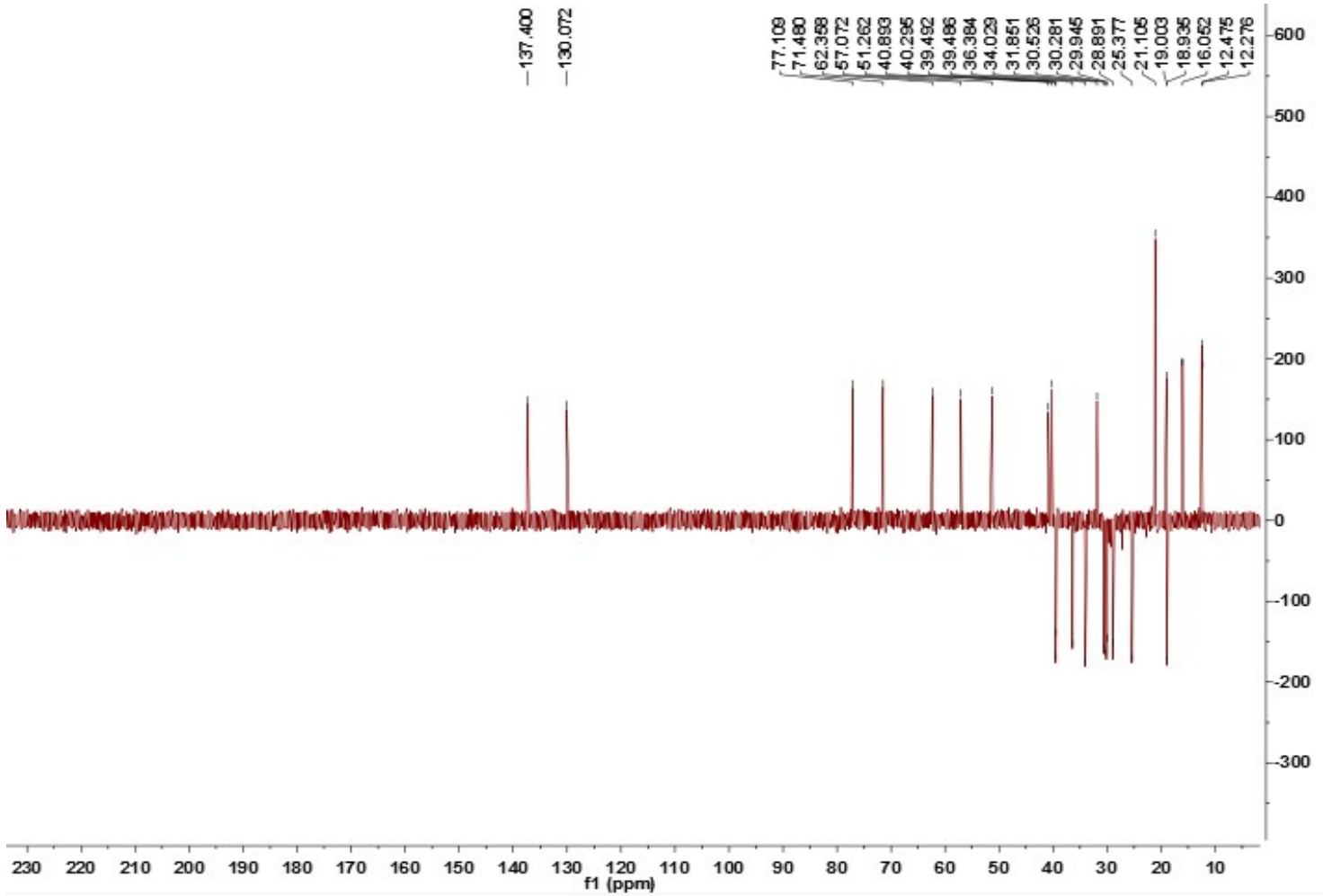

Fig. S5 DEPT135 spectrum (125 MHz) of compound **1** in $CDCl_3$.

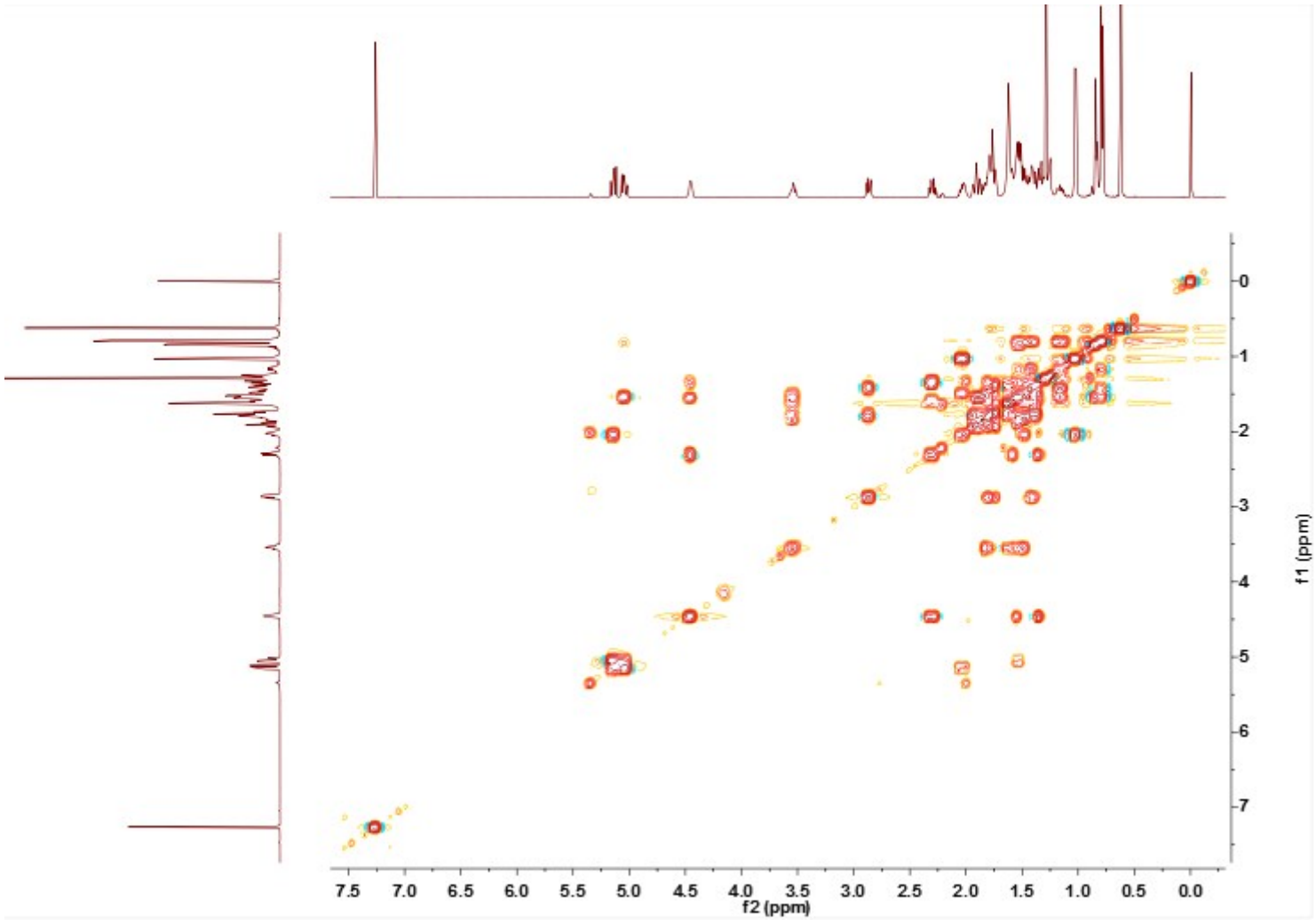

Fig. S6 ^{1}H–^{1}H COSY spectrum of compound **1** in $CDCl_3$.

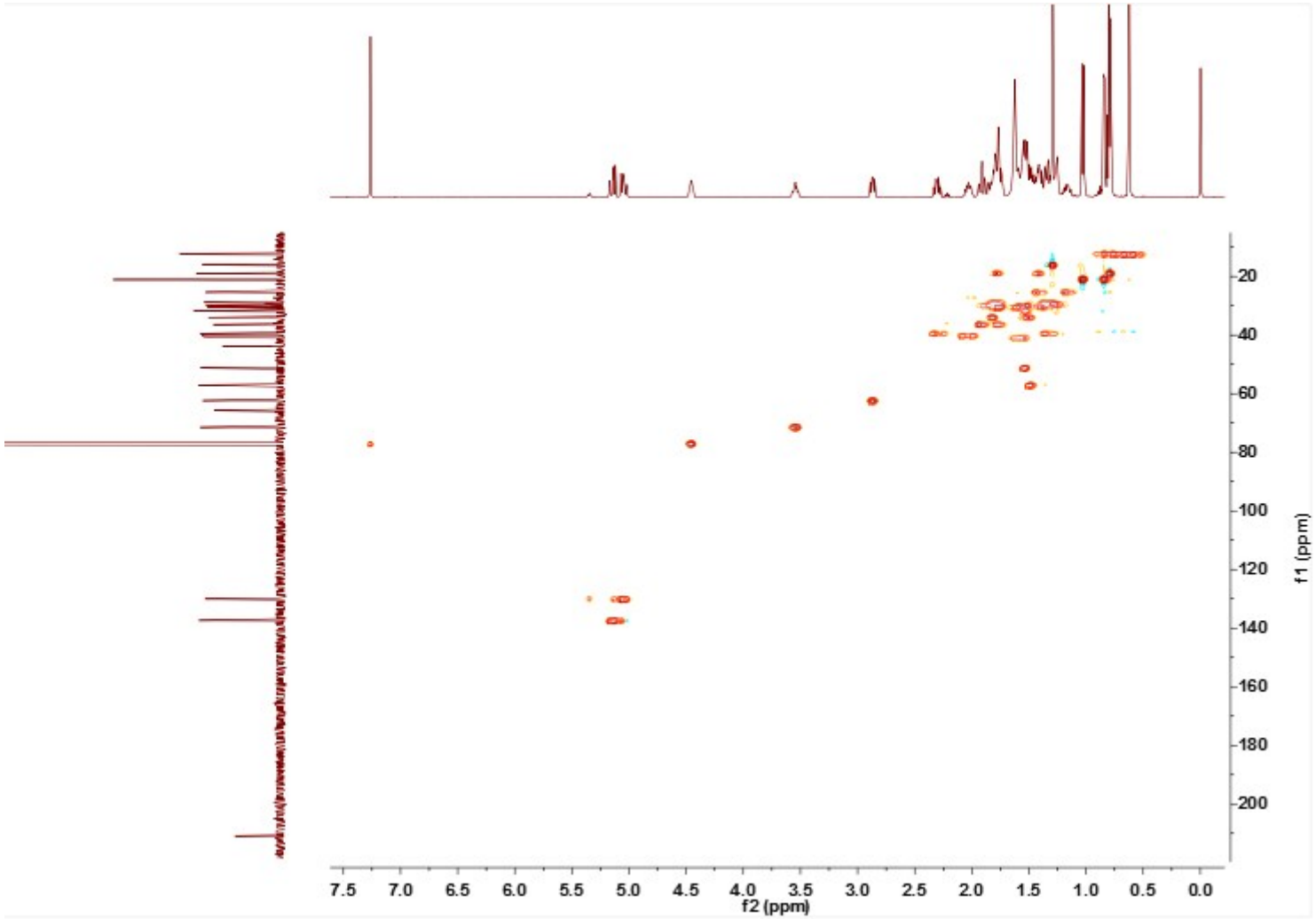

Fig. S7 HSQC spectrum of compound **1** in $CDCl_3$.

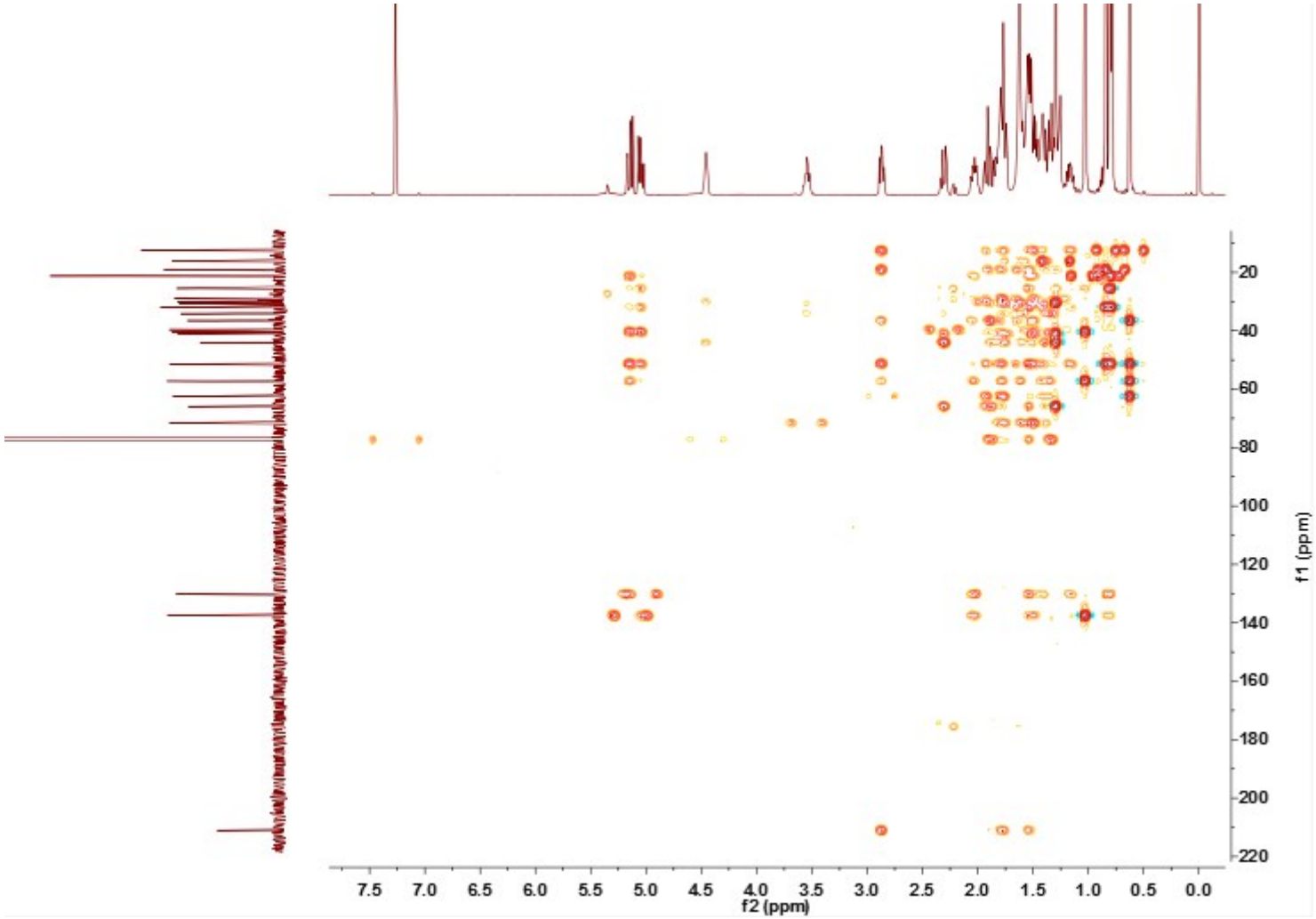

Fig. S8 HMBC spectrum of compound **1** in $CDCl_3$.

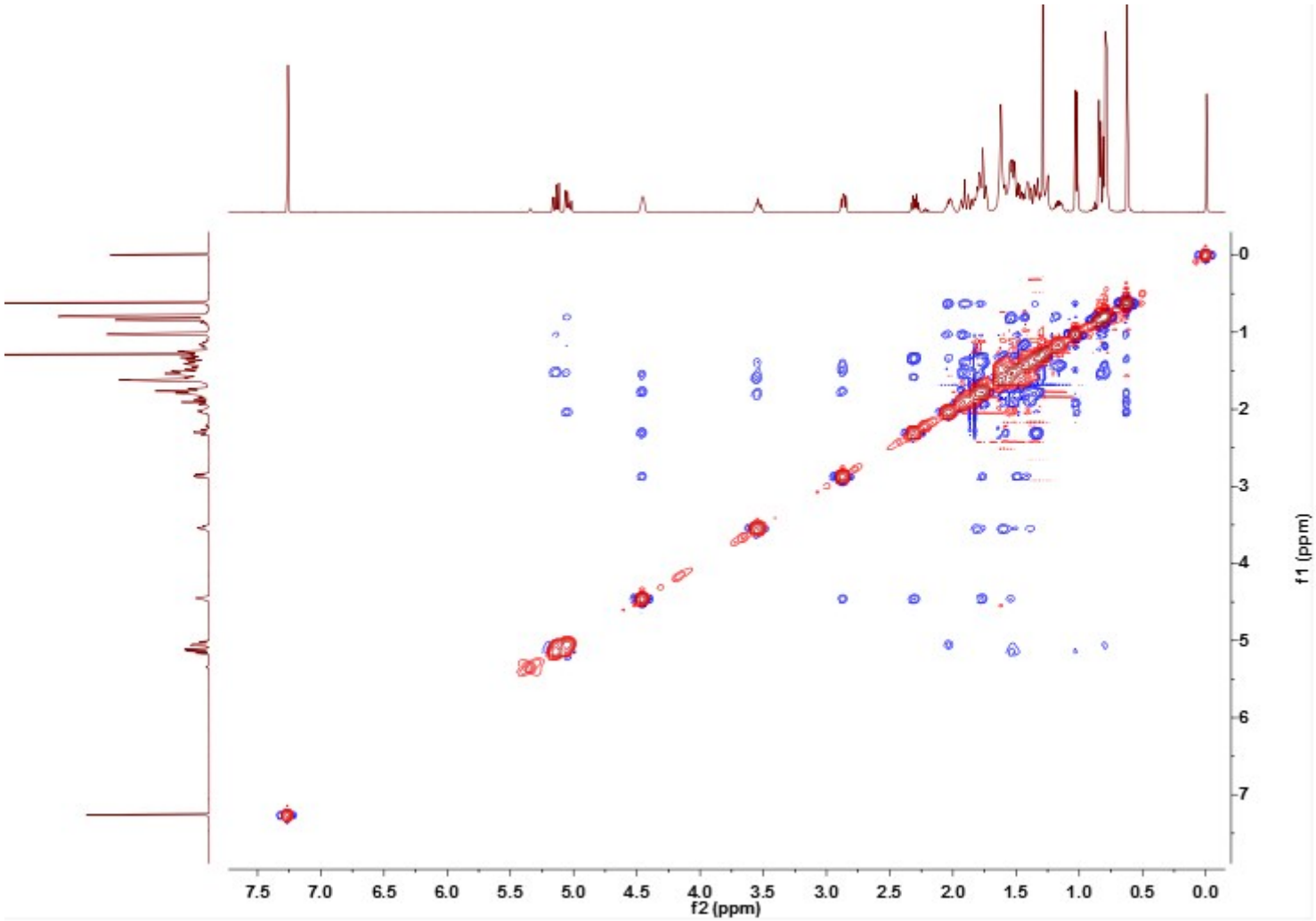

Fig. S9 NOESY spectrum of compound **1** in $CDCl_3$.

Elmt	Val.	Min	Max	Elmt	Val.	Min	Max	Elmt	Val.	Min	Max	Elmt	Val.	Min	Max	Use Adduct
H	1	0	50	O	2	0	5	P	3	0	0	Br	1	0	0	H
2H	1	0	0	18O	2	0	0	S	2	0	0	Pd	2	0	0	Na
B	3	0	0	F	1	0	0	Cl	1	0	0	Te	2	0	0	NH4
C	4	0	30	Al	3	0	0	Fe	2	0	0	I	3	0	0	
N	3	0	0	Si	4	0	0	Se	2	0	0	Pt	2	0	0	

Error Margin (ppm): 15
HC Ratio: 0.0 - 1000.0
Max Isotopes: all
MSn Iso RI (%): 75.00

DBE Range: -30.0 - 300.0
Apply N Rule: yes
Isotope RI (%): 1.00
MSn Logic Mode: AND

Electron Ions: both
Use MSn Info: no
Isotope Res: 10000
Max Results: 10000

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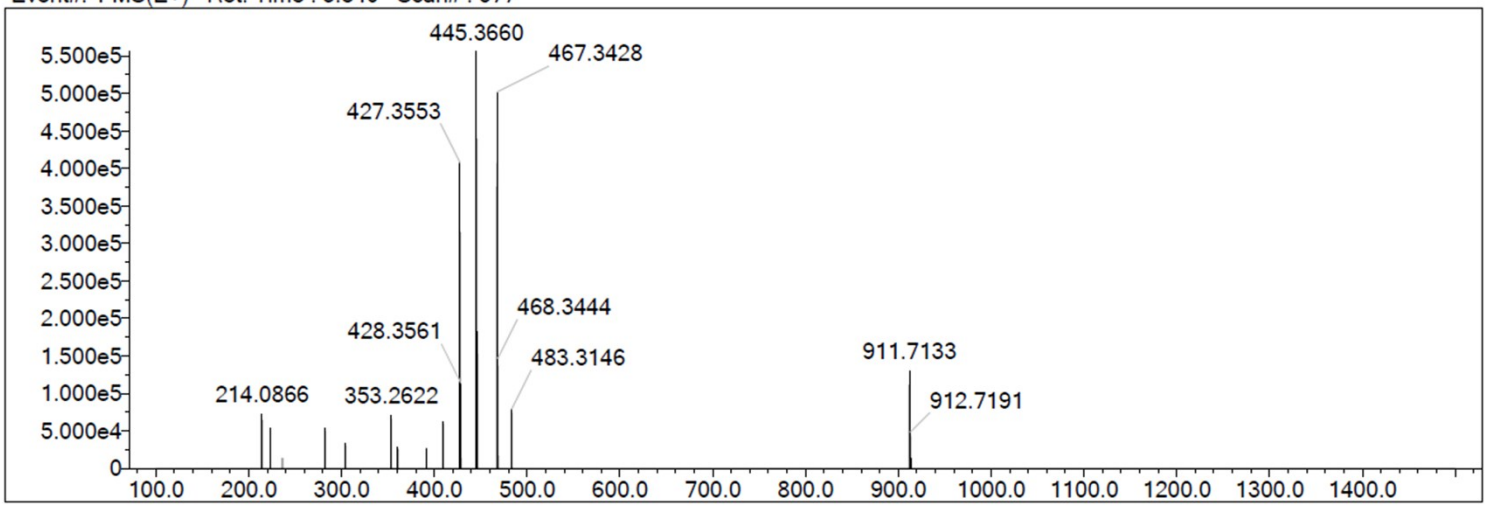

Rank	Score	Formula (M)	Ion	Meas. m/z	Pred. m/z	Df. (mDa)	Df. (ppm)	Iso	DBE
1	75.17	C29 H48 O3	[M+H]+	445.3660	445.3676	-1.6	-3.59	80.37	6.0

Fig. S10 HRESI (+) MS spectrum of compound **1**.

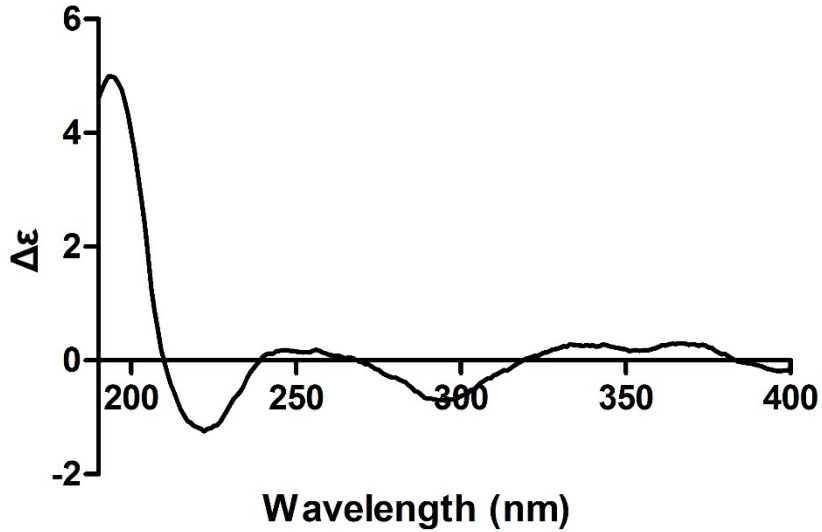

Fig. S11 CD spectrum of compound **1**.

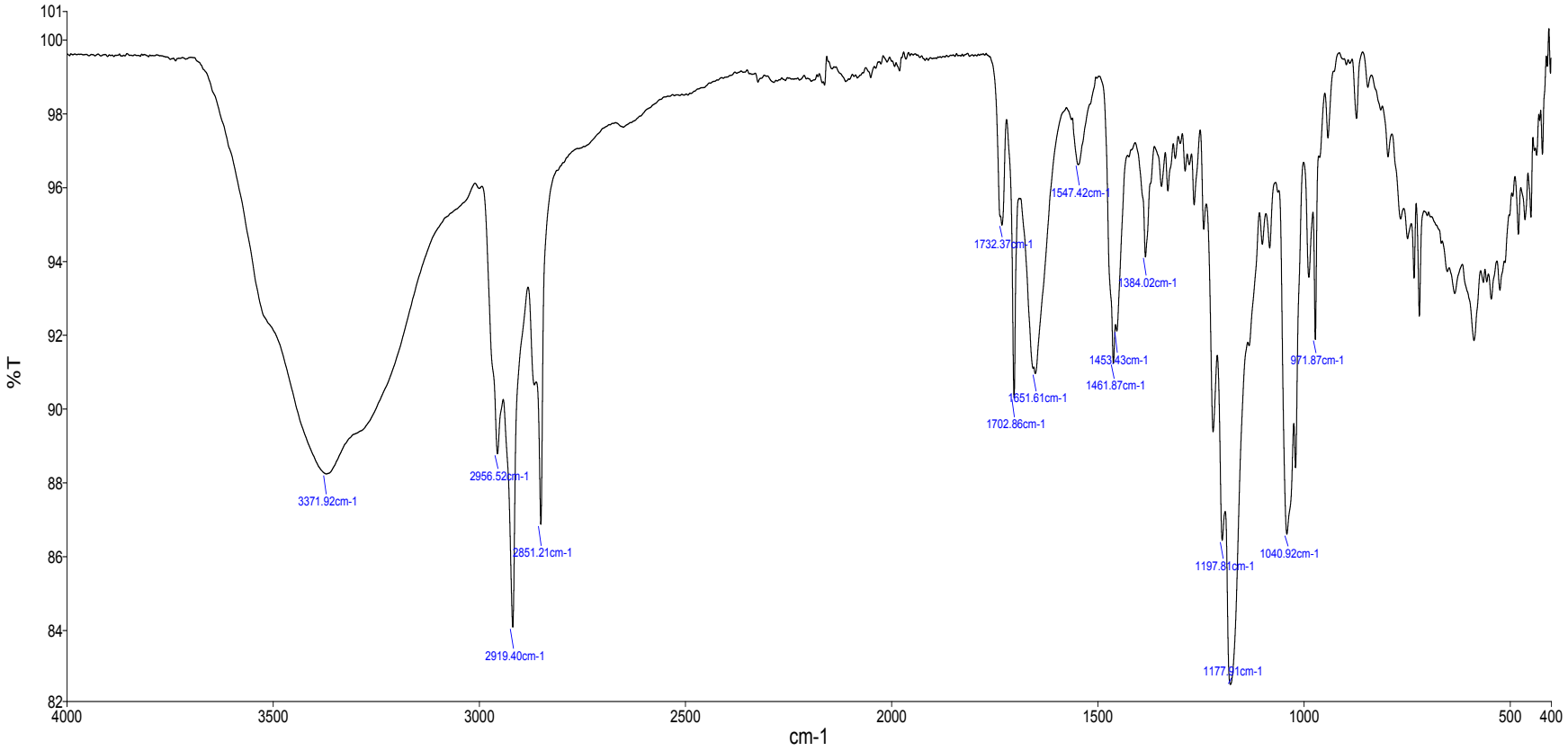

Fig. S12 IR spectrum of compound **1**.