

## Supplementary Information

### Study of Reactions of Two Mannich Bases Derived of 4'-Hydroxychalcones with Glutathione by RP-TLC, RP-HPLC and RP-HPLC-ESI-MS Analysis

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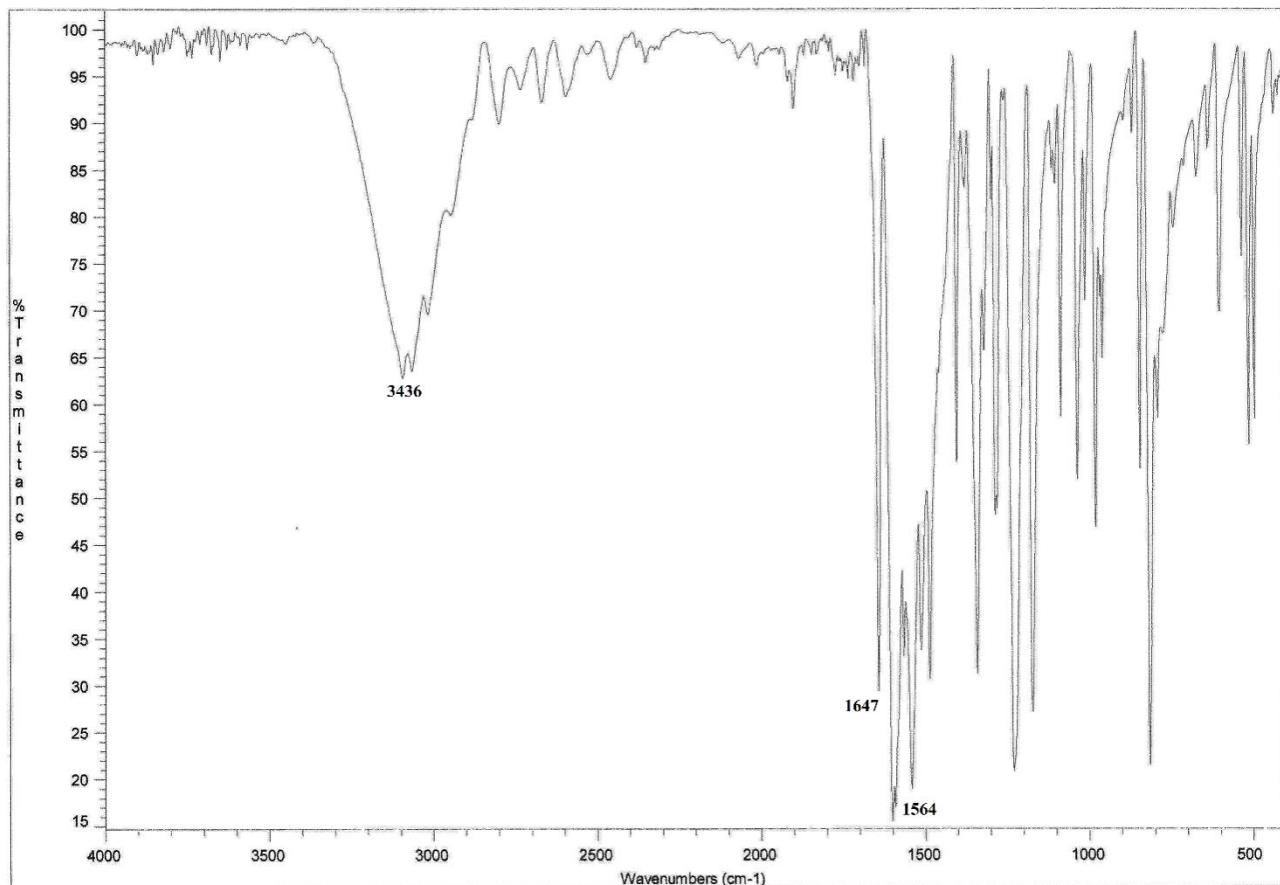
**Table S1.** Crystal data and refinement parameters of the crystal structures of compounds **3** and **4**

Solid phases	Compound <b>3</b>	Compound <b>4</b>
Structural formula	2(C <sub>21</sub> H <sub>26</sub> ClN <sub>2</sub> O <sub>2</sub> ), Cl, 6(H <sub>2</sub> O)	C <sub>26</sub> H <sub>34</sub> N <sub>2</sub> O <sub>5</sub> , 2(Cl), H <sub>2</sub> O
Formula weight / (g mol <sup>-1</sup> )	891.32	543.47
Crystal system	orthorhombic	triclinic
Space group	C222 <sub>1</sub>	P-1
Unit cell dimensions	$a$ / Å $b$ / Å $c$ / Å $\alpha$ / degree $\beta$ / degree $\gamma$ / degree	26.121(13) 7.812(4) 23.951(11) 90 90 90
$V$ / Å <sup>3</sup>	4887.4(9)	1337.9(11)
Z	4	2
$d$ / (g cm <sup>-3</sup> )	1.211	1.349
Absorption coeff. / mm <sup>-1</sup>	0.242	0.286
$\theta$ range for data collection / degree	1.56-25.47	2.05-25.31
Index ranges	-31 to 31 -9 to 9 -26 to 28	-11 to 11 -12 to 8 -17 to 17
Data collected	17660	12951
Unique reflections	4520	4802
Symmetry factor ( $R_{int}$ )	0.1106	0.0263
Completeness to $\theta^{\circ}_{\max}$ / %	99.5	98.4
F(000)	1900	240
Parameters refined	267	576

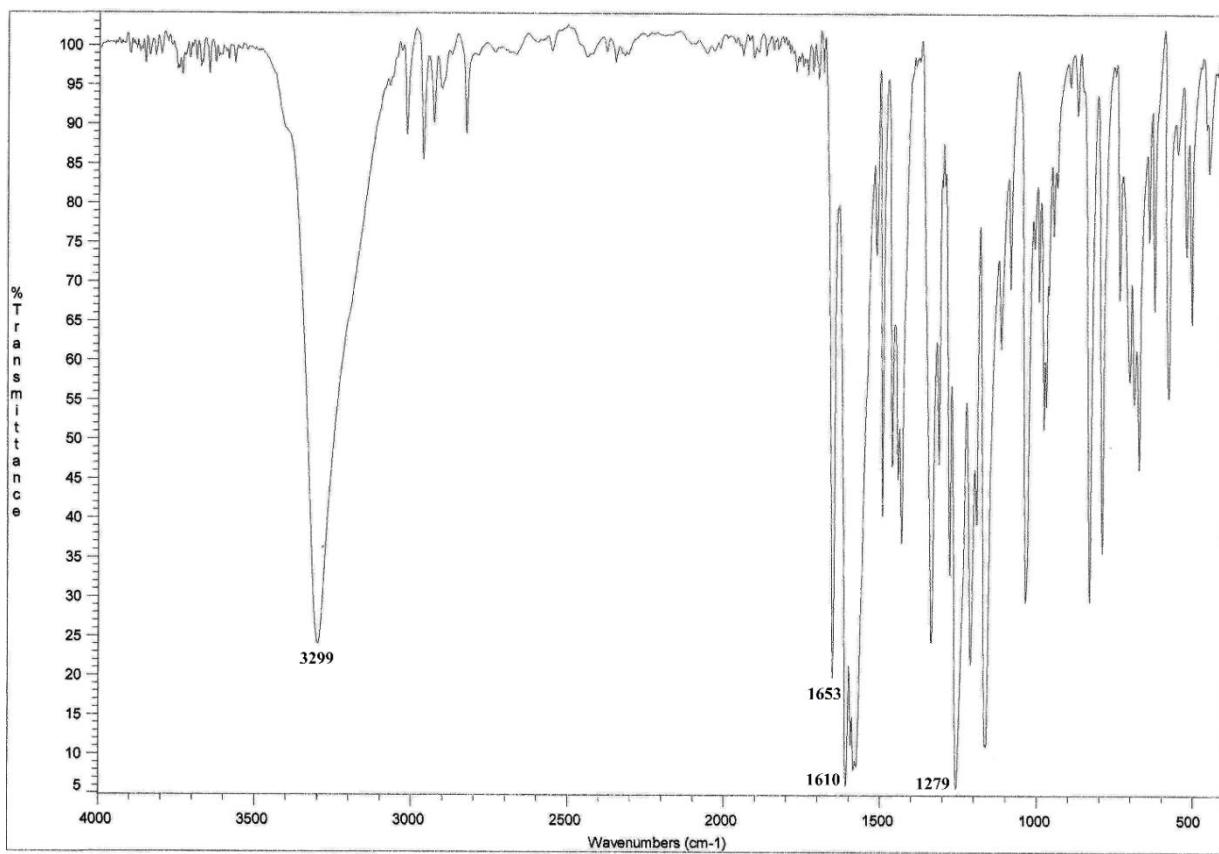
\*e-mail: pal.perjesi@aok.pte.hu

**Table S1.** Crystal data and refinement parameters of the crystal structures of compounds **3** and **4** (cont.)

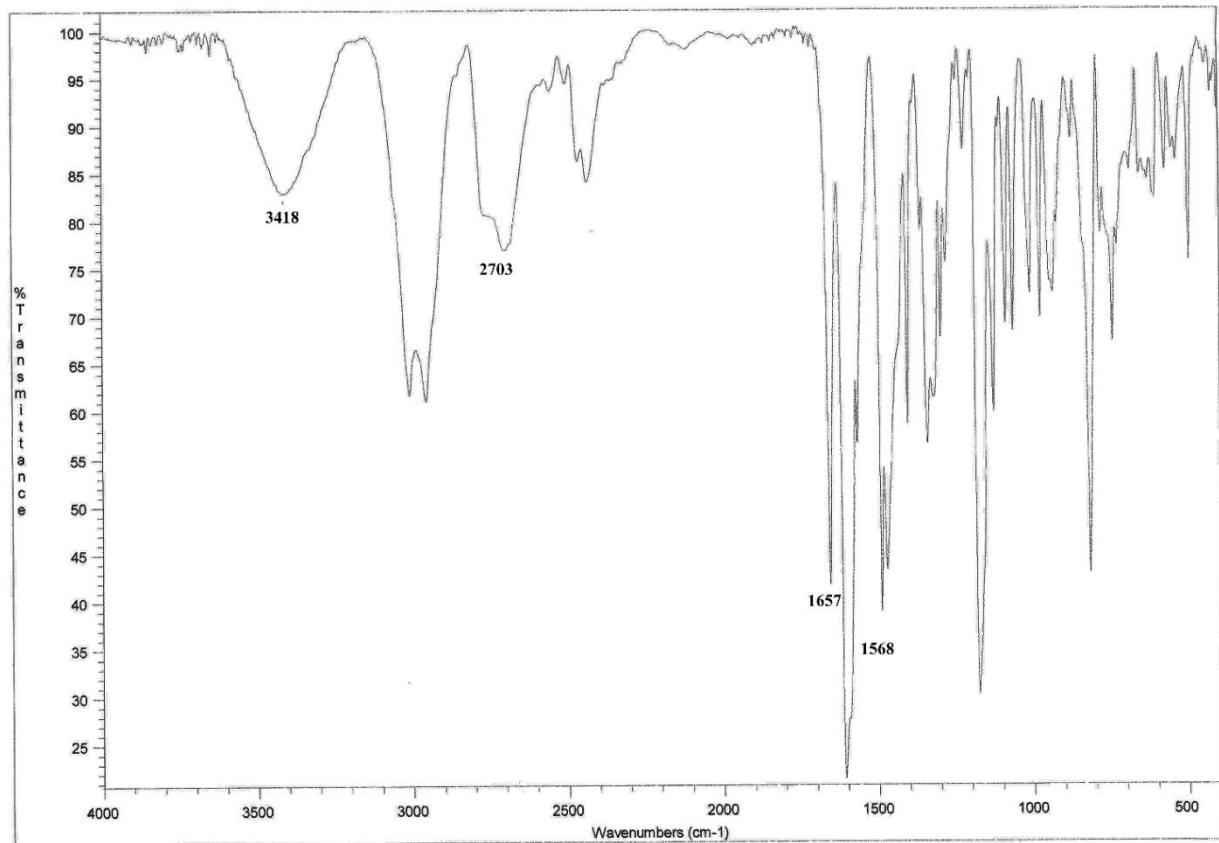
GOF on $F^2$	0.992	1.041
$R_I$ (all)	0.0886 (0.1460)	0.0470 (0.0678)
$wR_2$ (all)	0.2458 (0.2932)	0.1136 (0.1250)
Largest diff. peak and hole ( $e \text{ \AA}^{-3}$ )	0.494 and -0.371	0.694 and -0.271
Absolute structure	Flack parameter Friedel pairs	-0.04(18) 1968
CCDC deposit No.	1479638	1479615



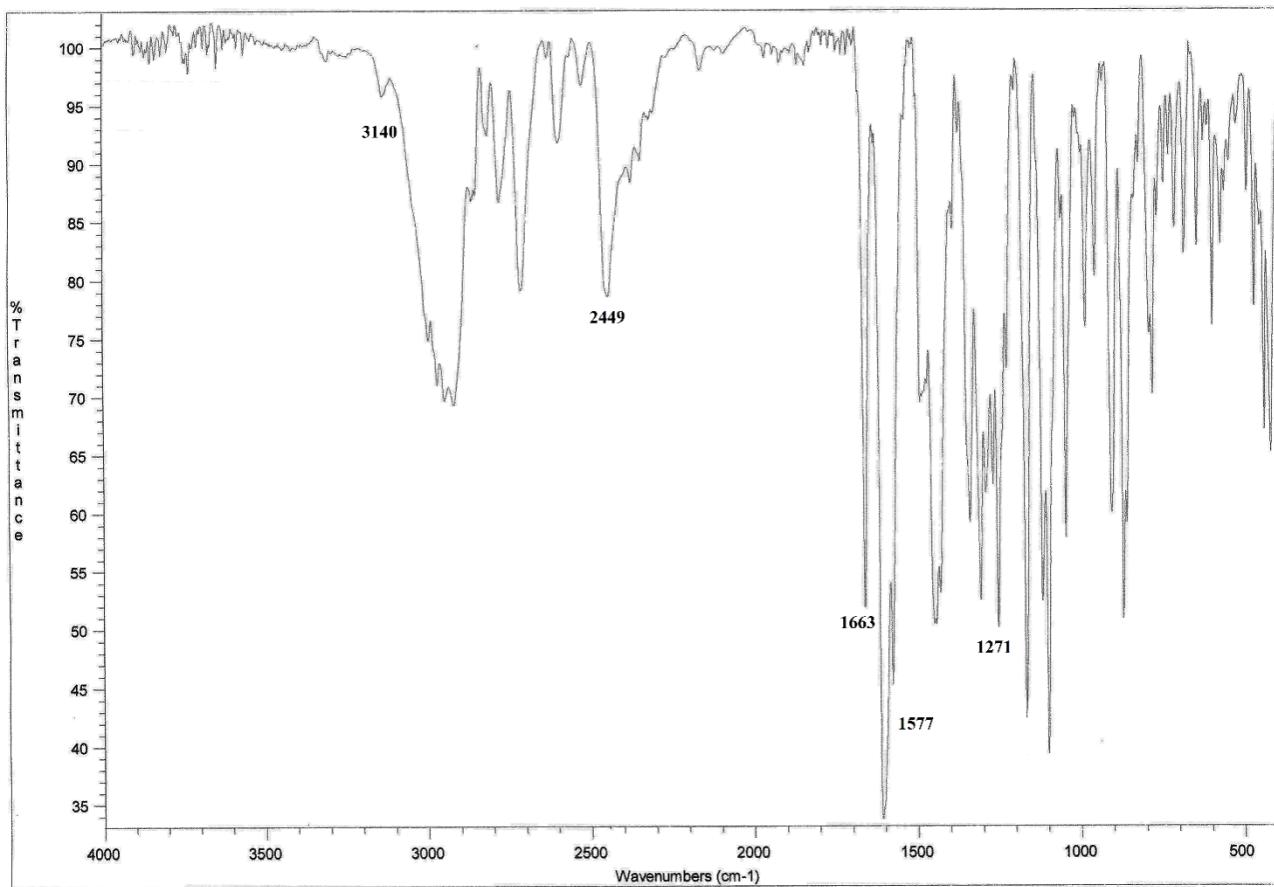
**Figure S1.** FTIR (KBr) spectrum of compound 1.



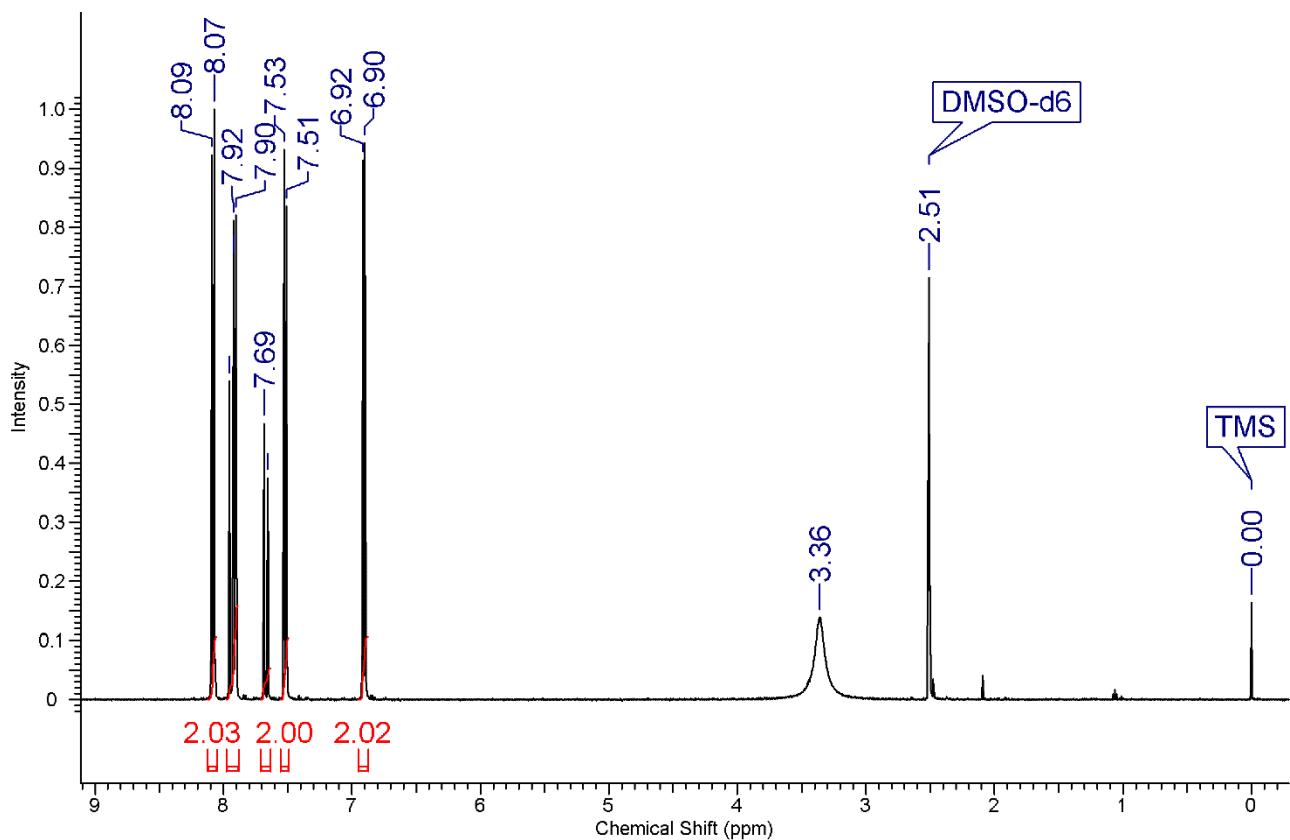
**Figure S2.** FTIR (KBr) spectrum of compound 2.



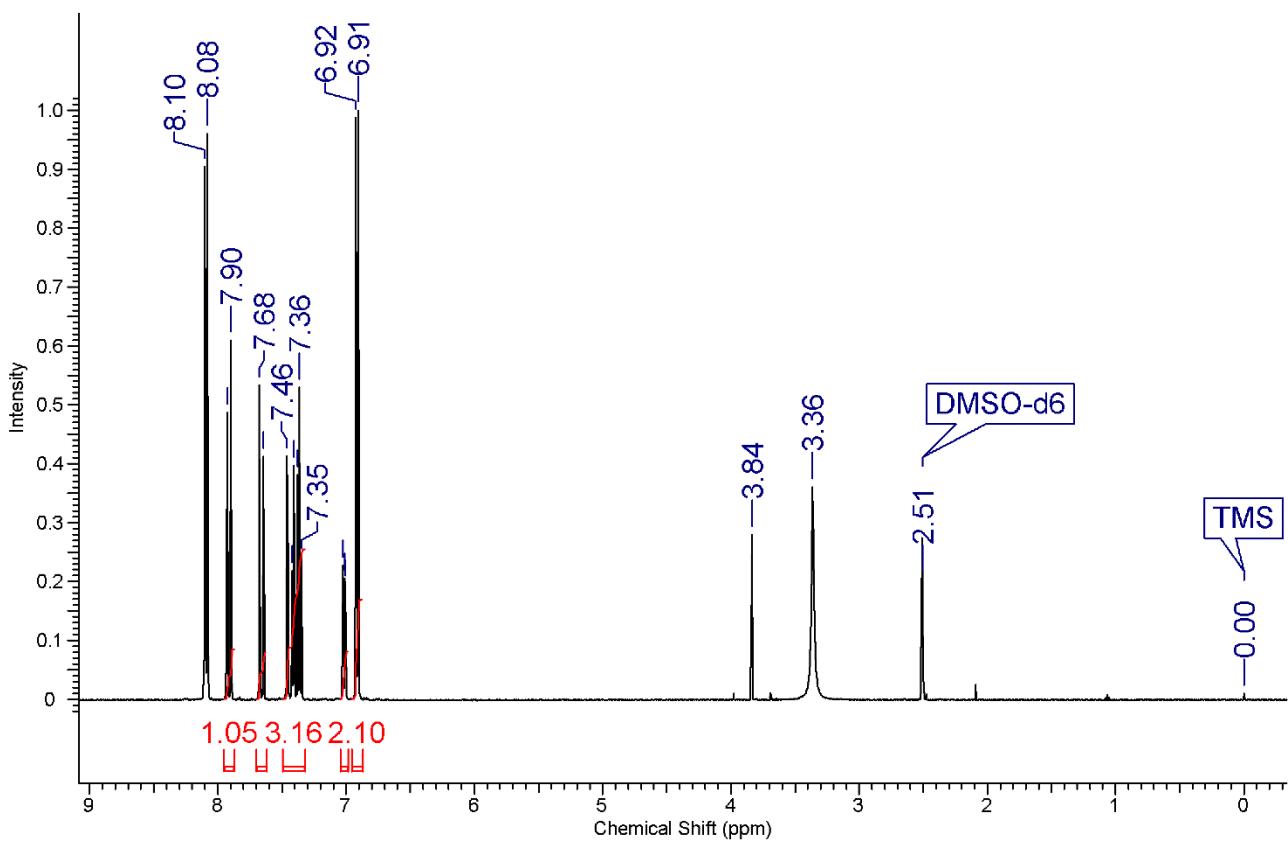
**Figure S3.** FTIR (KBr) spectrum of compound 3.



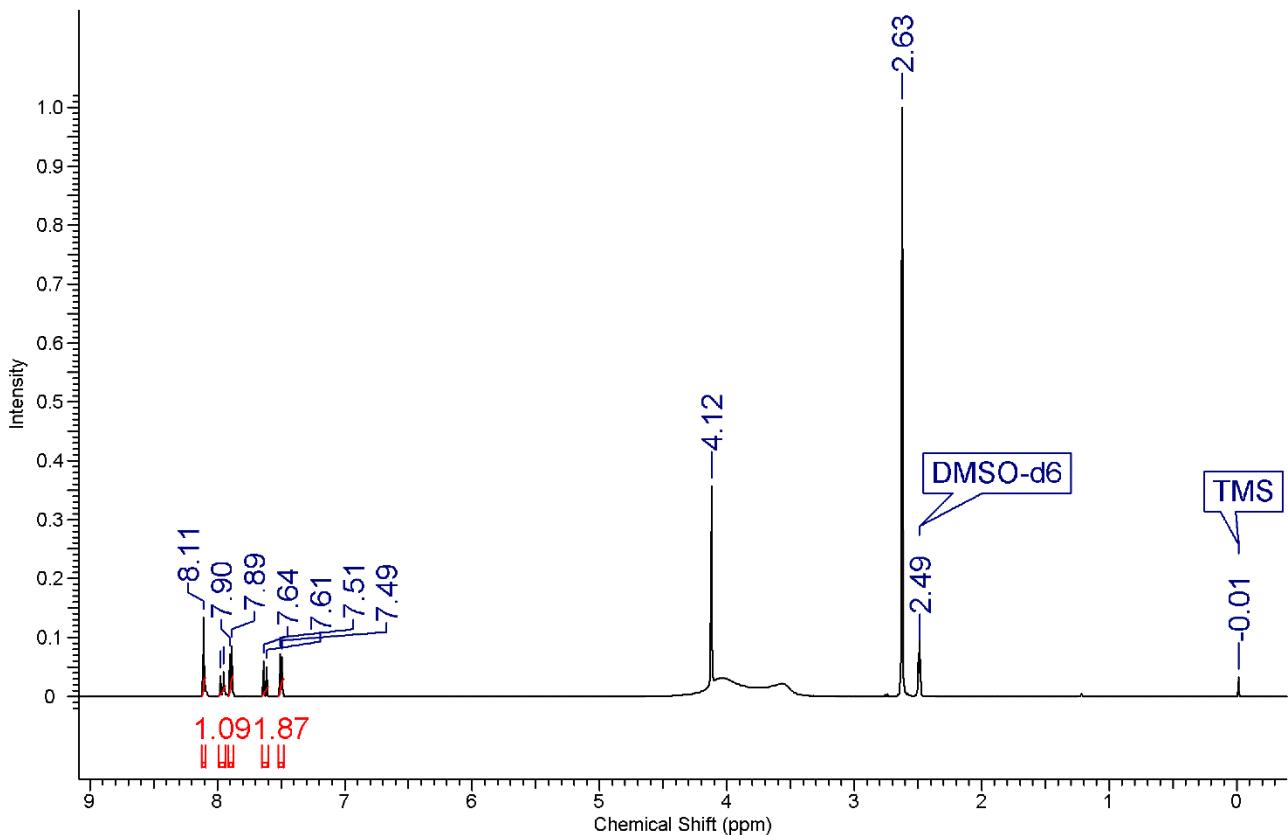
**Figure S4.** FTIR (KBr) spectrum of compound 4.



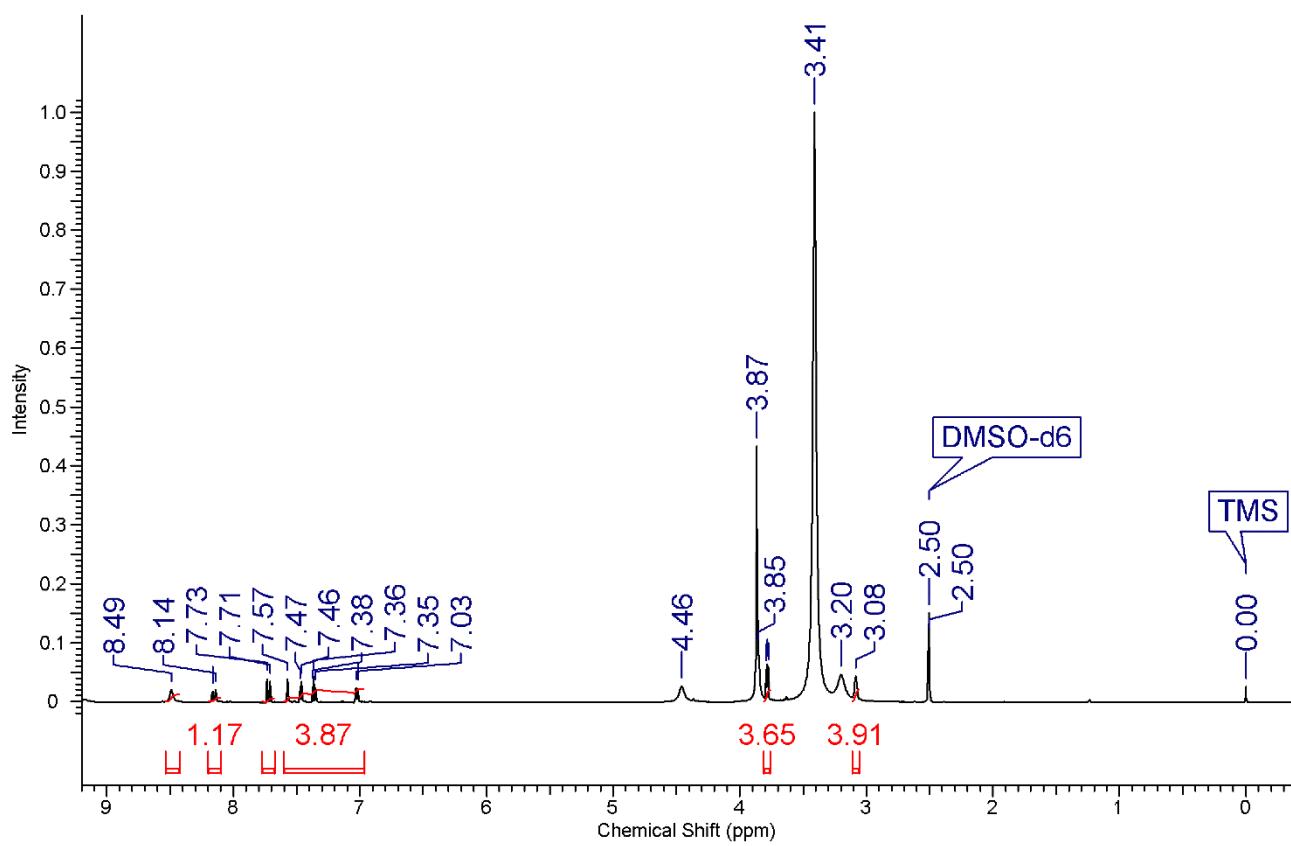
**Figure S5.** <sup>1</sup>H NMR spectrum (500 MHz, DMSO-*d*<sub>6</sub>) of compound 1.



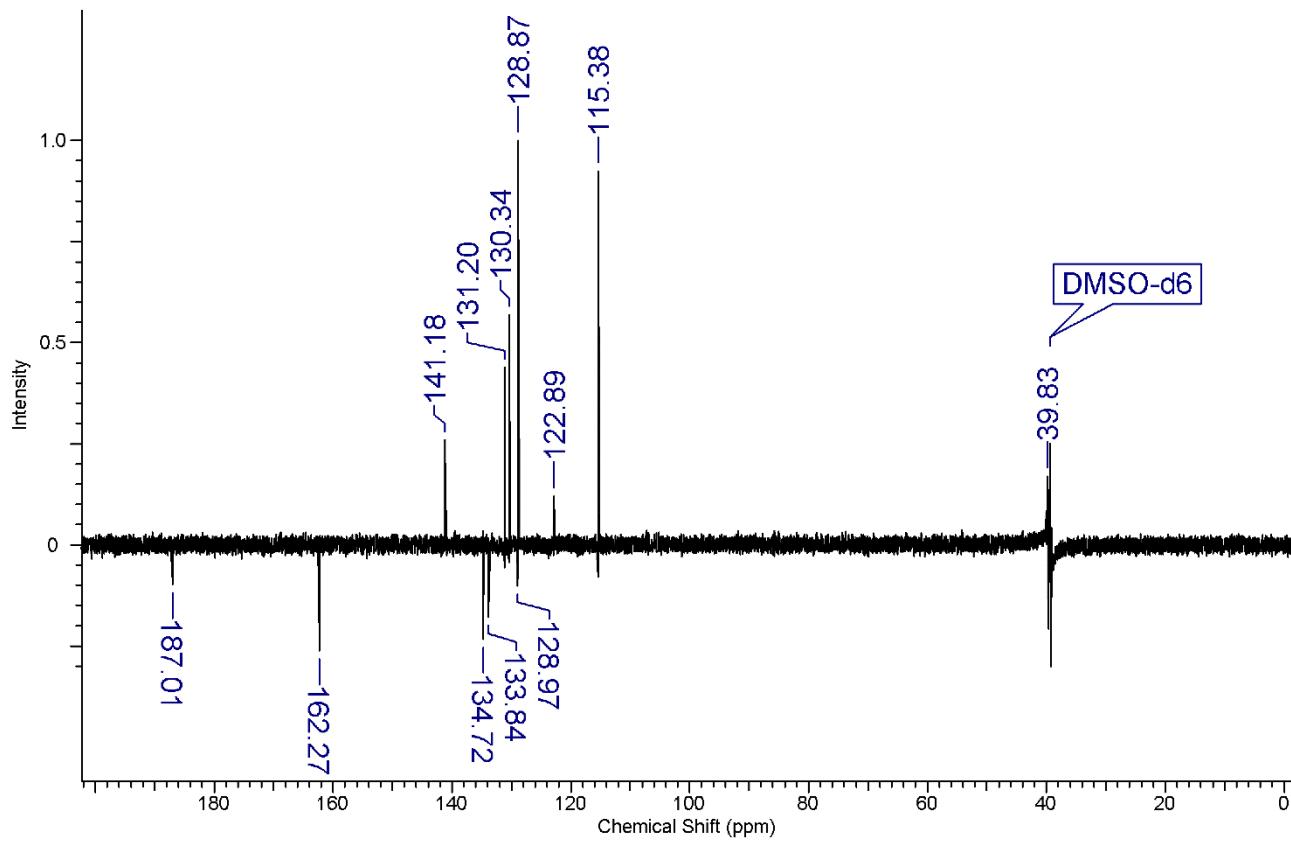
**Figure S6.**  $^1\text{H}$  NMR spectrum (500 MHz,  $\text{DMSO}-d_6$ ) of compound 2.



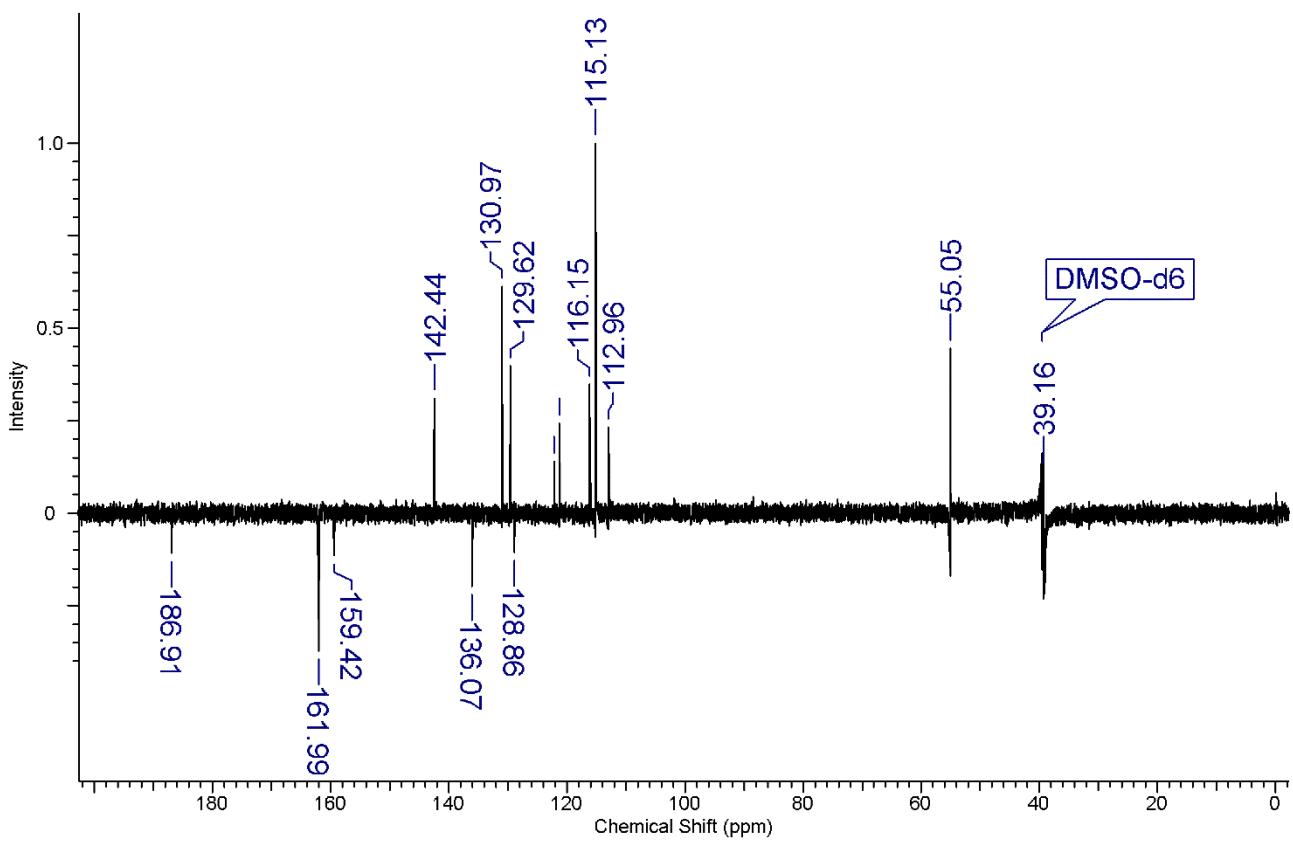
**Figure S7.**  $^1\text{H}$  NMR spectrum (500 MHz,  $\text{DMSO}-d_6$ ) of compound 3.



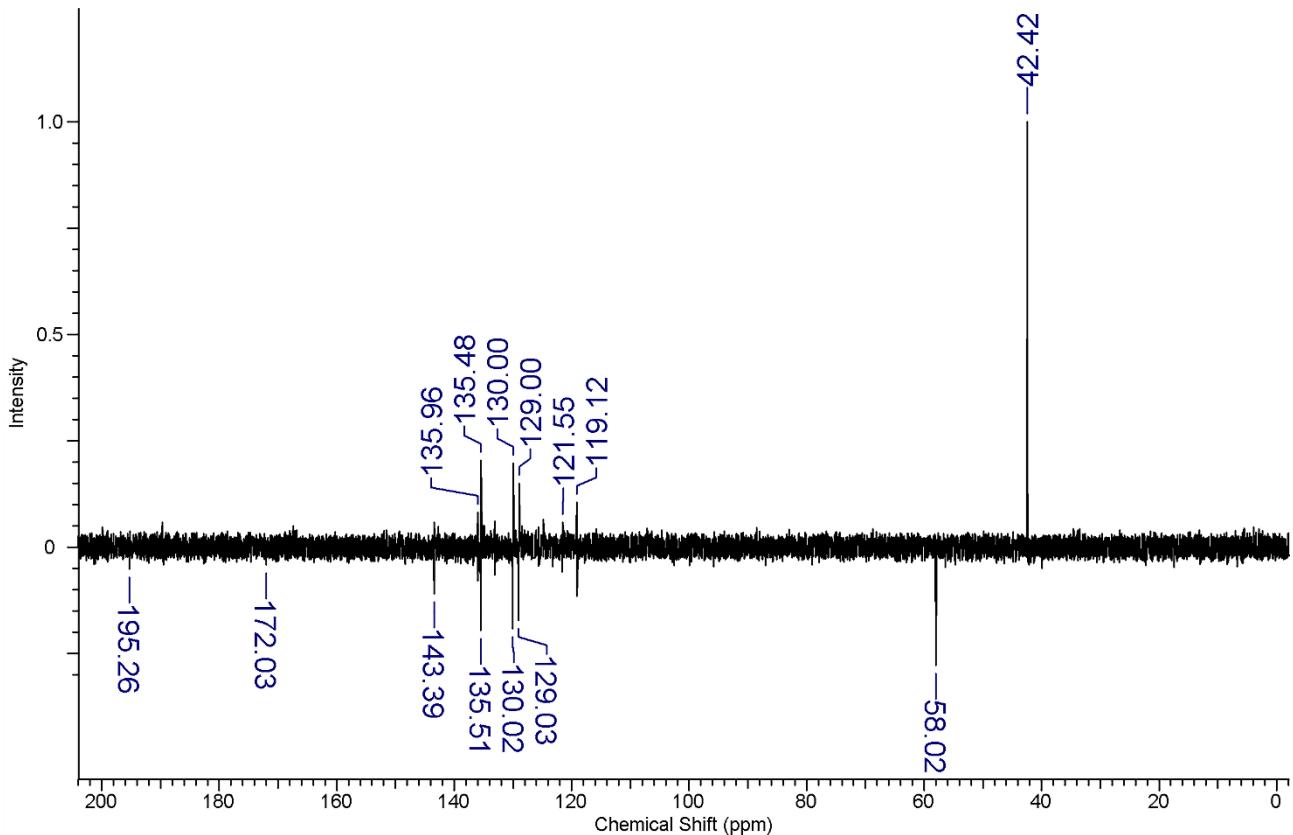
**Figure S8.**  $^1\text{H}$  NMR spectrum (500 MHz,  $\text{DMSO}-d_6$ ) of compound **4**.



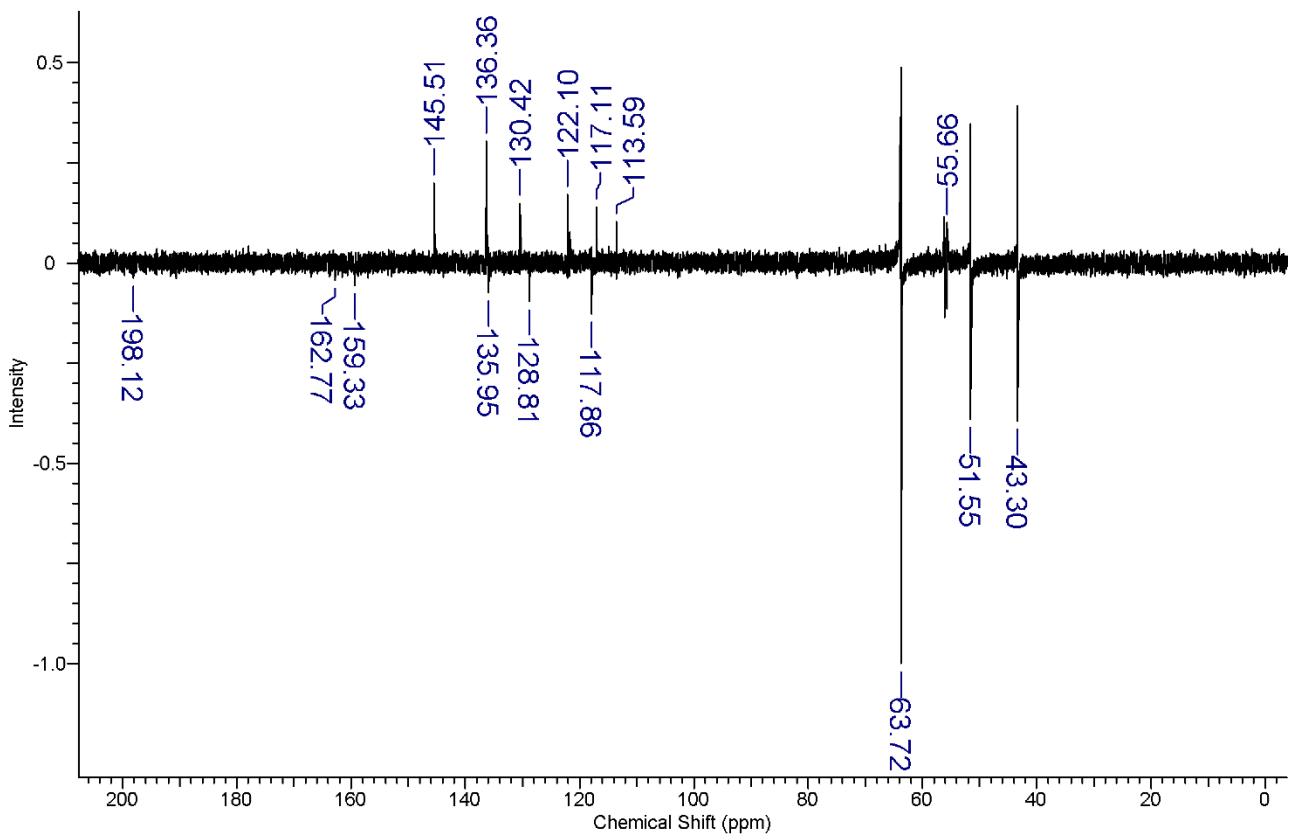
**Figure S9.**  $^{13}\text{C}$  NMR spectrum (126 MHz,  $\text{DMSO}-d_6$ ) of compound **1**.



**Figure S10.**  $^{13}\text{C}$  NMR spectrum (126 MHz, DMSO- $d_6$ ) of compound 2.



**Figure S11.**  $^{13}\text{C}$  NMR spectrum (126 MHz, DMSO- $d_6$ ) of compound 3.



**Figure S12.**  $^{13}\text{C}$  NMR spectrum (126 MHz,  $\text{DMSO}-d_6$ ) of compound 4.