

## **Disruption of lipid metabolism to induce ferroptosis by multifunctional fibrate-Pt(IV) prodrugs for cancer treatment**

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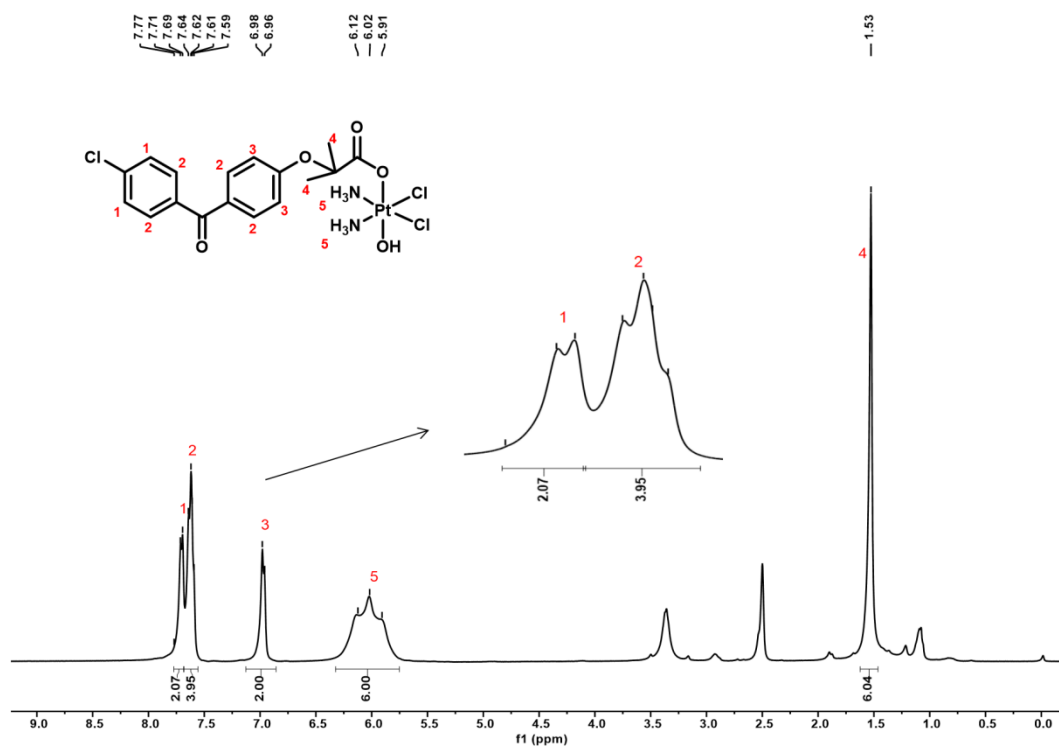


Fig. S1.  $^1\text{H-NMR}$  spectrum of compound **1** in  $\text{DMSO-}d_6$ .

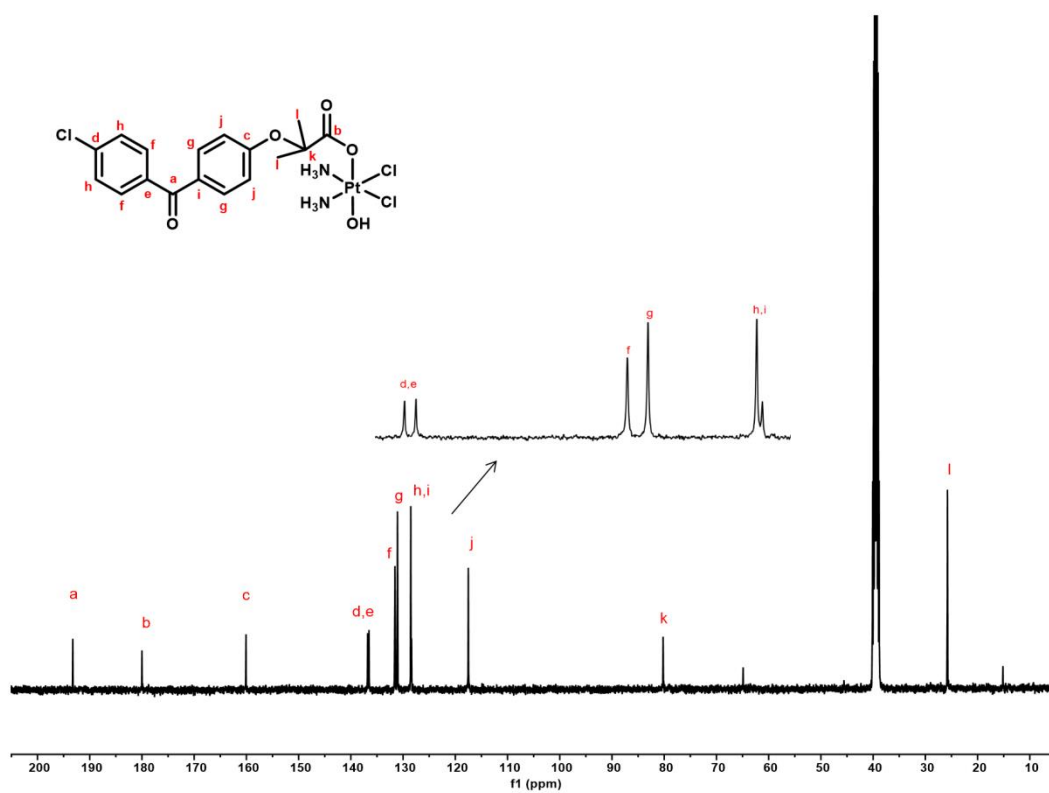


Fig. S2.  $^{13}\text{C}$ -NMR spectrum of compound 1 in  $\text{DMSO-}d_6$ .

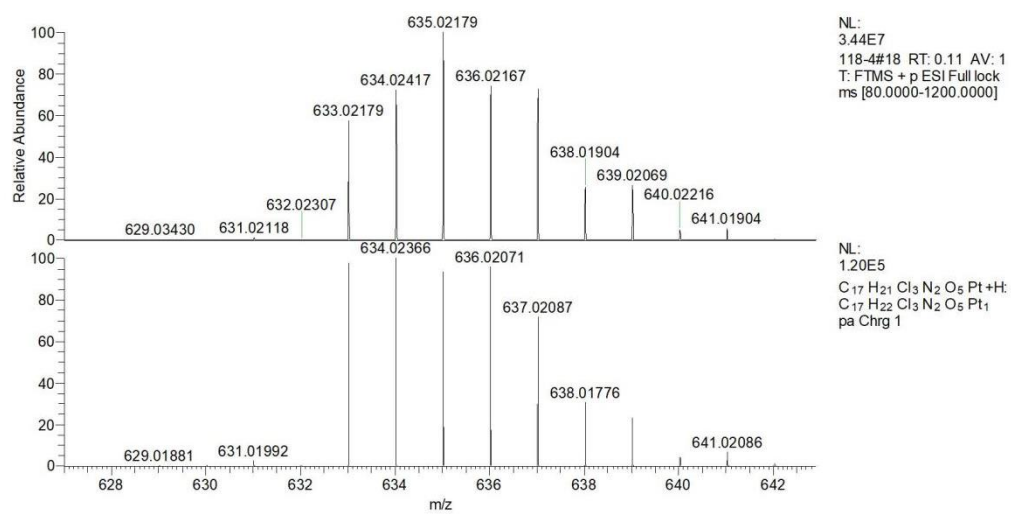
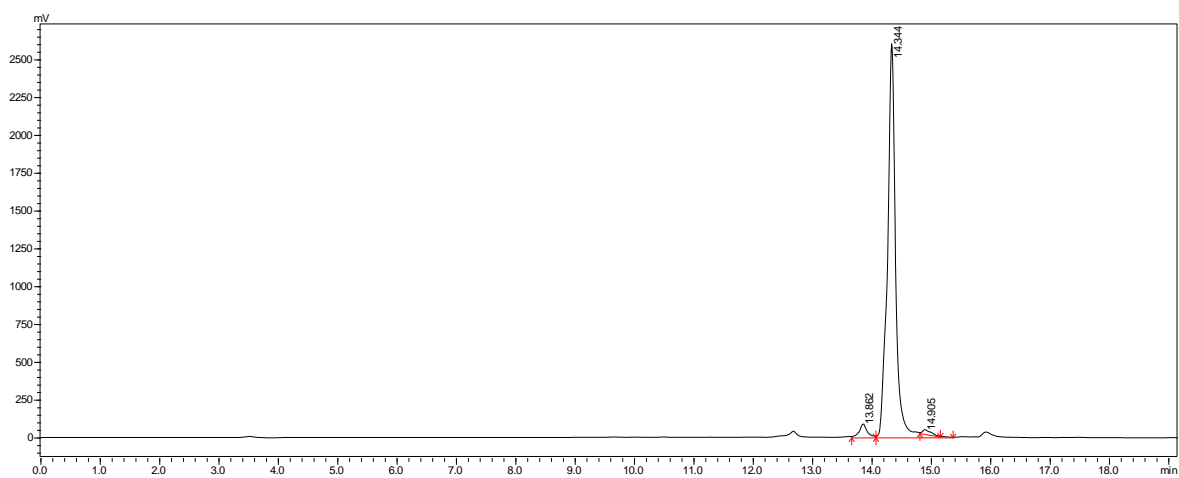


Fig. S3. HR-MS spectrum of compound 1.



	<b>Retention</b>	<b>Peak area</b>	<b>Concentration</b>
<b>1</b>	<b>13.862</b>	<b>787449</b>	<b>3.049</b>
<b>2</b>	<b>14.344</b>	<b>24787777</b>	<b>95.985</b>
<b>3</b>	<b>14.905</b>	<b>249446</b>	<b>0.966</b>
<b>Total</b>		<b>25824673</b>	<b>100.000</b>

Fig. S4. Reverse-phase HPLC trace of compound 1.

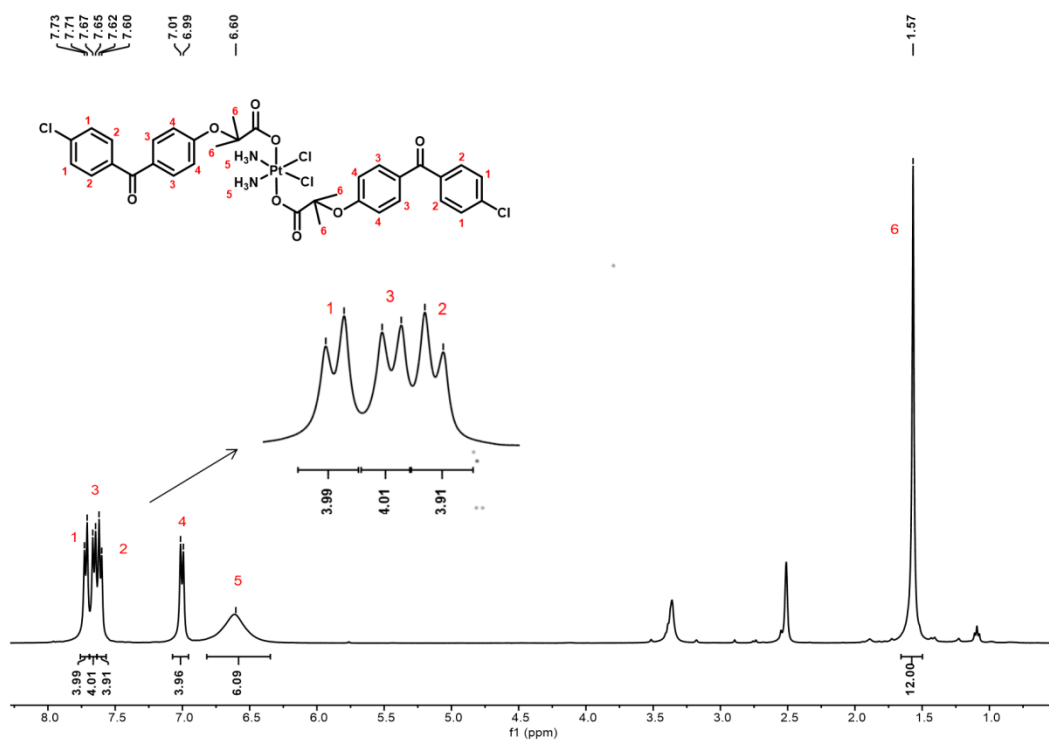


Fig. S5. <sup>1</sup>H-NMR spectrum of compound **2** in DMSO-*d*<sub>6</sub>.

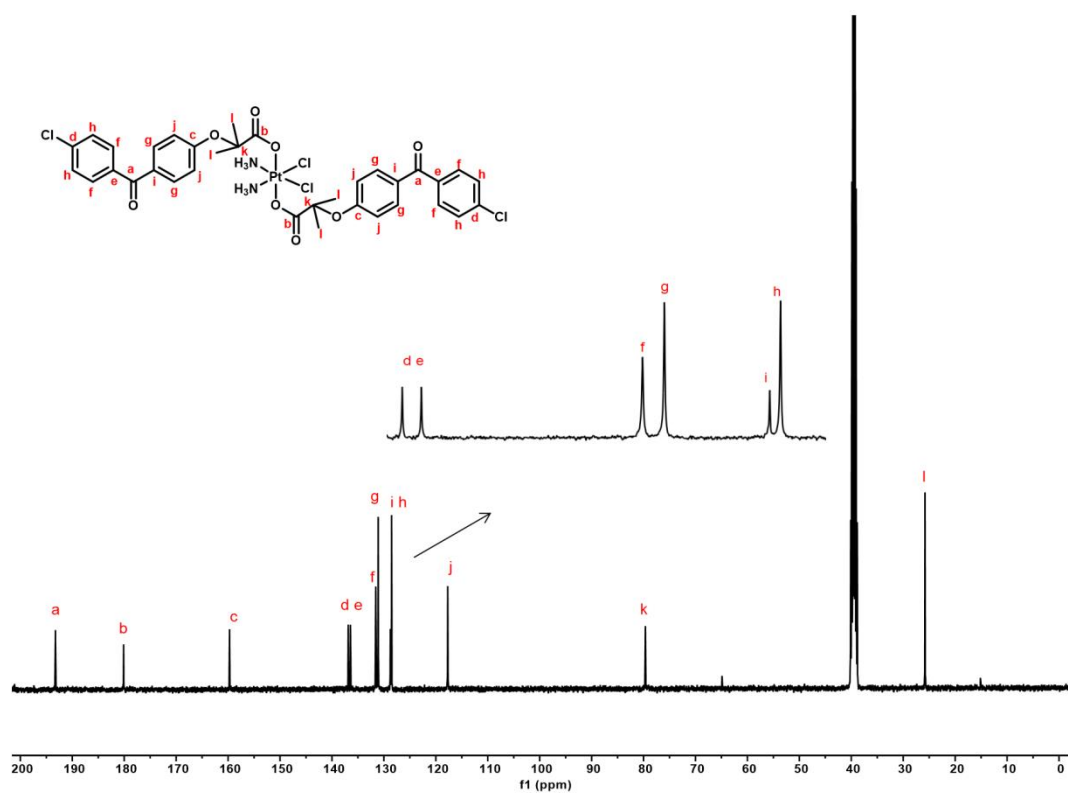


Fig. S6.  $^{13}\text{C}$ -NMR spectrum of compound **2** in  $\text{DMSO-}d_6$ .



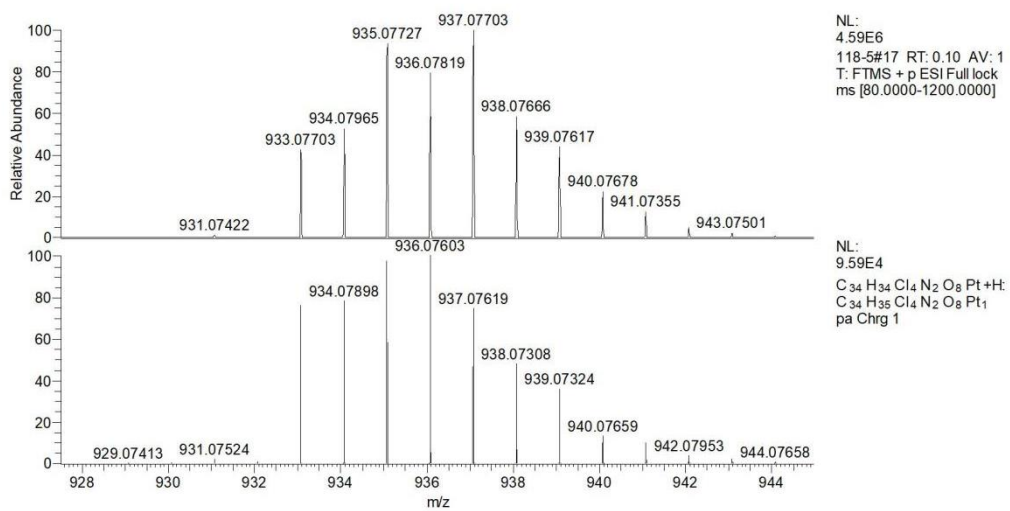
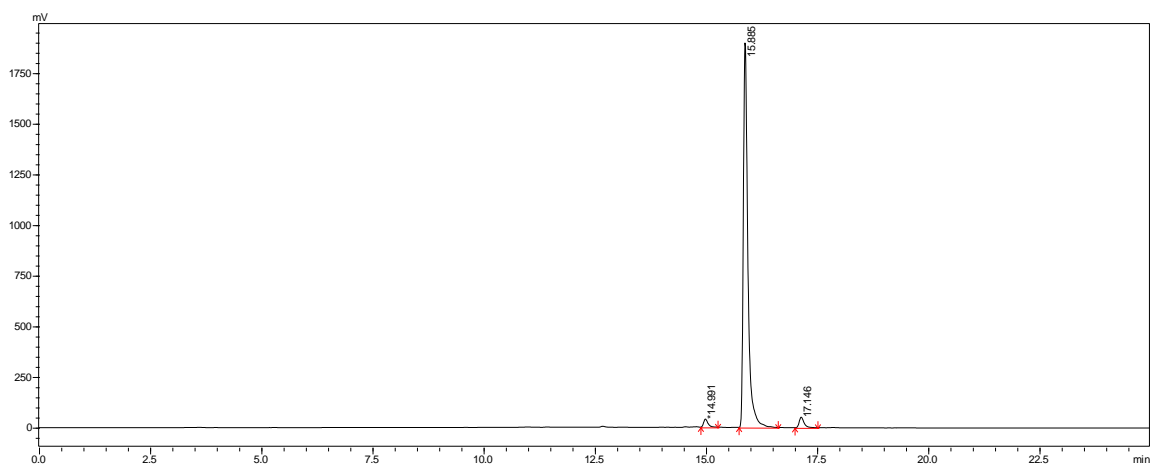


Fig. S7. HR-MS spectrum of compound 2.



	<b>Retention</b>	<b>Peak area</b>	<b>Concentration</b>
<b>1</b>	<b>14.991</b>	<b>401243</b>	<b>1.523</b>
<b>2</b>	<b>15.885</b>	<b>25384642</b>	<b>96.376</b>
<b>3</b>	<b>17.146</b>	<b>553216</b>	<b>2.101</b>
<b>Total</b>		<b>26339101</b>	<b>100.000</b>

Fig. S8. Reverse-phase HPLC trace of compound 2.

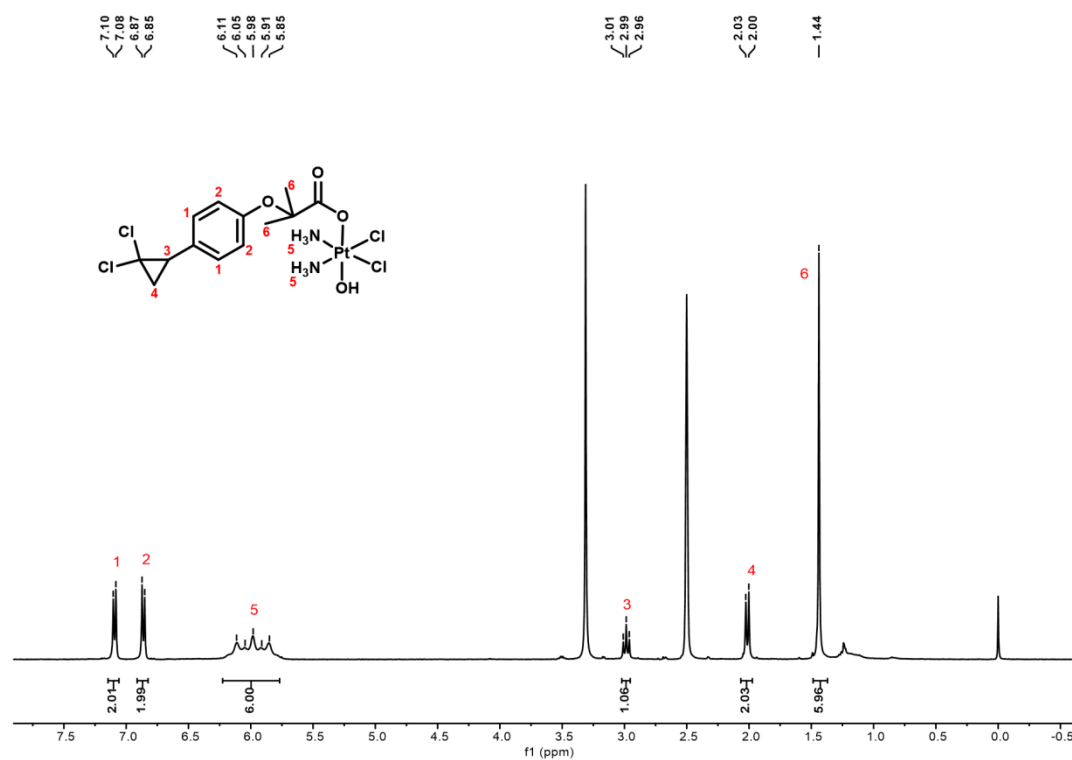


Fig. S9.  $^1\text{H-NMR}$  spectrum of compound **3** in  $\text{DMSO-}d_6$ .

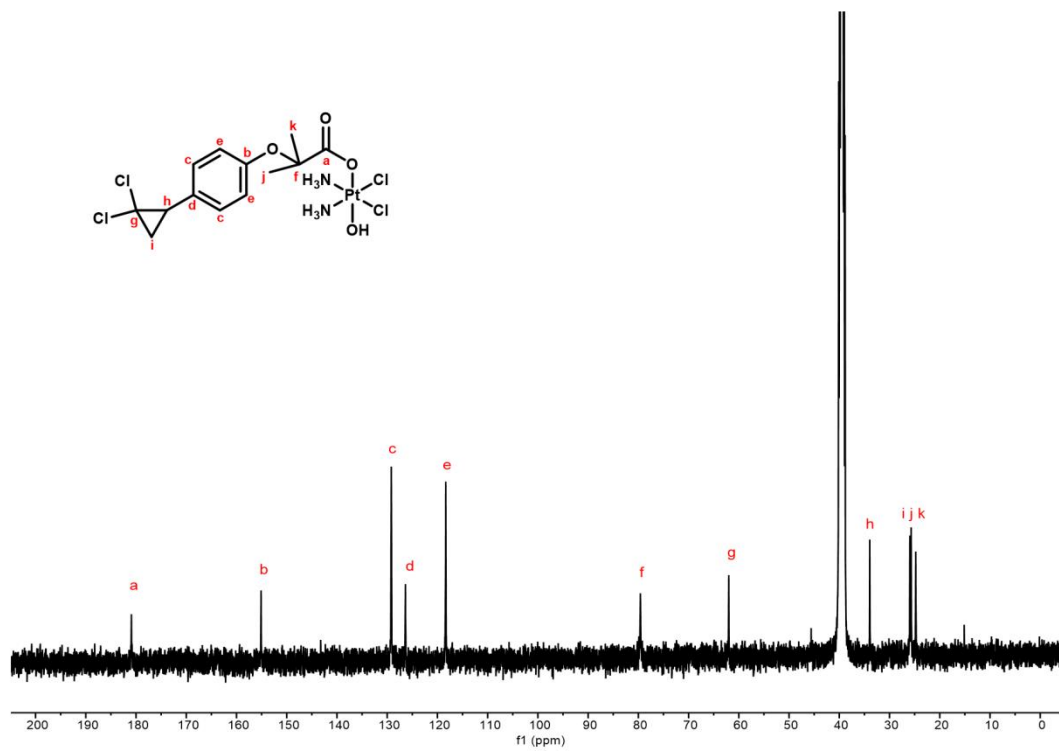


Fig. S10.  $^{13}\text{C}$ -NMR spectrum of compound **3** in  $\text{DMSO-}d_6$ .

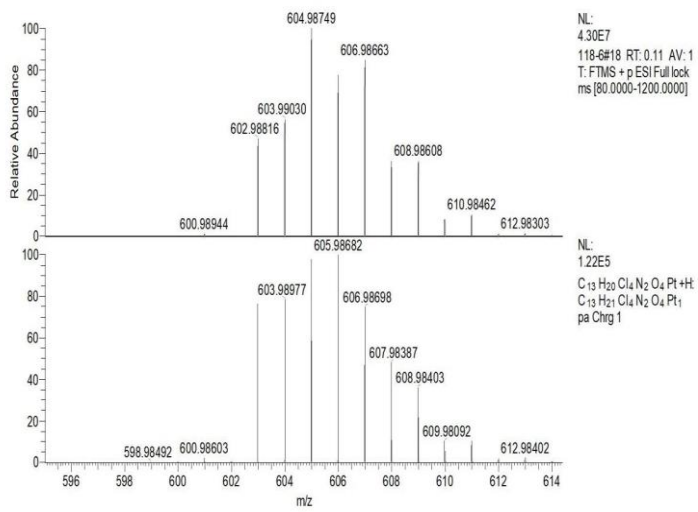
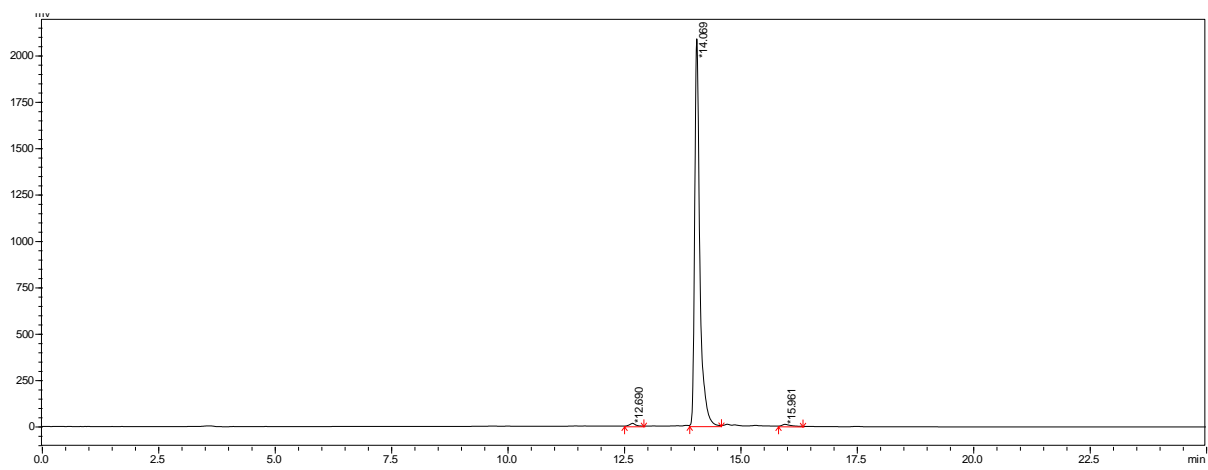


Fig. S11. HR-MS spectrum of compound 3.



	<b>Retention</b>	<b>Peak area</b>	<b>Concentration</b>
<b>1</b>	<b>12.690</b>	<b>122730</b>	<b>0.756</b>
<b>2</b>	<b>14.069</b>	<b>15990395</b>	<b>98.563</b>
<b>3</b>	<b>15.961</b>	<b>110391</b>	<b>0.680</b>
<b>Total</b>		<b>16223516</b>	<b>100.000</b>

Fig. S12. Reverse-phase HPLC trace of compound 3.

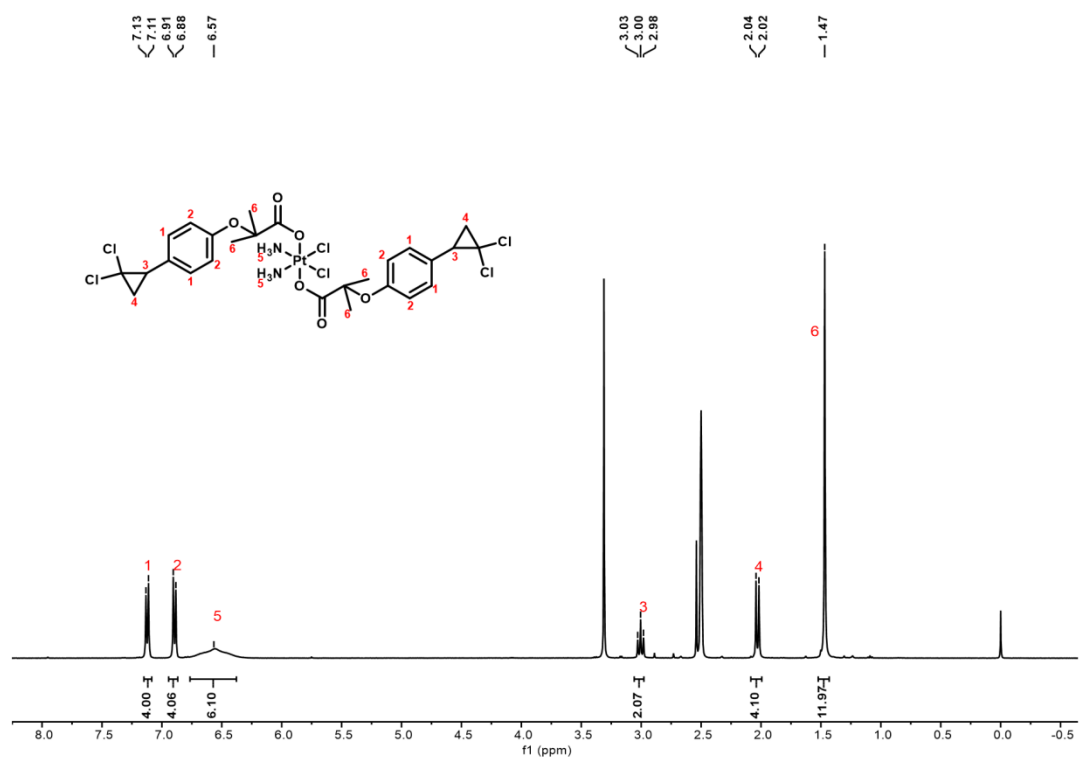


Fig. S13.  $^1\text{H-NMR}$  spectrum of compound **4** in  $\text{DMSO-}d_6$ .

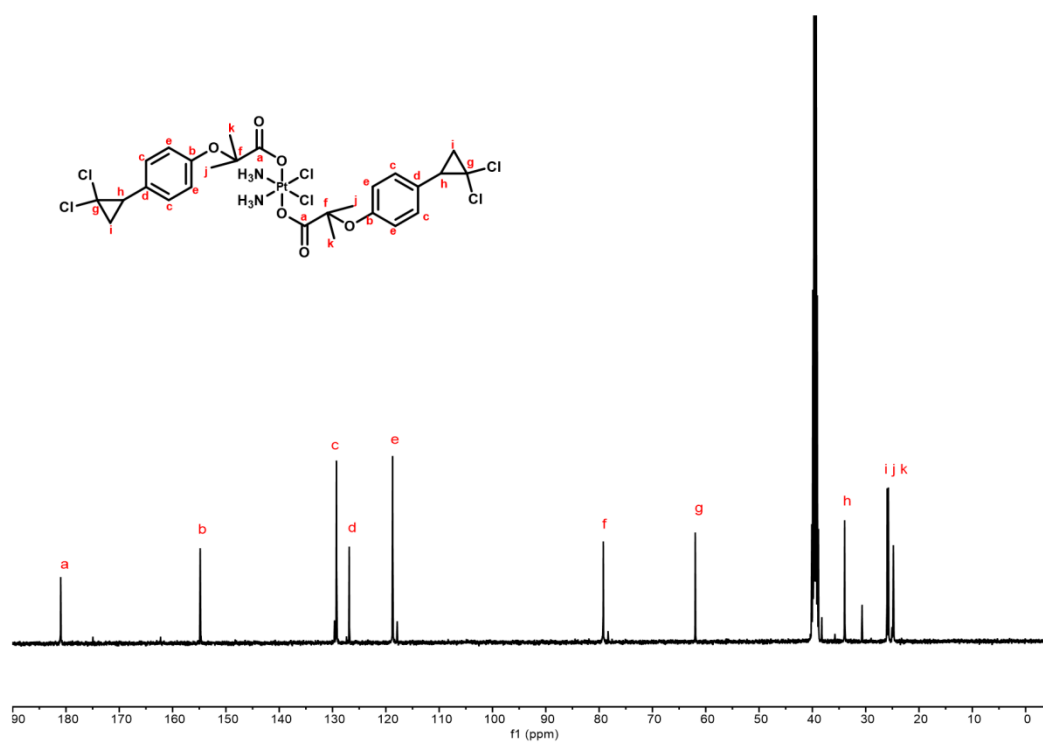


Fig. S14.  $^{13}\text{C}$ -NMR spectrum of compound 4 in  $\text{DMSO-}d_6$ .



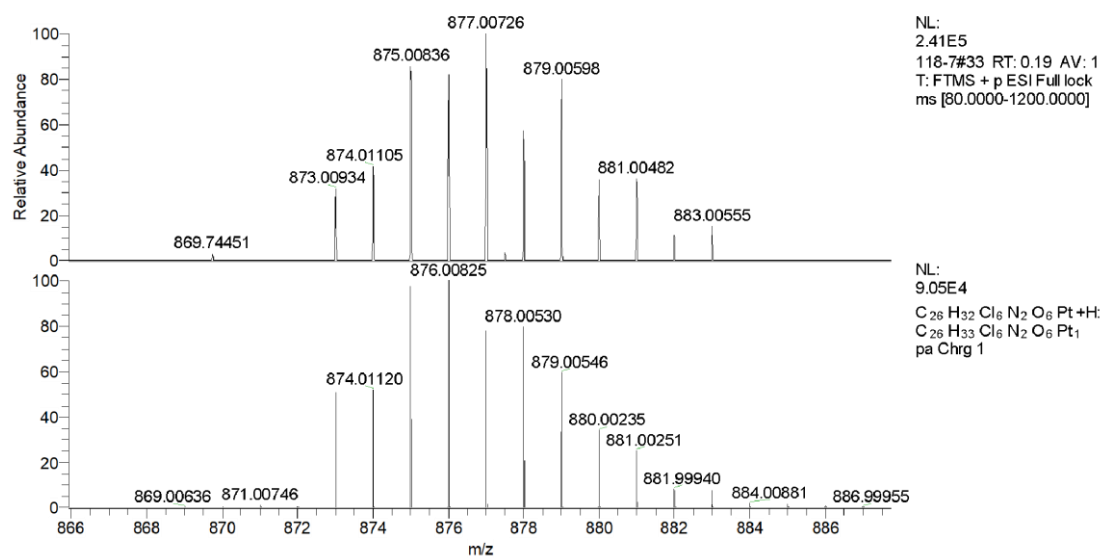
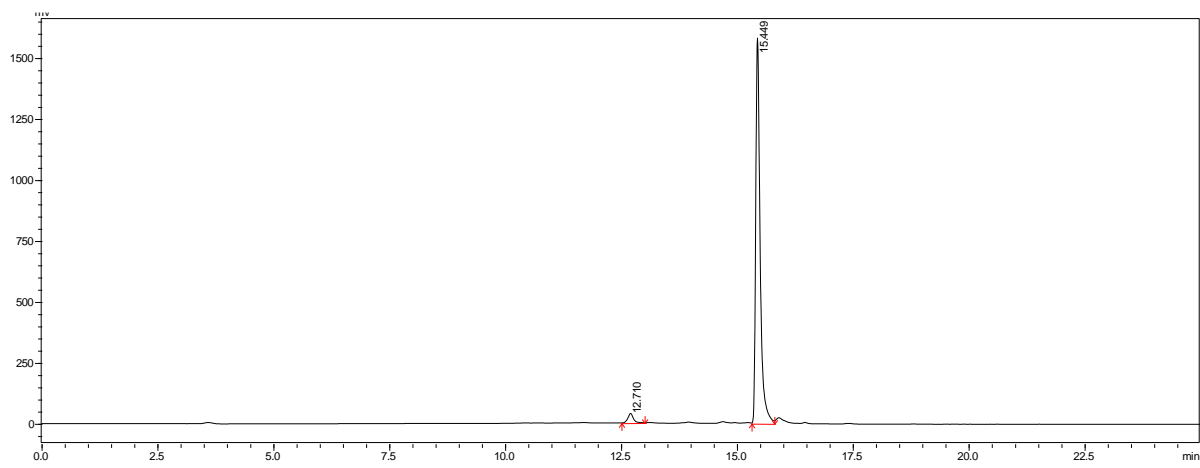


Fig. S15. HR-MS spectrum of compound 4.



	<b>Retention</b>	<b>Peak area</b>	<b>Concentration</b>
<b>1</b>	<b>12.710</b>	<b>313928</b>	<b>2.902</b>
<b>2</b>	<b>15.4449</b>	<b>10501909</b>	<b>97.098</b>
<b>Total</b>		<b>10815836</b>	<b>100.000</b>

Fig. S16. Reverse-phase HPLC trace of compound 4.

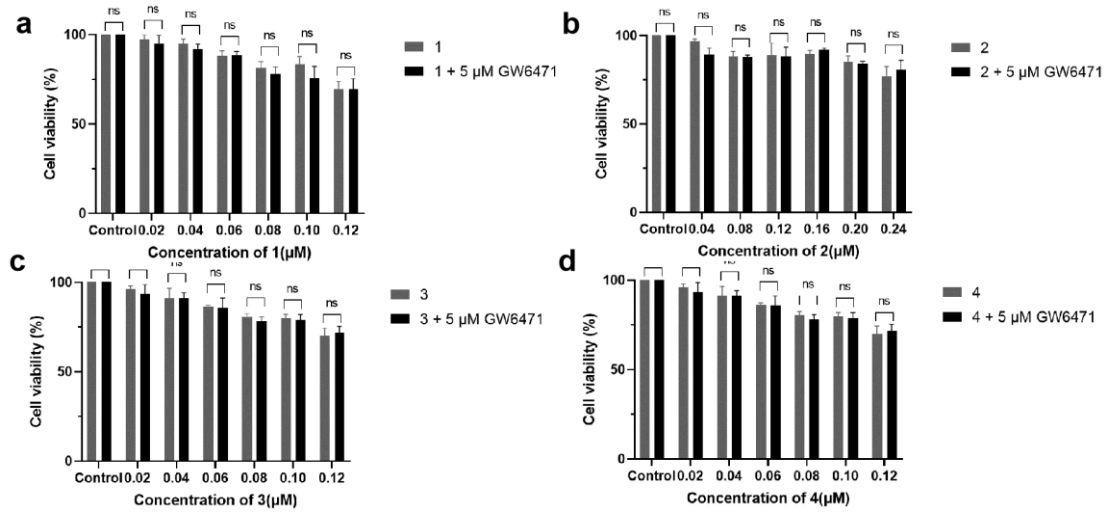


Fig. S17. Comparison of cell viability of A549 cells treated with different concentrations of compounds for 48 h.

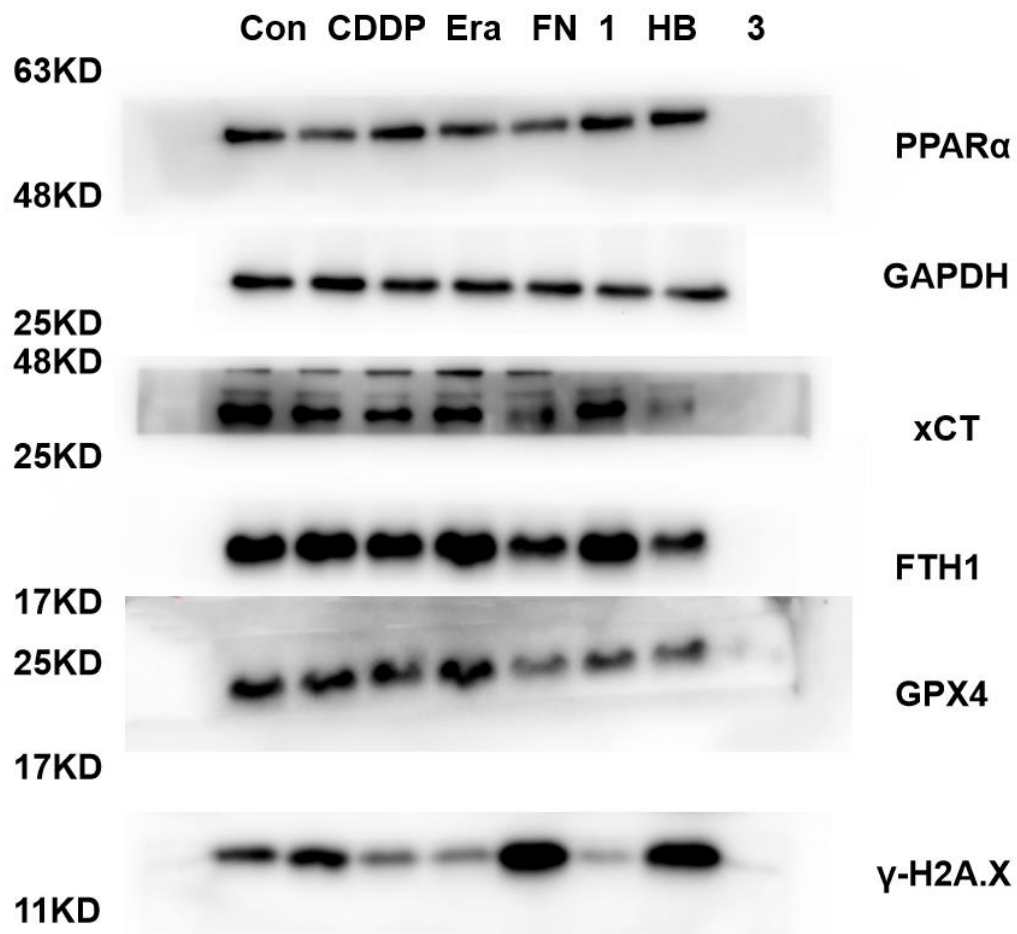


Fig. S18. Un-cropped western blotting images of Figure 8a.

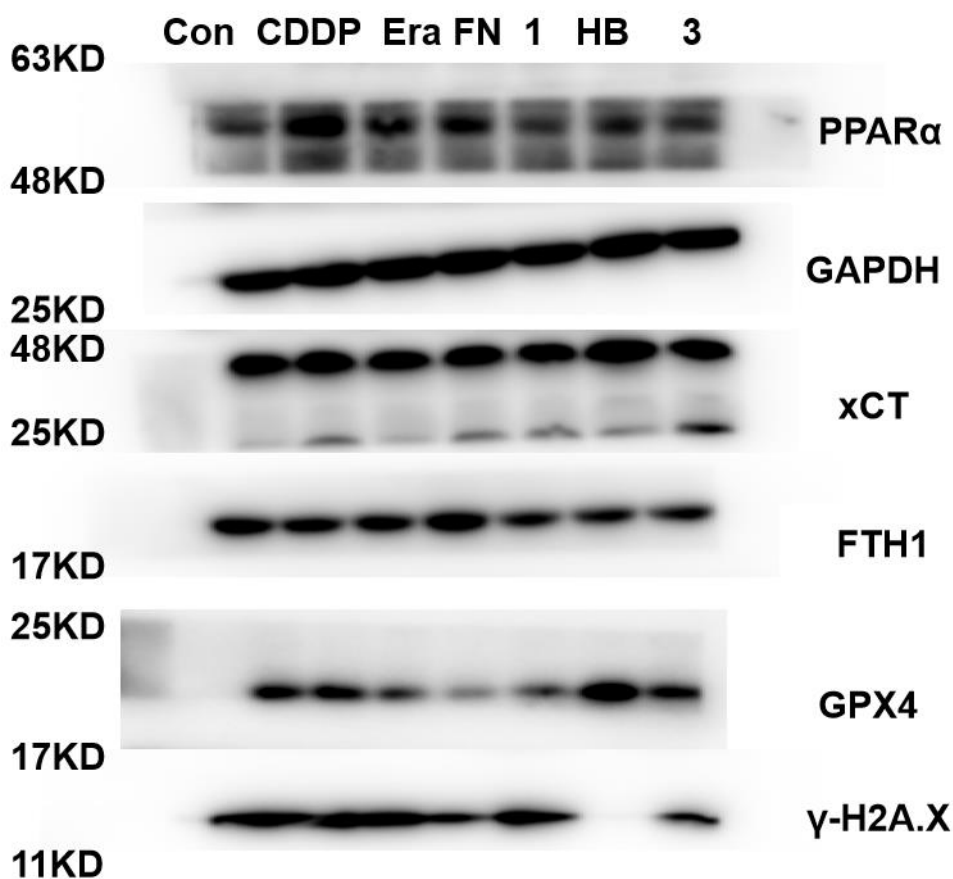


Fig. S19. Un-cropped western blotting images of Figure 8c.

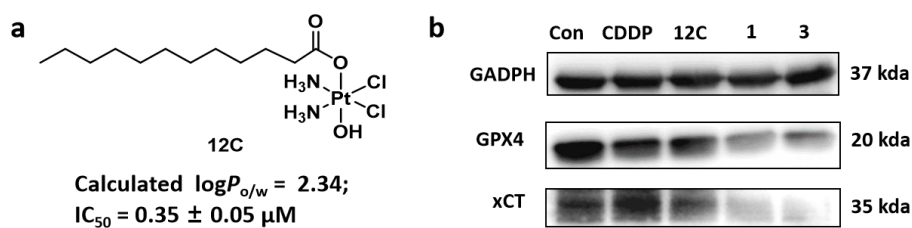


Fig. S20. (a) Chemical structure of compound **12C**. (b) Protein expression of A549 cells treated with 5  $\mu M$  platinum compounds for 24 h.