## Supplementary material

## Synthesis of novel tryptamine derivatives and their biological activity as antitumor agents

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Figure S1. <sup>1</sup>H NMR spectrum of compound 4 in DMSO-d<sub>6</sub> (600 MHz, 25 °C)



Figure S2. Expanded view of aromatic region of <sup>1</sup>H NMR spectrum of compound 4 in DMSO-d<sub>6</sub> (600 MHz, 25 °C)



Figure S3. <sup>13</sup>C NMR spectrum of compound 4 in DMSO-d<sub>6</sub> (150 MHz, 25 °C)



Figure S4. DEPT spectrum of compound 4 in DMSO-d<sub>6</sub> (150 MHz, 25 °C)



Figure S5. ESI-MS<sup>+</sup> spectrum of compound 4.



Figure S6. <sup>1</sup>H NMR spectrum of compound 5 in DMSO-d<sub>6</sub> (400 MHz, 25 °C)



Figure S7. Expanded view of aromatic region of <sup>1</sup>H NMR spectrum of compound 5 in DMSO-d<sub>6</sub> (400 MHz, 25 °C)



Figure S8. <sup>13</sup>C NMR spectrum of compound 5 in DMSO-d<sub>6</sub> (100 MHz, 25 °C)



Figure S9. DEPT spectrum of compound 5 in DMSO-d<sub>6</sub> (100 MHz, 25 °C)



**Figure S10.** ESI-MS<sup>+</sup> spectrum of compound **5**.



**Figure S11.** <sup>1</sup>H NMR spectrum of compound **7** in DMSO-d<sub>6</sub> (600 MHz, 25 °C).



Figure S12. <sup>13</sup>C NMR spectrum of compound 7 in DMSO-d<sub>6</sub> (150 MHz, 25 °C)



Figure S13. DEPT spectrum of compound 7 in DMSO-d<sub>6</sub> (150 MHz, 25 °C)



Figure S14. ESI-MS<sup>+</sup> spectrum of compound 7.



Figure S15. <sup>1</sup>H NMR spectrum of compound 8 in DMSO-d<sub>6</sub> (600 MHz, 25 °C)



Figure S16. <sup>13</sup>C NMR spectrum of compound 8 in DMSO-d<sub>6</sub> (150 MHz, 25 °C)



Figure S17. DEPT spectrum of compound 8 in DMSO-d<sub>6</sub> (150 MHz, 25 °C)



Figure S18. ESI-MS<sup>+</sup> spectrum of compound 8.



**Figure S19.** <sup>1</sup>H NMR spectrum of compound **9** in DMSO-d<sub>6</sub> (400 MHz, 25 °C)



Figure S20. Expanded view of aromatic region of <sup>1</sup>H NMR spectrum of compound 9 in DMSO-d<sub>6</sub> (400 MHz, 25 °C)



Figure S21.  $^{13}$ C NMR spectrum of compound 9 in DMSO-d<sub>6</sub> (100 MHz, 25 °C)



Figure S22. DEPT spectrum of compound 9 in DMSO-d<sub>6</sub> (100 MHz, 25 °C)



Figure S23. ESI-MS<sup>+</sup> spectrum of compound 9.



Figure S24. <sup>1</sup>H NMR spectrum of compound **13** in CDCl<sub>3</sub> (300 MHz, 25 °C)



Figure S25. <sup>13</sup>C NMR spectrum of compound **13** in CDCl<sub>3</sub> (75 MHz, 25 °C)



Figure S26. DEPT spectrum of compound 13 in CDCl<sub>3</sub> (75 MHz, 25 °C)



**Figure S27.** ESI-MS<sup>+</sup> spectrum of compound **13**.



Figure S28. <sup>1</sup>H NMR spectrum of compound **14** in CD<sub>3</sub>CN (600 MHz, 25 °C)



Figure S29. <sup>13</sup>C NMR spectrum of compound 14 in CD<sub>3</sub>CN (150 MHz, 25 °C)



Figure S30. DEPT spectrum of compound 14 in CD<sub>3</sub>CN (150 MHz, 25 °C)



Figure S31. ESI-MS+ spectrum of compound 14.