

# Preliminary study of a 1,5-benzodiazepine-derivative labelled with indium-111 for CCK-2 receptors targeting.

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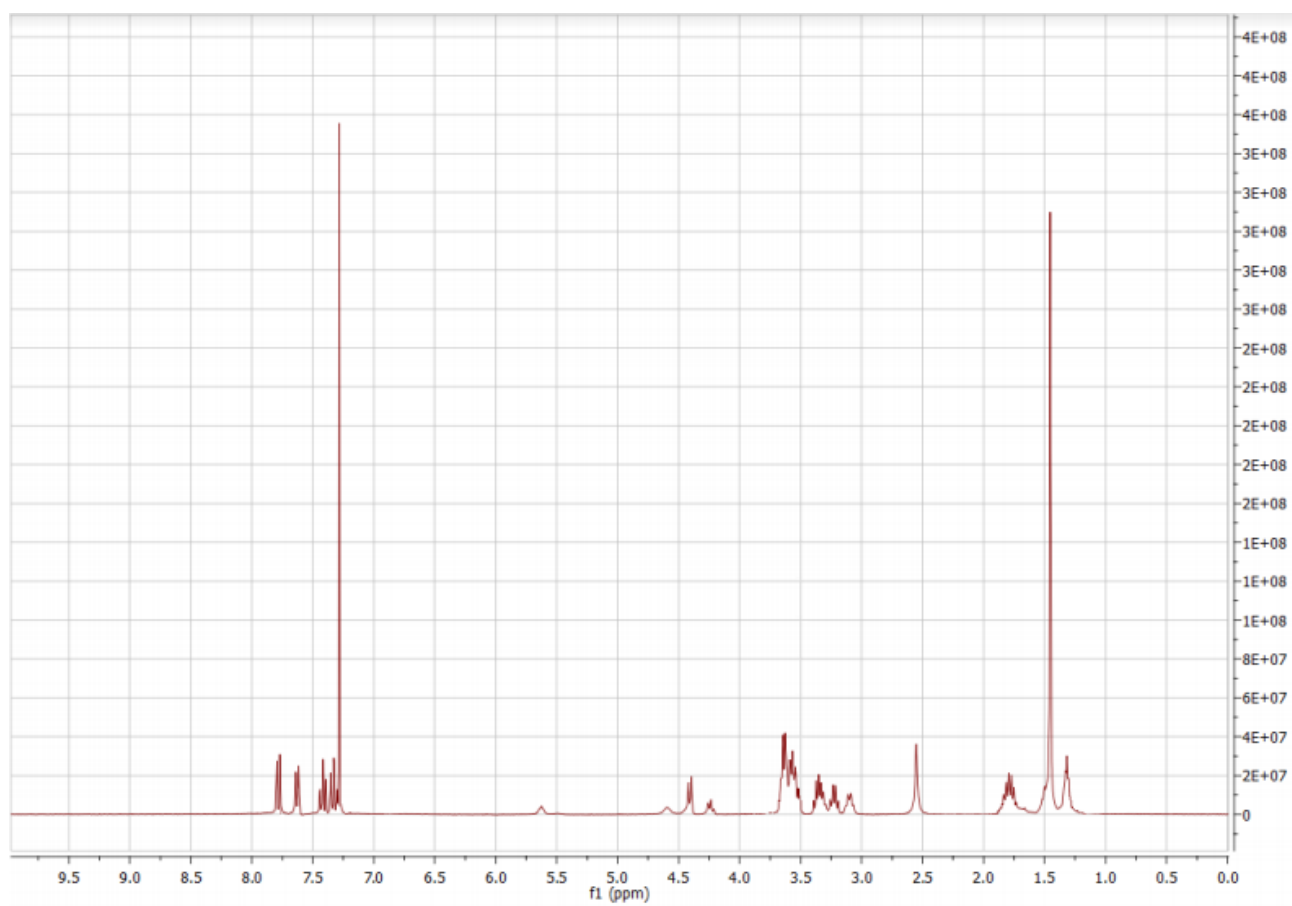
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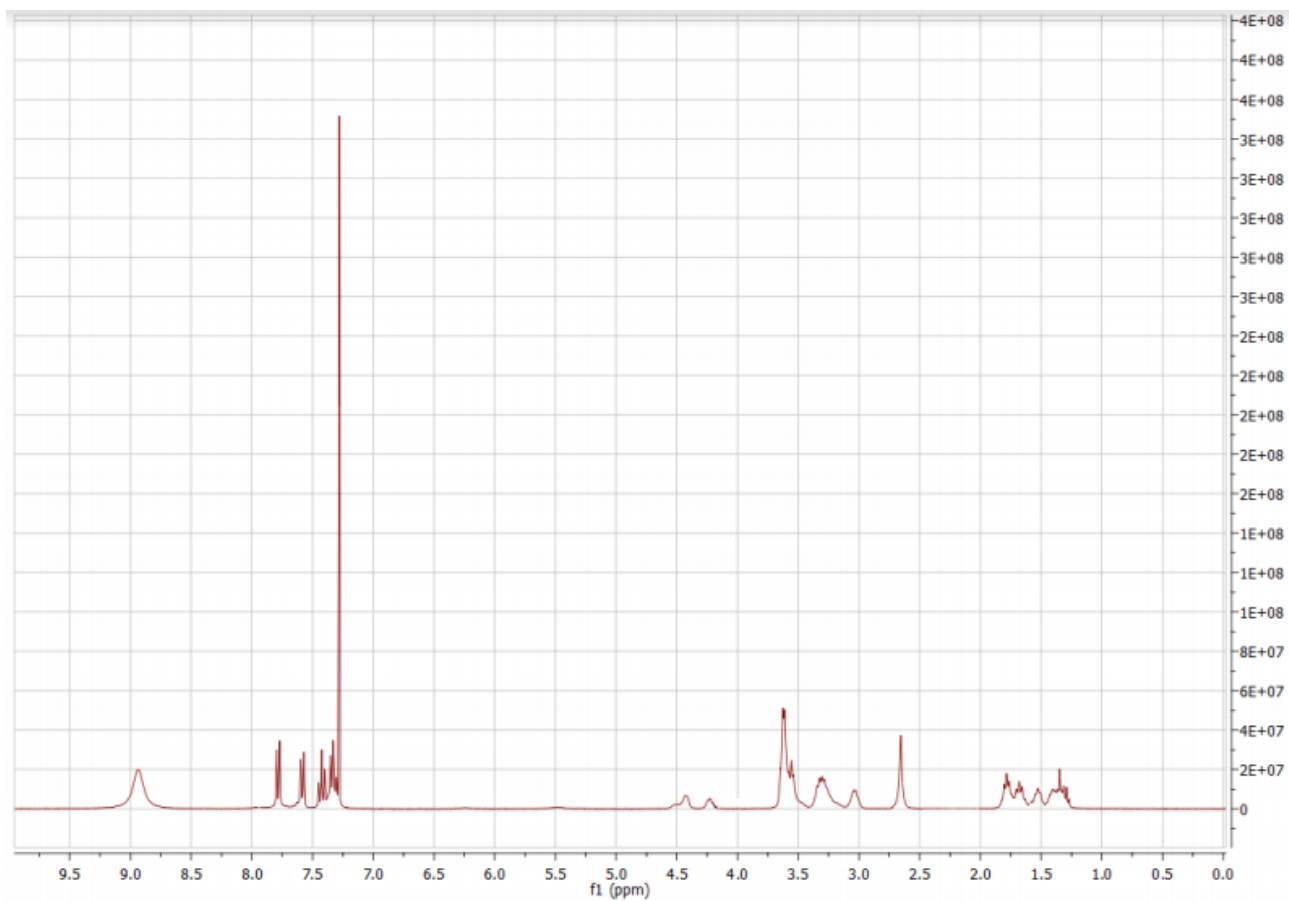
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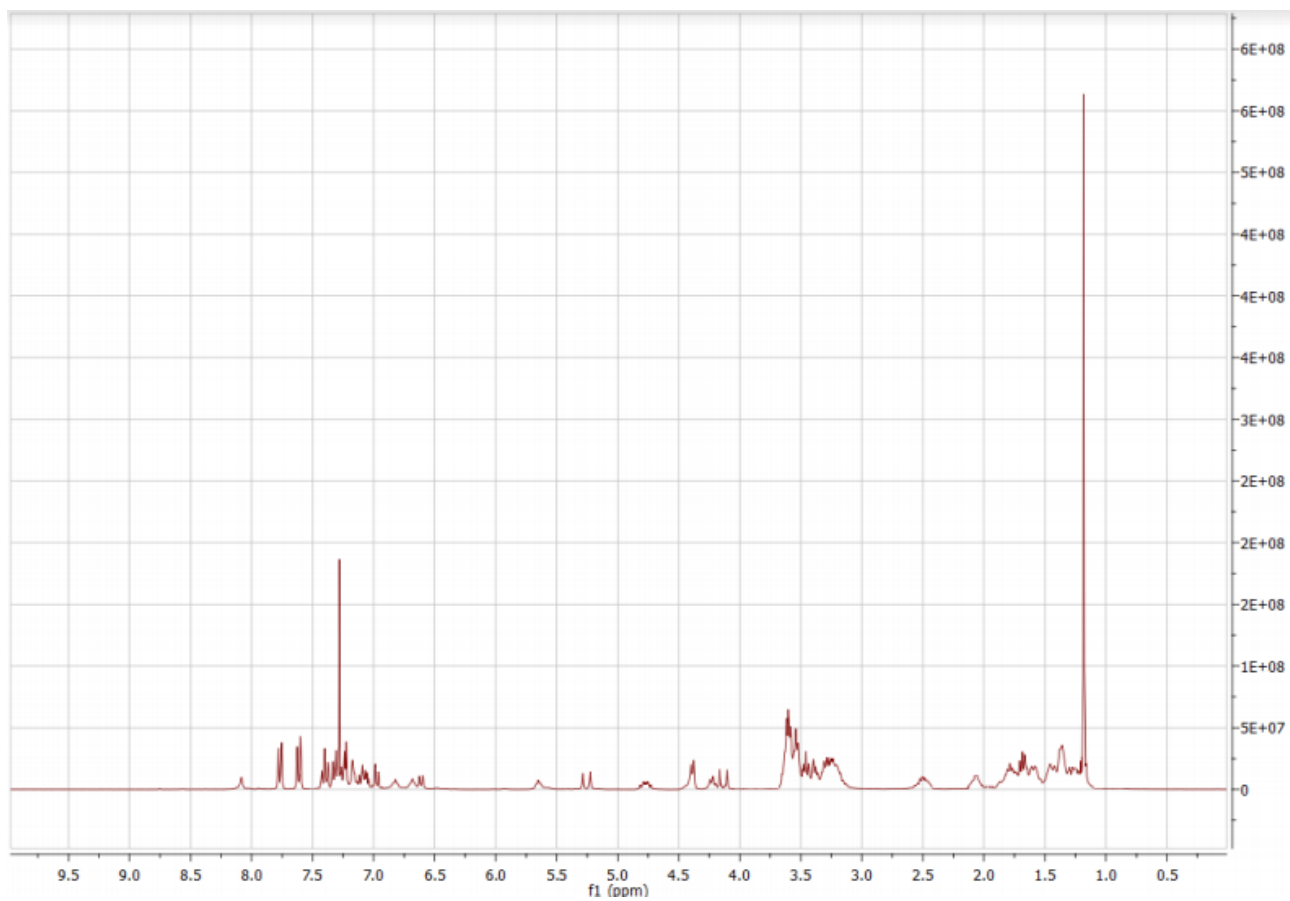
- **Figure S1.** <sup>1</sup>H NMR spectrum of **3**
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- **Figure S10.** <sup>1</sup>H NMR spectrum of the compound due to the cyclization of the succinyl- group of compound **2**.



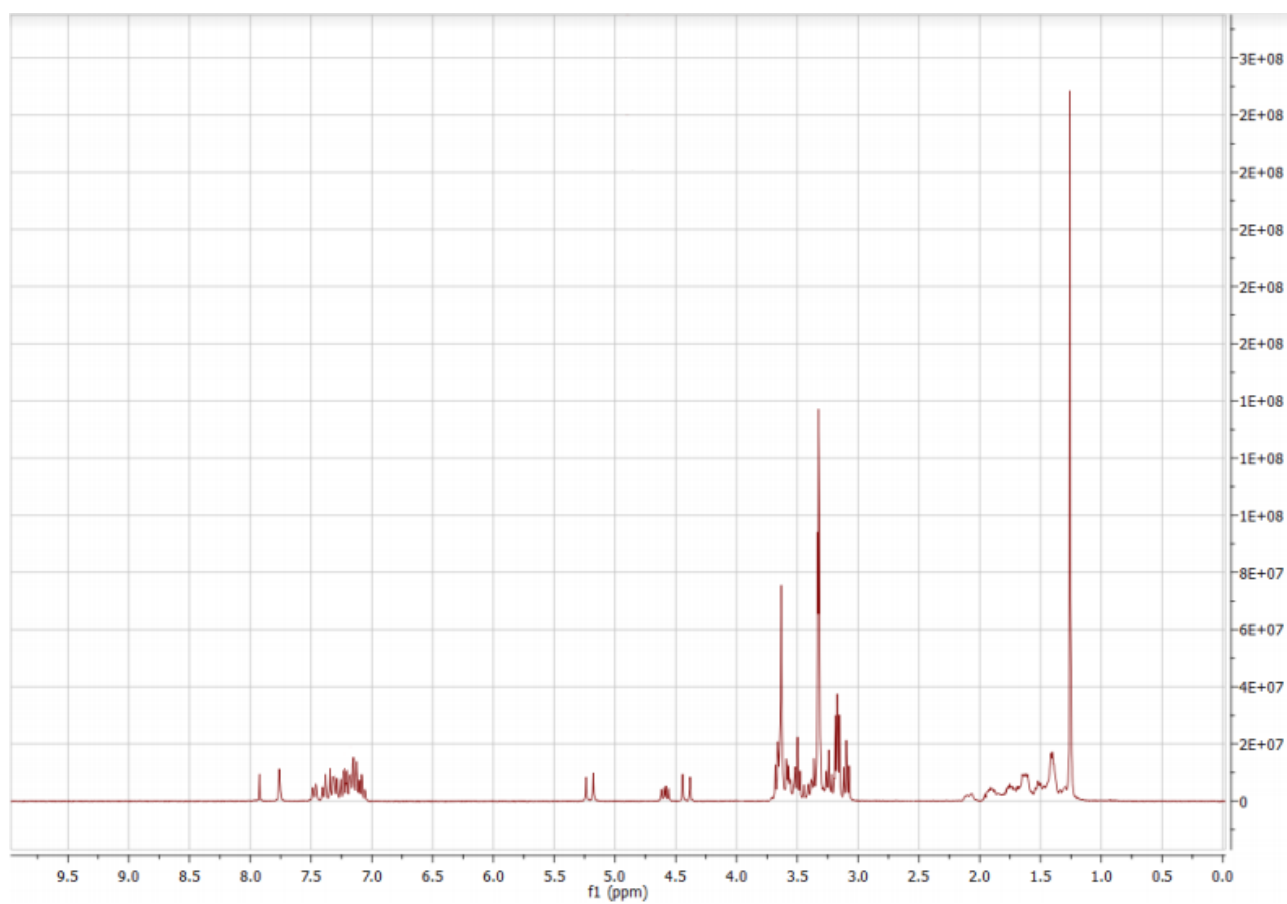
**Figure S1.** <sup>1</sup>H-NMR spectrum of **3** in CDCl<sub>3</sub> at 25 °C.



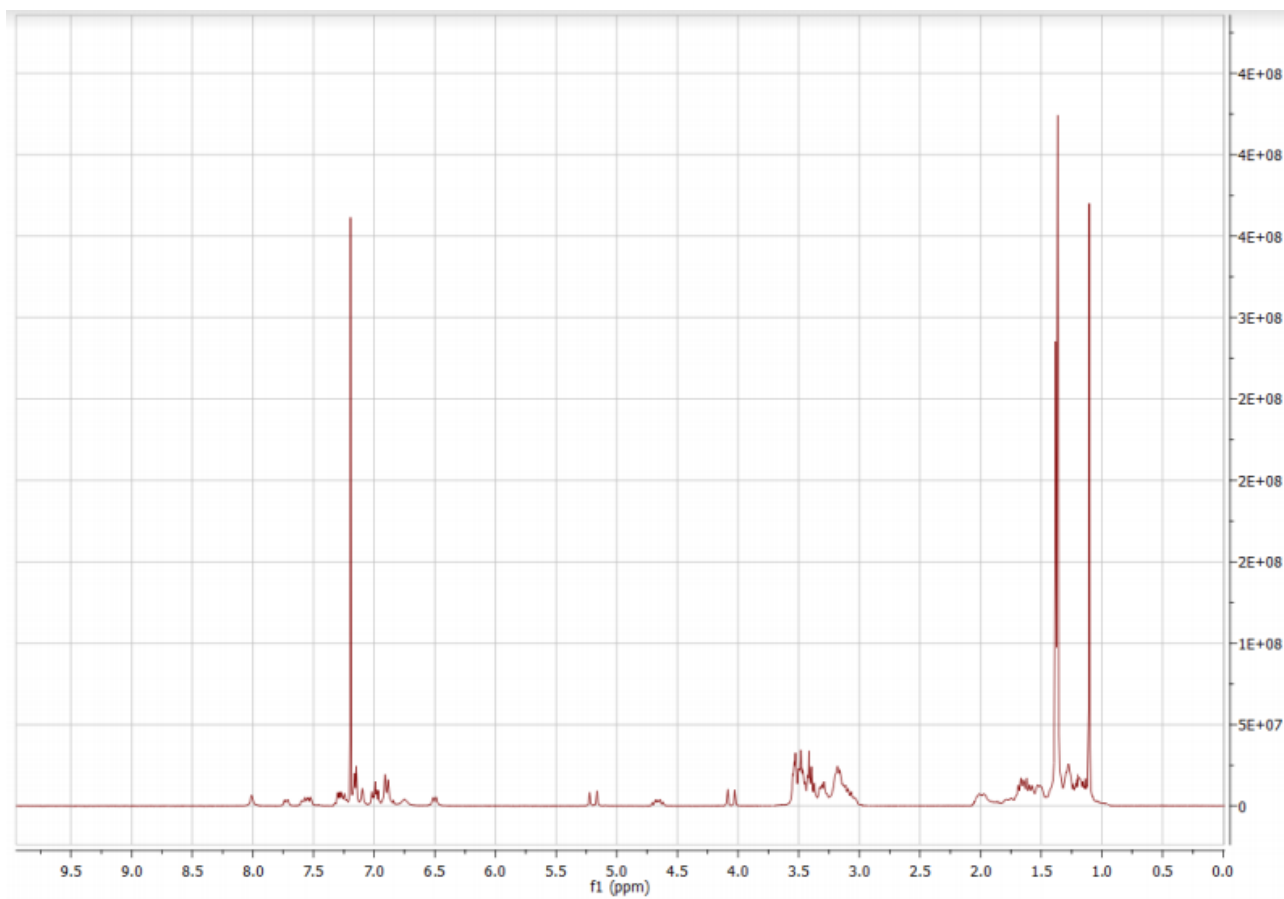
**Figure S2.** <sup>1</sup>H-NMR spectrum of **4** in CDCl<sub>3</sub> at 25 °C.



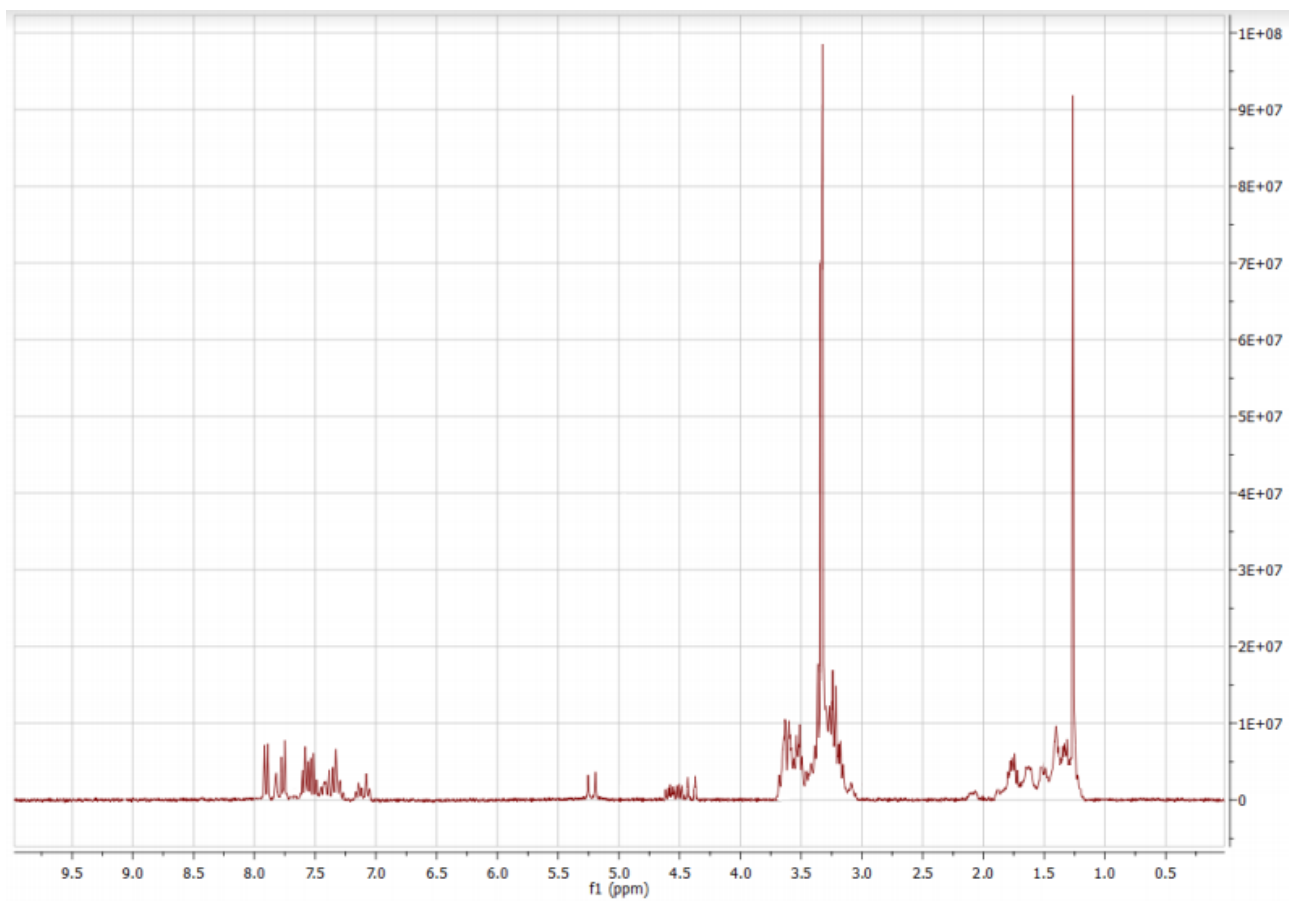
**Figure S3.** <sup>1</sup>H-NMR spectrum of **6** in CDCl<sub>3</sub> at 25 °C.



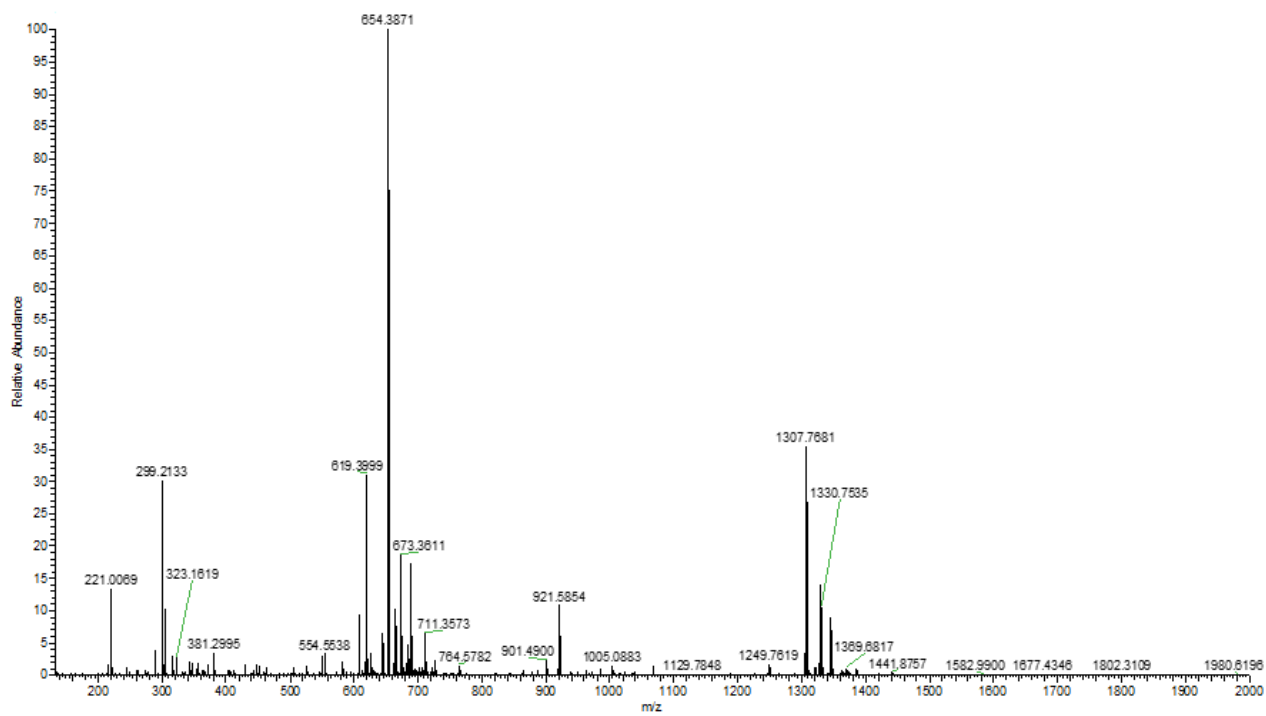
**Figure S4.** <sup>1</sup>H-NMR spectrum of 7 in CDCl<sub>3</sub> at 25 °C.



**Figure S5.** <sup>1</sup>H-NMR spectrum of **8** in CDCl<sub>3</sub> at 25 °C.

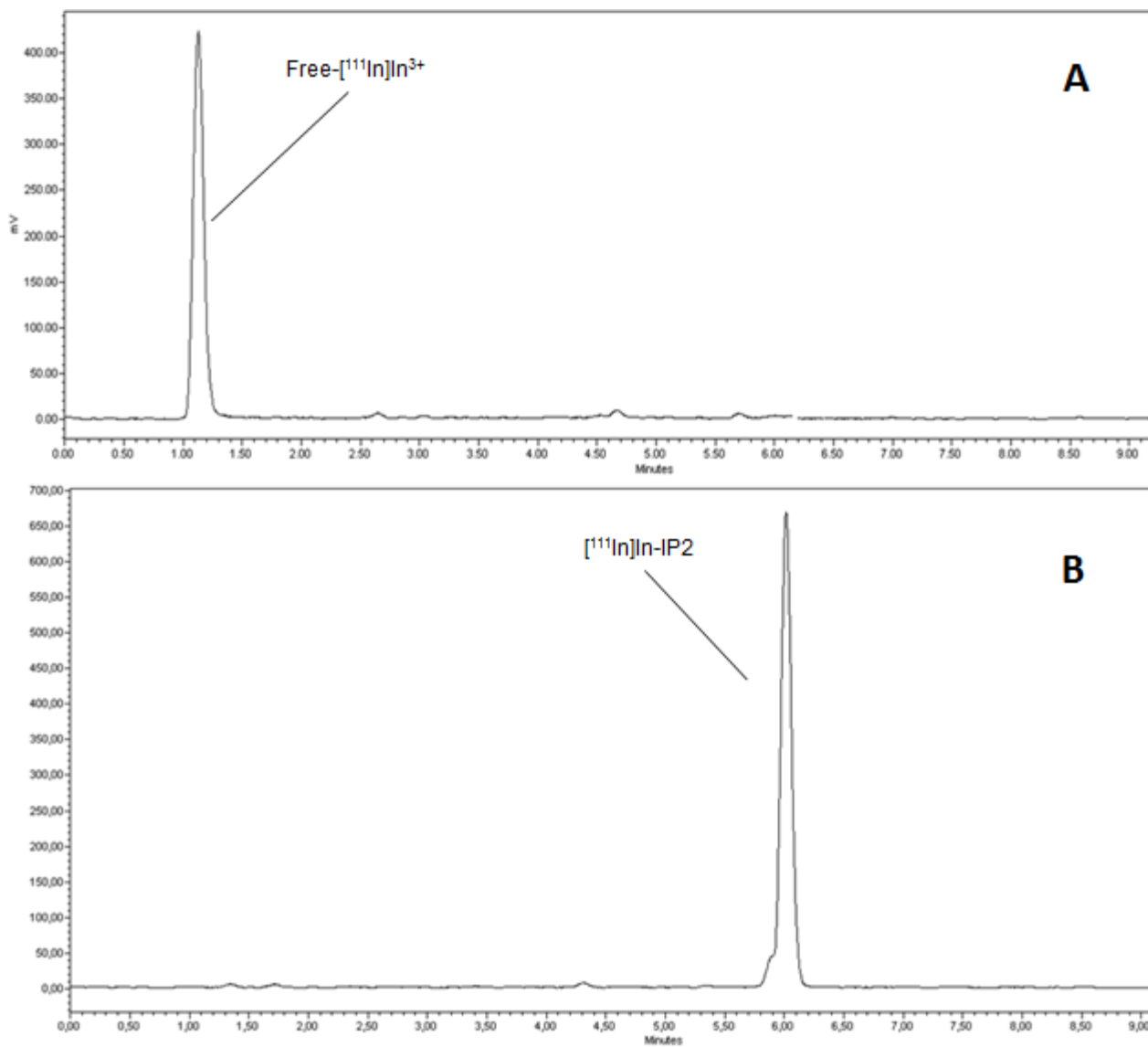


**Figure S6.** <sup>1</sup>H-NMR spectrum of IP-001 in MeOD-d<sub>4</sub> at 25 °C.

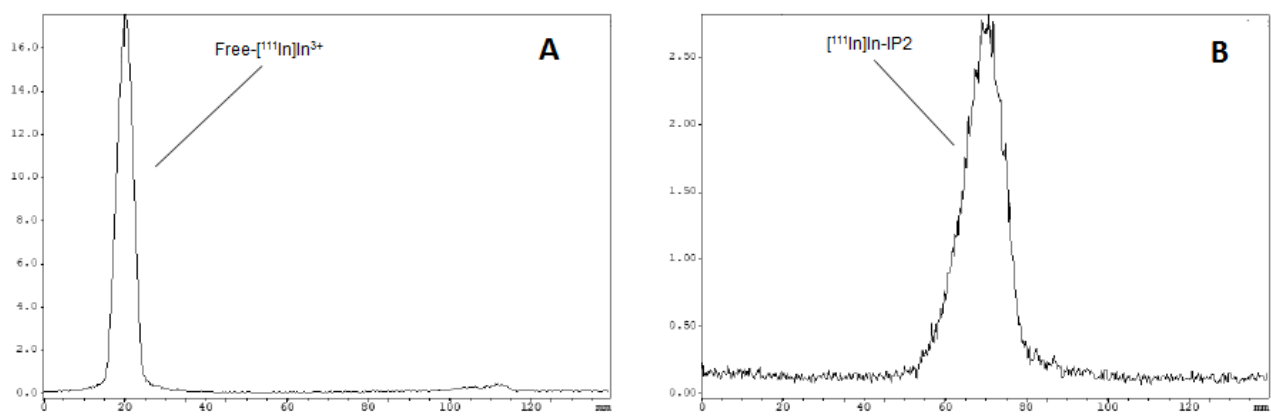


**Figure S7.** HRMS analysis of **IP-001**.  $m/z = 1307.76$   $[M+H^+]$ ;  $m/z = 654.38$   $[M+2H^+]$ ;  $m/z = 921.58$   $[M-DOTA]$ ;  $m/z = 619.39$   $[M+H^+]$  of **7**, originating from fragmentation of **IP-001**.

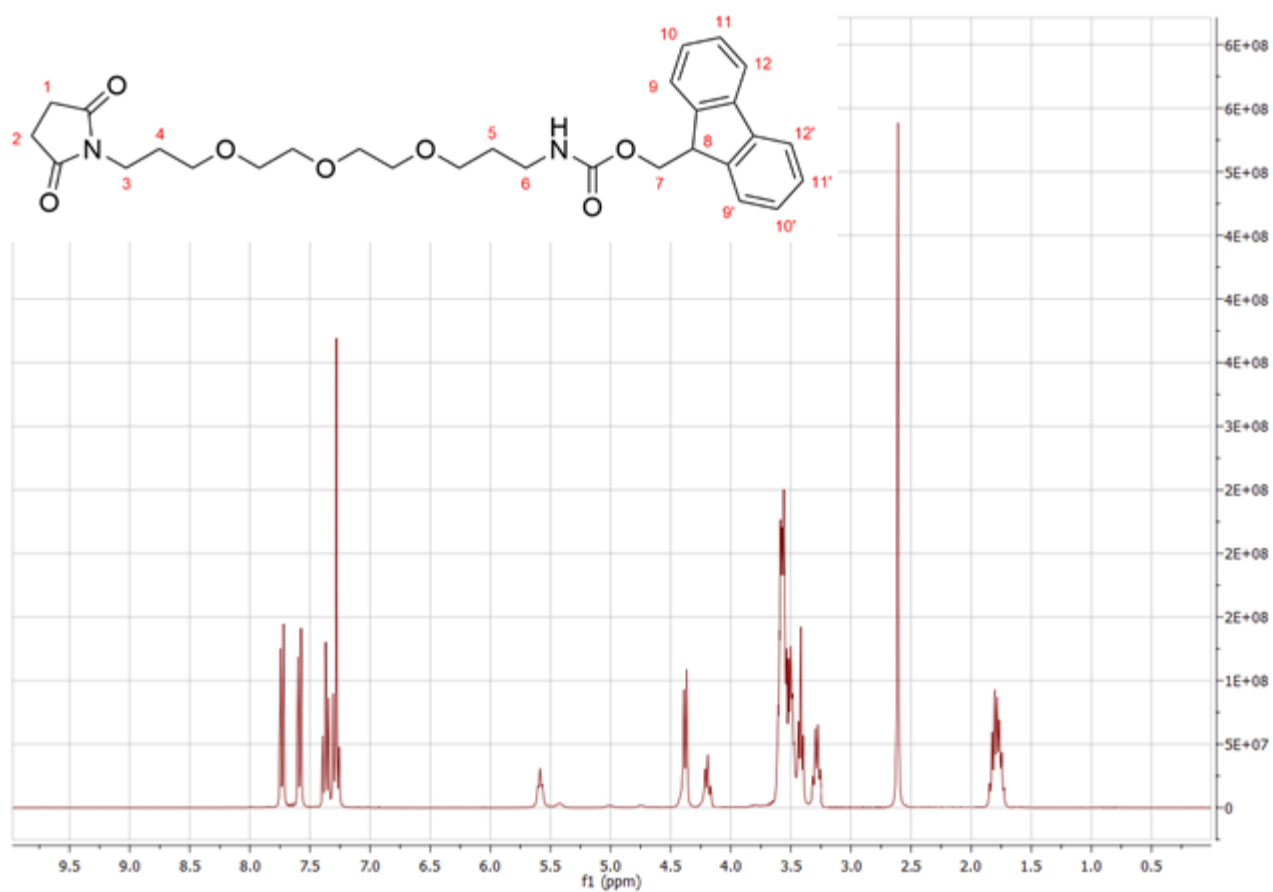




**Figure S8.** Representative RP-HPLC chromatograms of free [<sup>111</sup>In]In<sup>3+</sup> (A) and [<sup>111</sup>In]In-IP-001 (B). R<sub>t</sub>: free-[<sup>111</sup>In]In<sup>3+</sup> = 1.1 minutes; [<sup>111</sup>In]In-IP-001 = 6.0 minutes.



**Figure S9.** Representative radio-TLC chromatograms of free-[<sup>111</sup>In]In<sup>3+</sup> (A) and [<sup>111</sup>In]In-IP-001 (B).



**Figure S10.** <sup>1</sup>H-NMR spectrum in CDCl<sub>3</sub> of the compound due to the cyclization of the succinyl- group of compound **2**. <sup>1</sup>H-NMR (400 MHz, CDCl<sub>3</sub>) δ ppm 7.71 (d, *J*=7.4, 2H); 7.57 (d, *J*=7.4, 2H); 7.35 (t, *J*=7.3, 2H); 7.36 (t, *J*=7.3, 2H); 5.57 (t, *J*=5.4, 1H); 4.42-4.32 (m, 2H); 4.22-4.14 (m, 1H); 3.60-3.44 (m, 12H); 3.39 (t, *J*=6.4, 2H); 3.26 (q, *J*=6.2, 2H); 2.59 (s, 4H); 1.84-1.70 (m, 4H).