

## SUPPLEMENTARY MATERIALS

### Evaluation of the Biodistribution of Serinolamide-Derivatized C<sub>60</sub> Fullerene

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## 1. Analytical spectra for synthesis of C<sub>60</sub>-NOTA conjugate

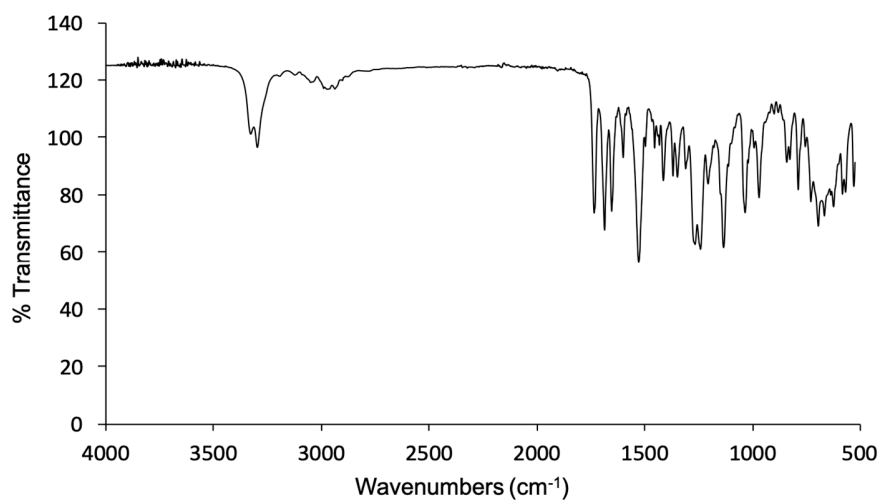


Figure S1. IR of compound 1.

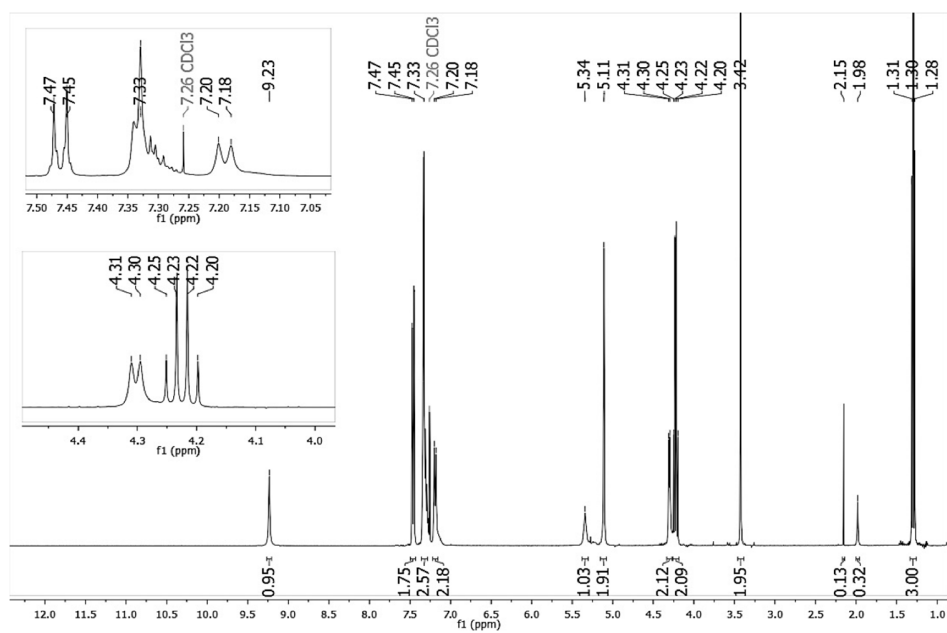
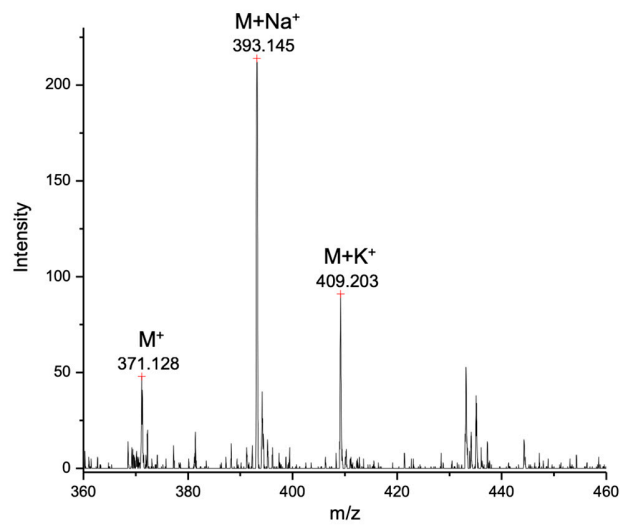
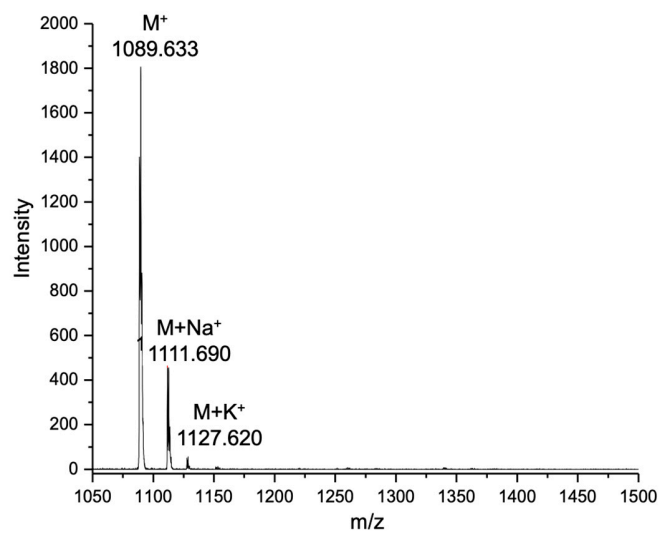


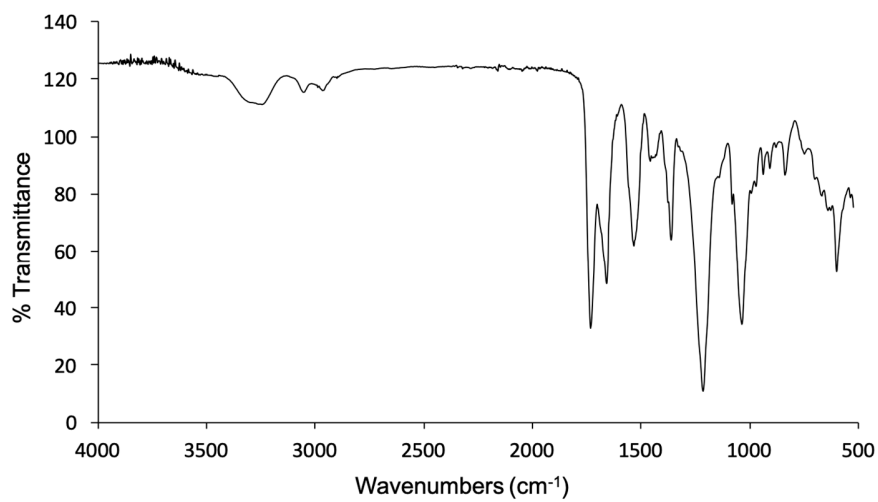
Figure S2. <sup>1</sup>H NMR of compound 1.



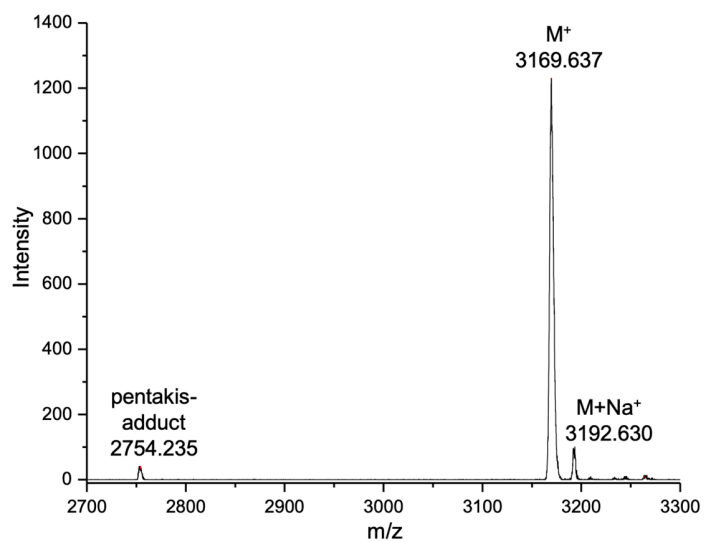
**Figure S3. MALDI-MS of compound 1.**



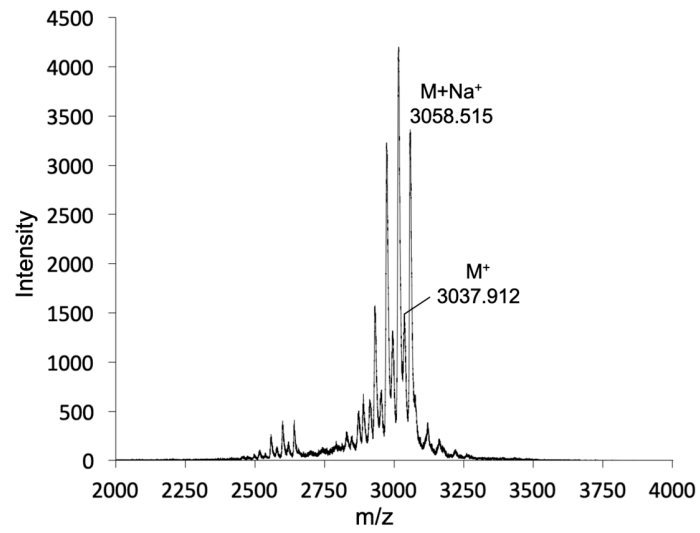
**Figure S4. MALDI-MS of compound 2.**



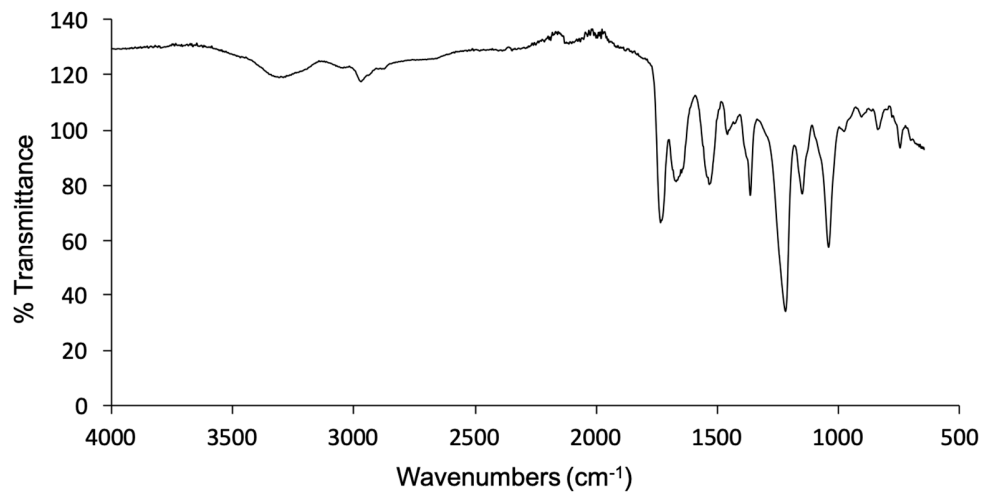
**Figure S5. IR of compound 3.**



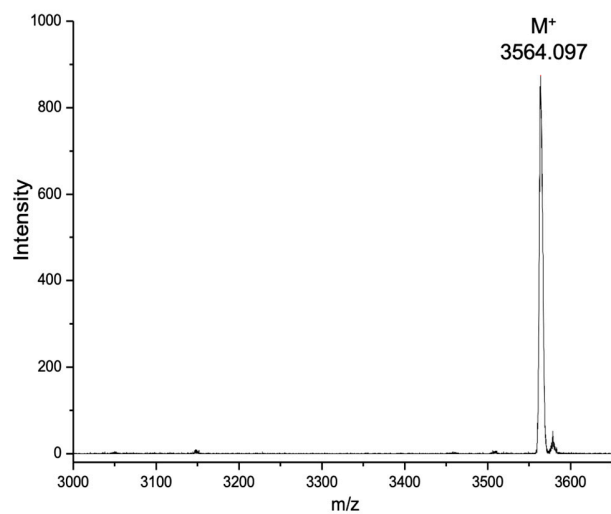
**Figure S6. MALDI-MS of compound 3.**



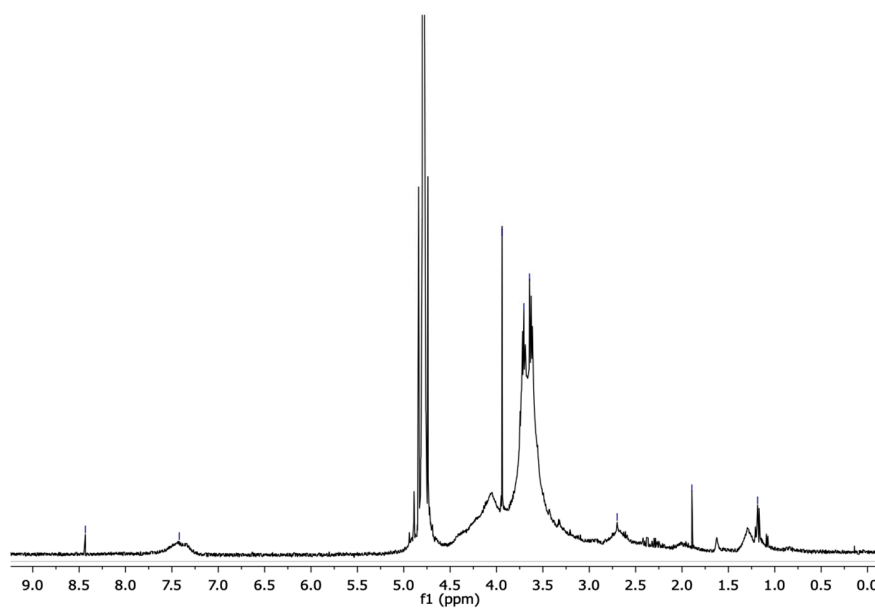
**Figure S7. MALDI-MS of compound 4.**



**Figure S8. IR of compound 5.**

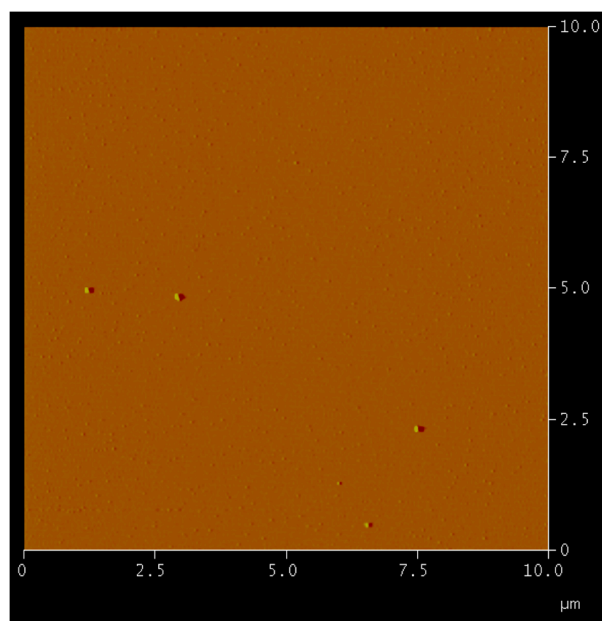


**Figure S9. MALDI-MS of compound 5.**

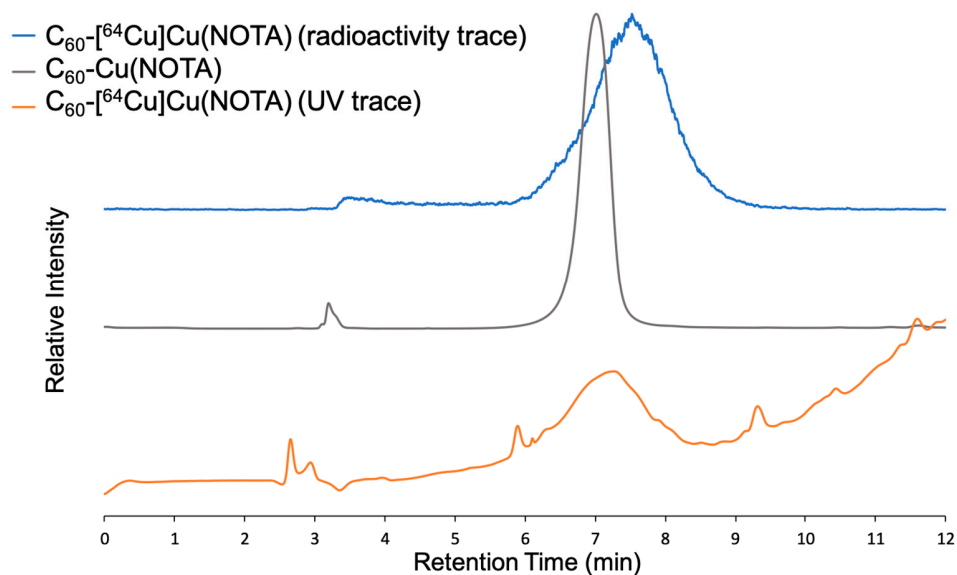


**Figure S10. <sup>1</sup>H NMR of compound 6.**

## 2. Characterization data for C<sub>60</sub>-NOTA conjugate and C<sub>60</sub>-[<sup>64</sup>Cu]Cu(NOTA)

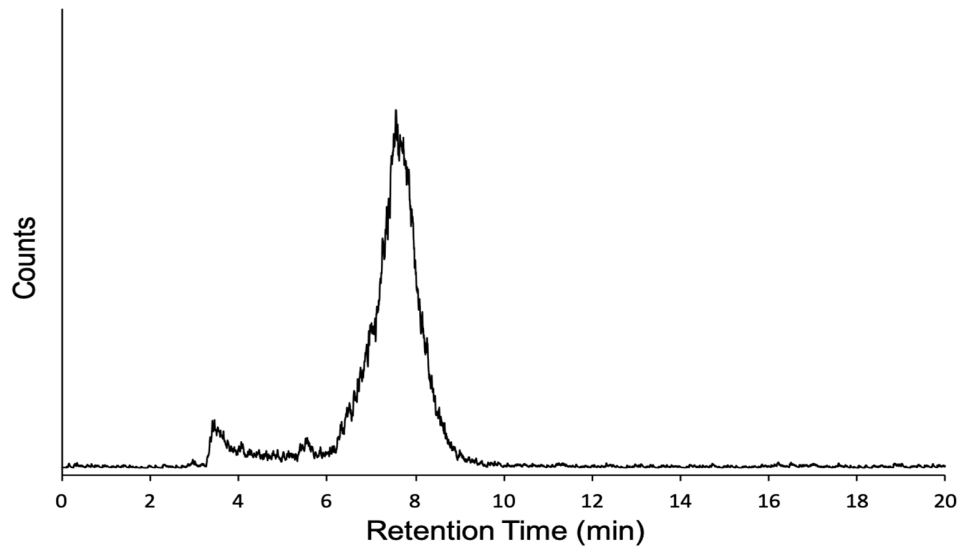


**Figure S11. AFM of C<sub>60</sub>-NOTA.** Average horizontal distance of three pictured nanoparticles is 195 nm and average vertical distance of three pictured nanoparticles is 0.122 nm.

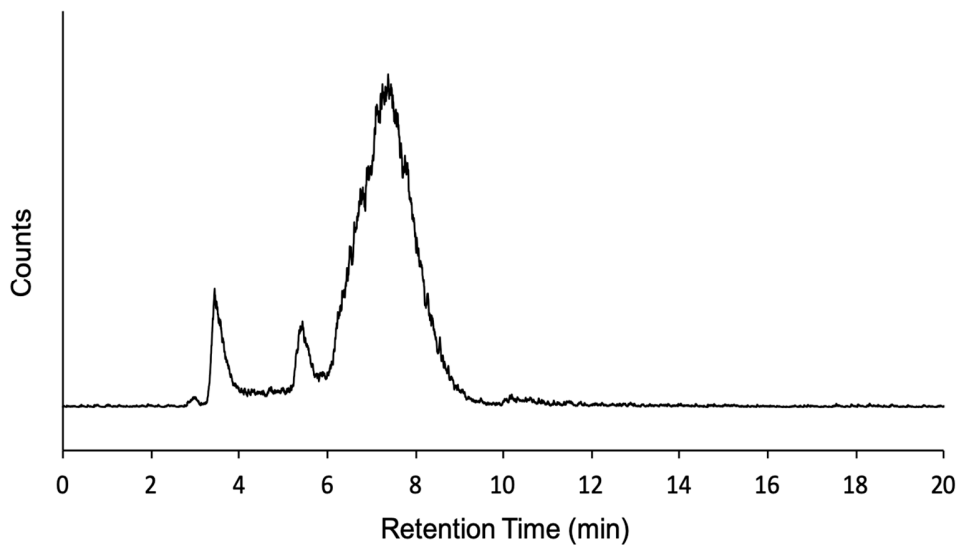


**Figure S12. Characterization of C<sub>60</sub>-[<sup>64</sup>Cu]Cu(NOTA).** Radio-HPLC trace of C<sub>60</sub>-[<sup>64</sup>Cu]Cu(NOTA) (blue, top), HPLC trace of C<sub>60</sub>-Cu(NOTA) at 254 nm (gray, middle), and HPLC trace of C<sub>60</sub>-[<sup>64</sup>Cu]Cu(NOTA) at 254 nm (orange, bottom).

### 3. C<sub>60</sub>-[<sup>64</sup>Cu]Cu(NOTA) stability test data



**Figure S13. Shelf stability study.** Radio-HPLC trace of C<sub>60</sub>-[<sup>64</sup>Cu]Cu(NOTA) after incubation in 1x PBS for 48 hours at room temperature.



**Figure S14. Shelf stability study.** Radio-HPLC trace of C<sub>60</sub>-[<sup>64</sup>Cu]Cu(NOTA) after incubation in human serum for 48 hours at 37 °C.