

## Supporting Information

# Nucleolipids as building blocks for the synthesis of $^{99\text{m}}\text{Tc}$ -Labeled Nanoparticles functionalized with Folic acid.

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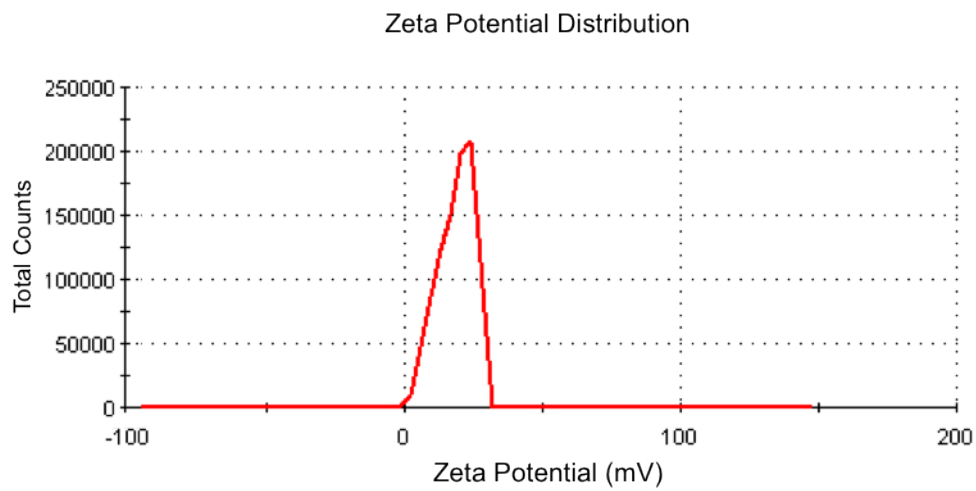
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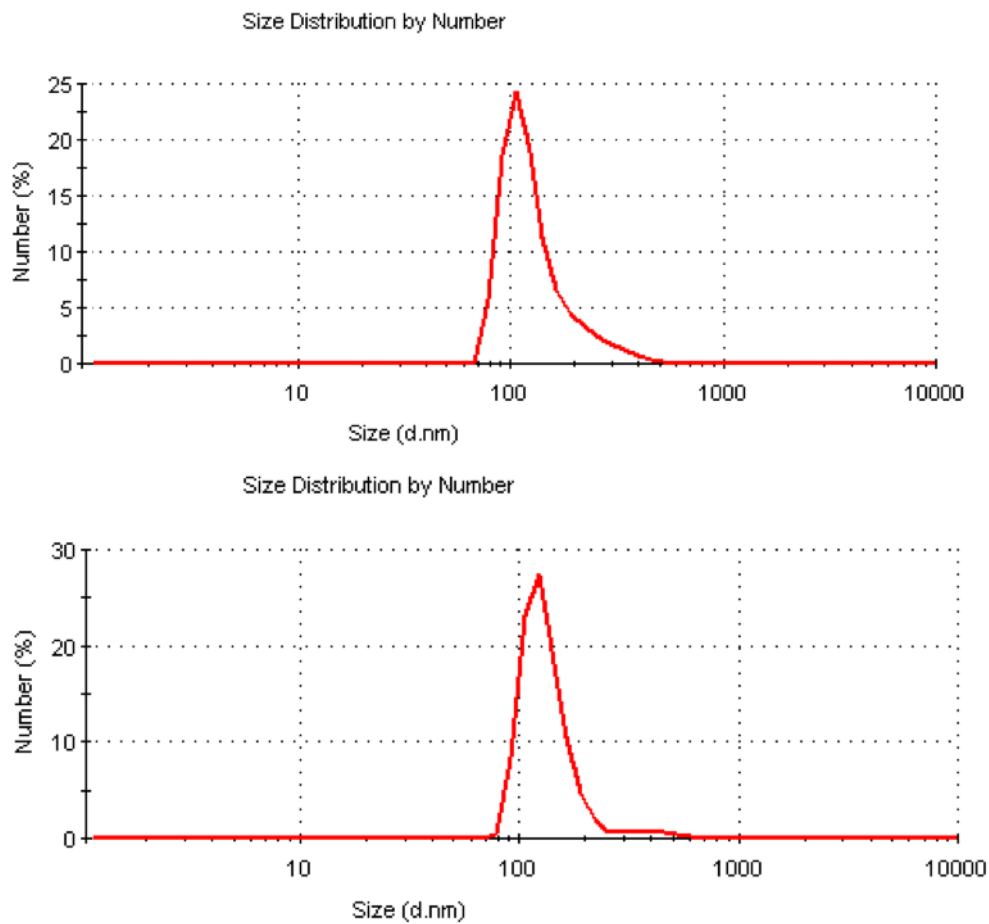
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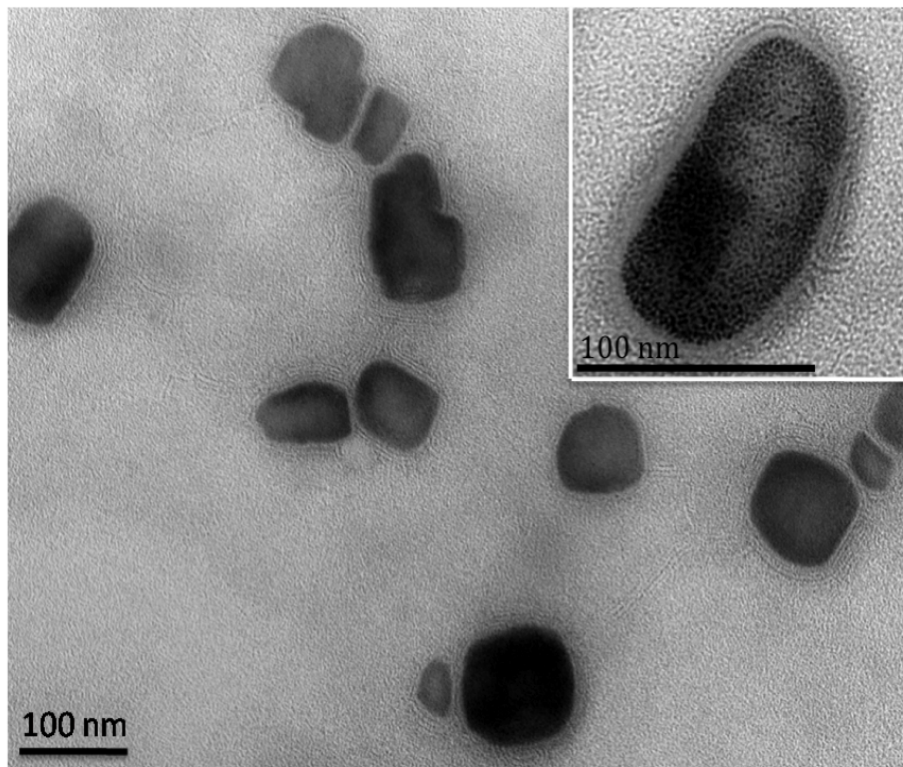
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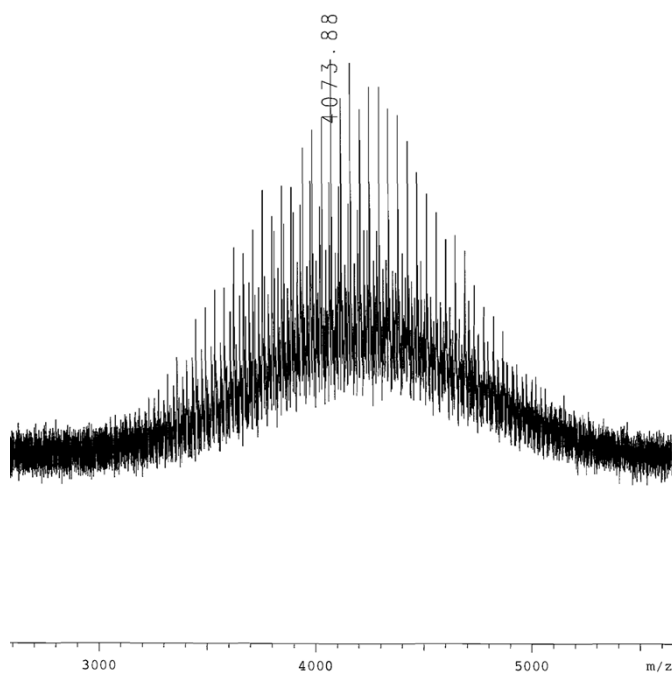
**Figure SI1:** Zeta potential of pegylated nanoparticles (NP-PEG<sub>FA</sub>).



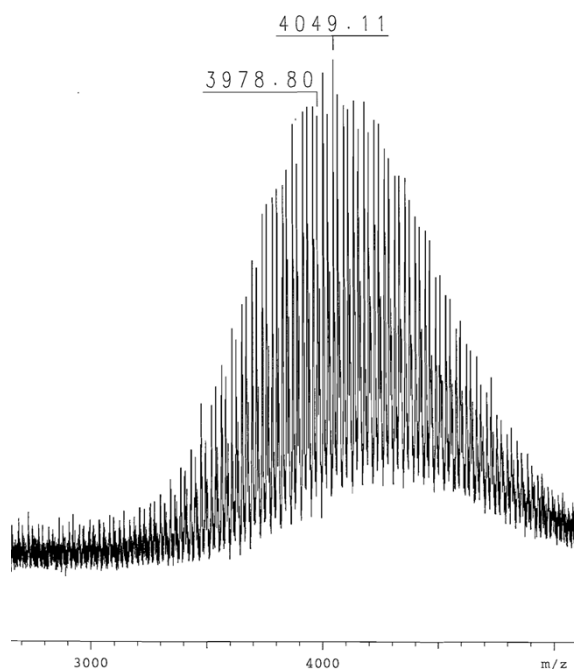
**Figure SI2:** Size measurements of two different samples of pegylated nanoparticles by DLS (NP-PEG<sub>FA</sub>).



**Figure SI3.** TEM image of NP-PEG<sub>FA</sub>.



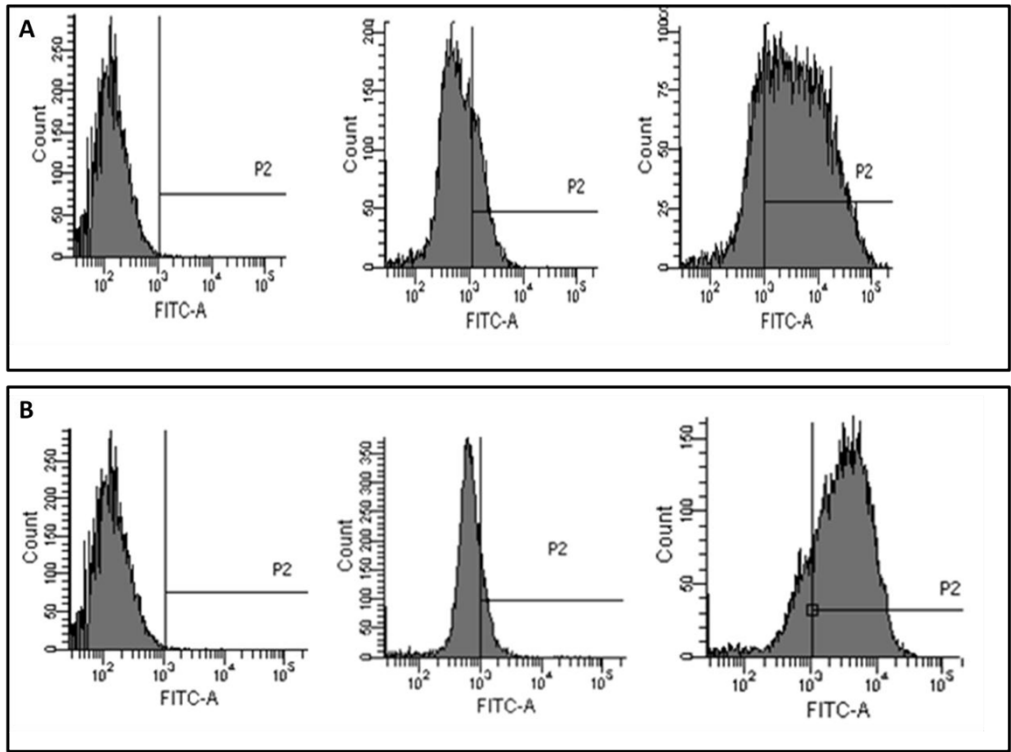
**Figure SI4:** Mass spectrum of DOUPEG3000-NHBoc **2** with a peak at the m/z range around 4073.



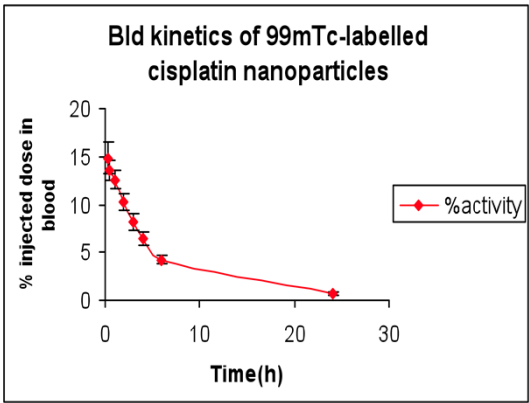
**Figure SI5:** Mass spectrum of DOUPEG3000-NH2 **3** with a peak at the m/z range around 3978.



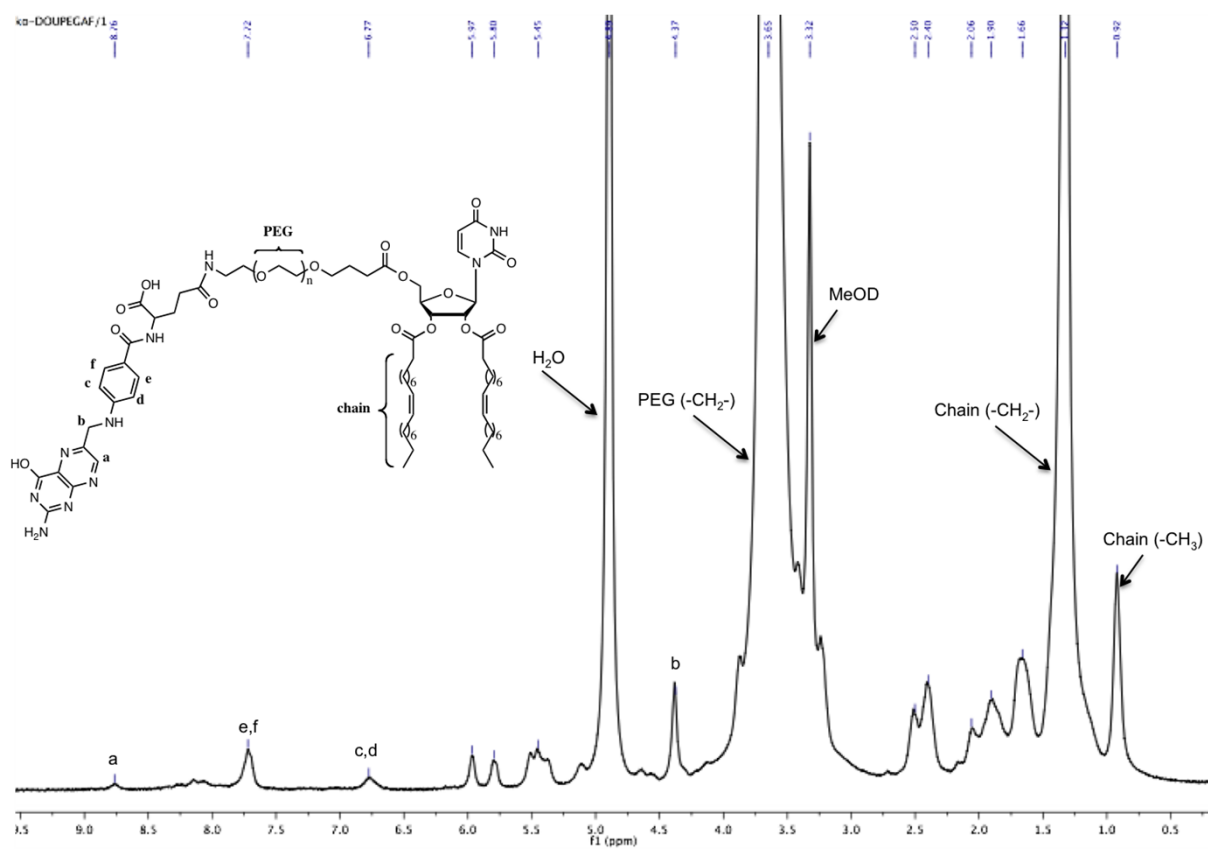
**Figure S16:** Mass spectrum of DOUPEG3000-FA **4** with a peak at the  $m/z$  range around 4391.



**Figure SI7.** FACS analysis of IGROV1 cell line (A) and SKOV3 cell line (B) stained for Folic acid receptor. left panel show unstained cells as control, middle panel show stained cell fluorescent secondary antibody without the primary antibody and right panel show stained cells with primary antibody specific for folic acid receptor (anti-FR $\alpha$ ) and fluorescent secondary antibody.



**Figure SI8.** Blood kinetics of NPs (NP-PEG<sub>FA</sub>) in Rabbits



**Figure SI9.** <sup>1</sup>H NMR spectrum of compound 4