

Figure S1. Transmission electron microscopy (TEM) image of 15 nm SPIONs synthesized via thermal decomposition of iron (III) acetylacetonate $\text{Fe}(\text{acac})_3$.

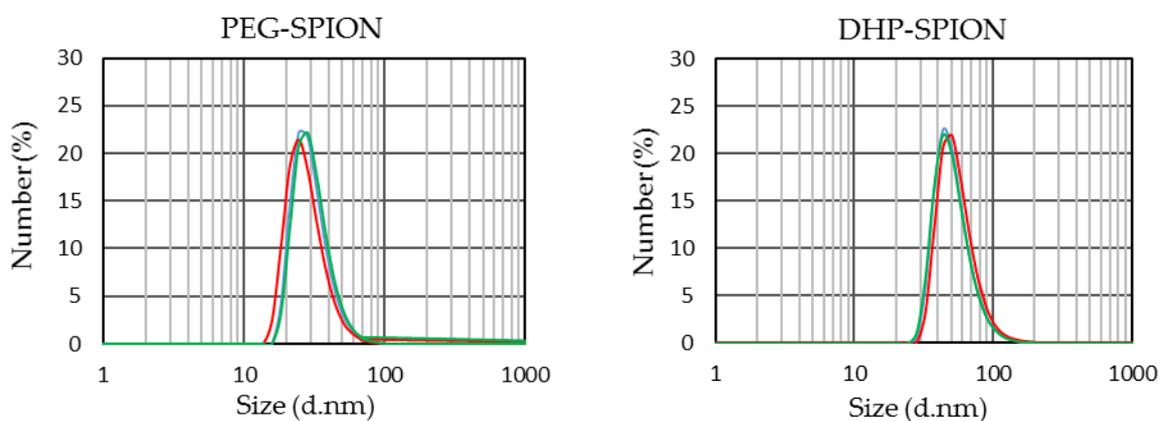


Figure S2. Dynamic light scattering measurement (DLS) of hydrodynamic diameter. SPION-PEG: Number mean: 29.69 ± 1.57 nm; Polydispersity index (PDI): 0.16. SPION-DHP: Number mean: 53.75 ± 1.93 nm; Polydispersity index (PDI): 0.154. Measurements performed in triplicate.

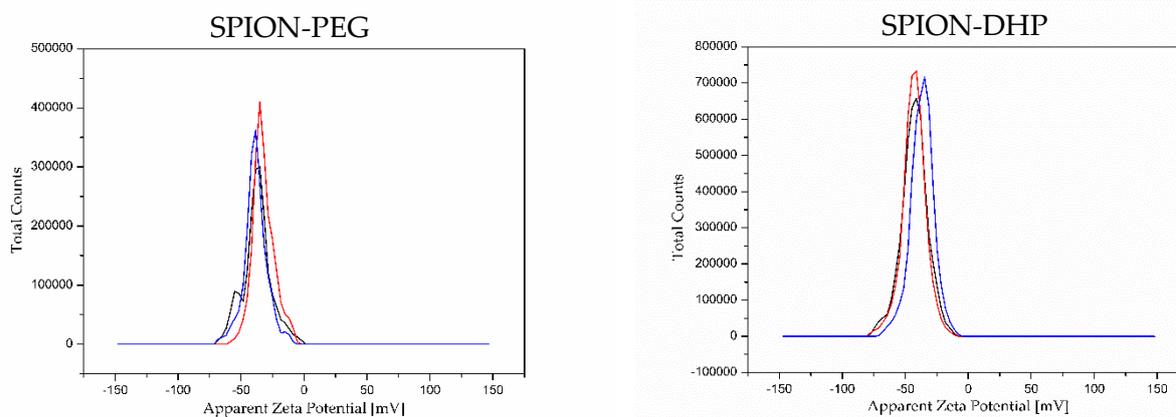


Figure S3. ζ -potential measurements. SPION-PEG: -37.3 ± 2.9 mV; SPION-DHP: -44.0 ± 3.4 mV.

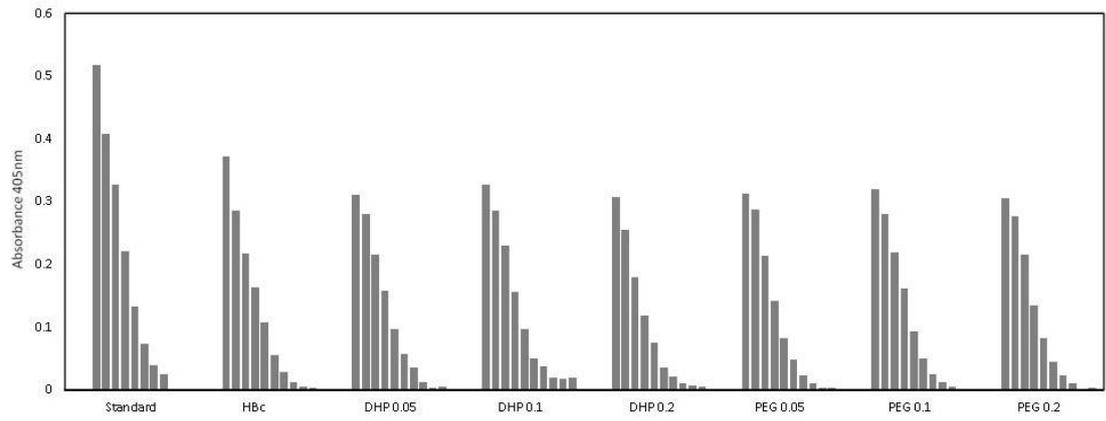


Figure S4. Antigenicity of SPION-HBc VLPs obtained at different SPION/HBc concentrations in comparison to standard protein, assessed by ELISA.