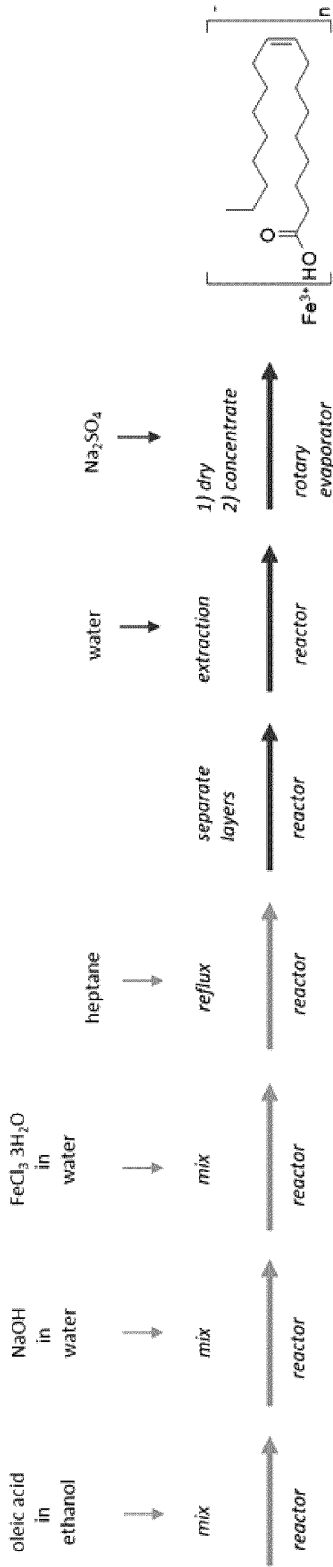


Figure 1: Flow chart of iron oleate complex synthesis



Note: light blue arrows indicate synthesis steps, dark blue arrows indicate purification steps

Figure 2: Flow chart of SPIONs synthesis

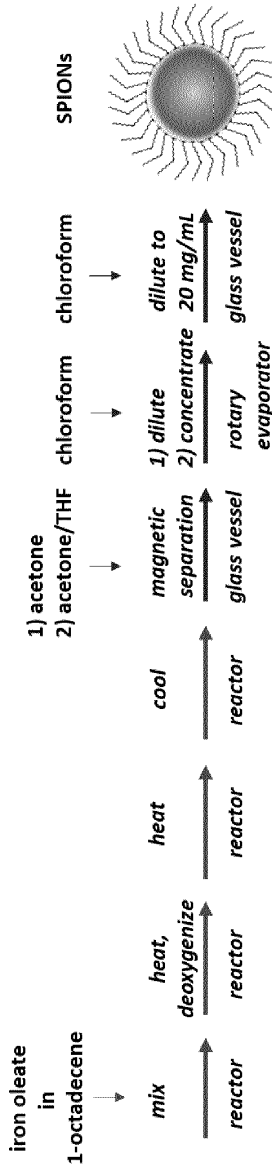


Figure 3: Flow chart of LM-PMAOD synthesis

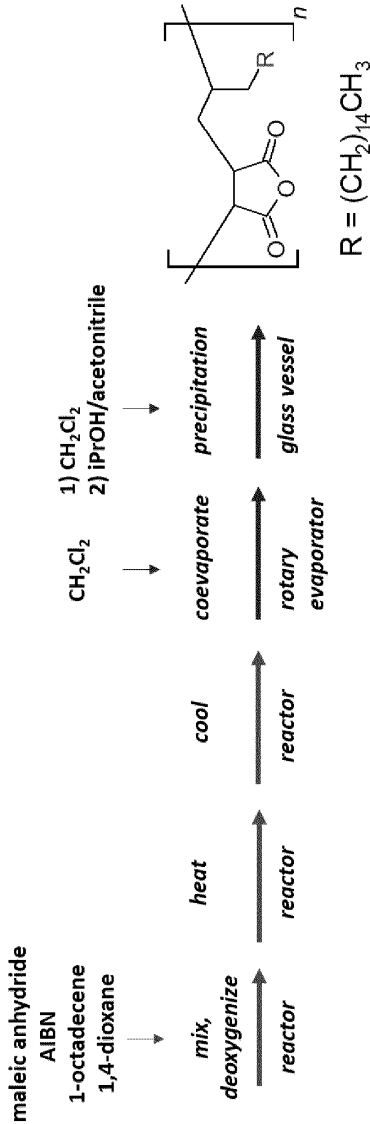


Figure 4: Flow chart of LM-PMAcOD synthesis

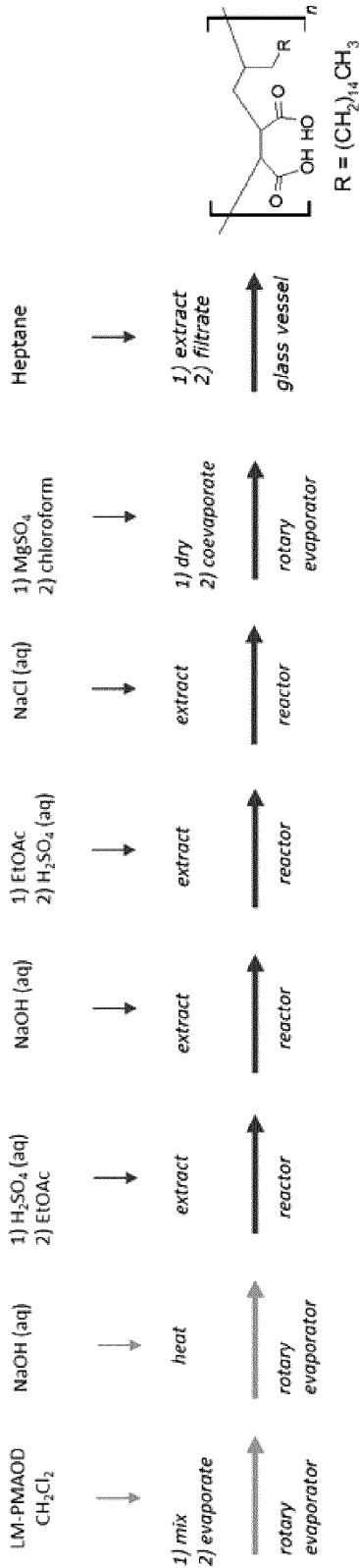


Figure 5: Polymer coating of SPIONs

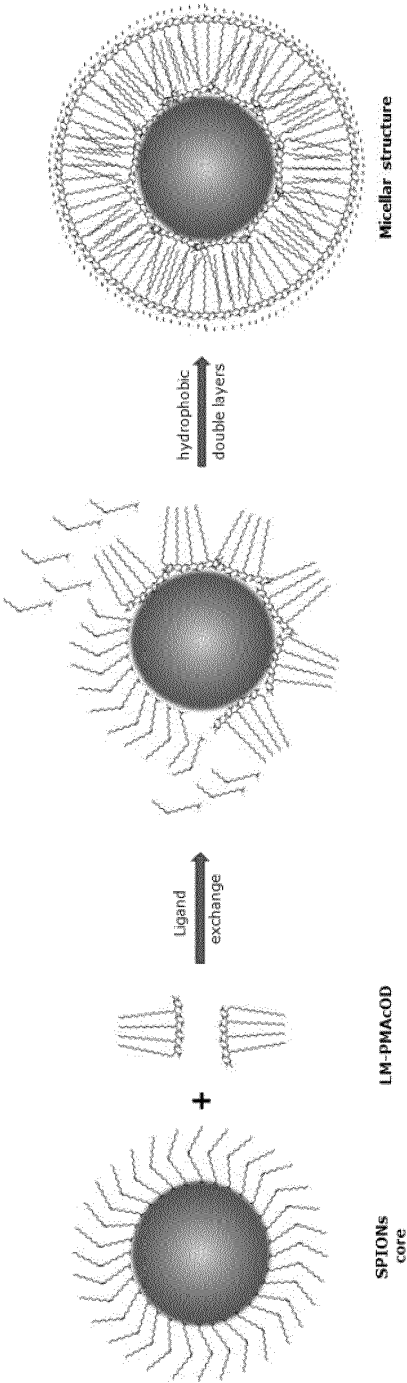
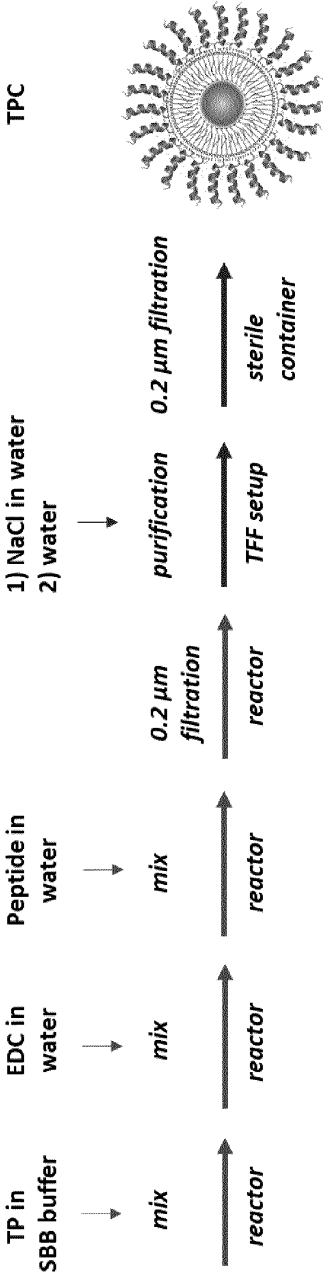


Figure 6: Flow chart of peptide coupling



TPC: Topas Particle Conjugate

Figure 7: TEM images of nanoparticles - 100x magnification

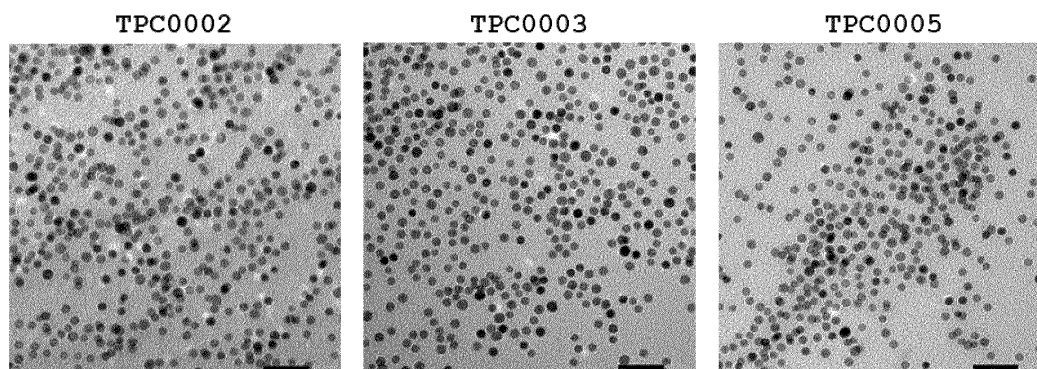


Figure 8: Molecular mass distribution of LM-PMaCO_D

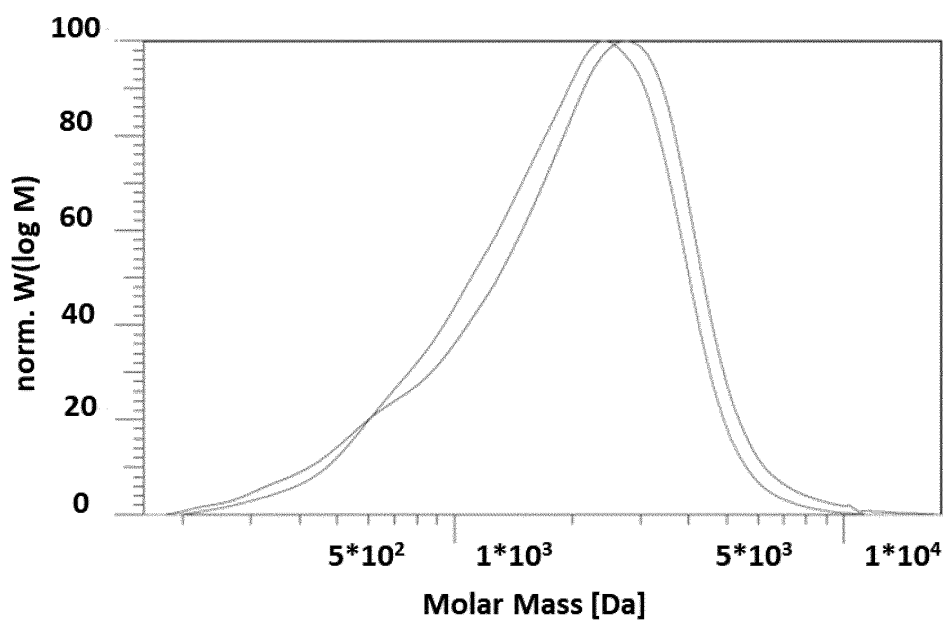


Figure 9: SEC chromatograms of crude HM-PMACOD-SPION - before TFF purification

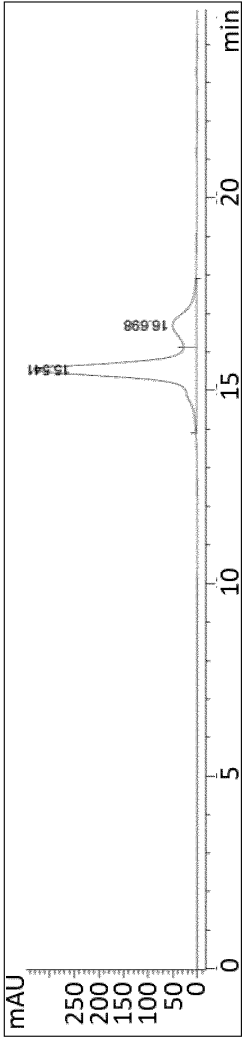


Figure 10: SEC chromatogram of permeate HM-PMACOD-SPION - TFF purification - 300 kDa membrane pores

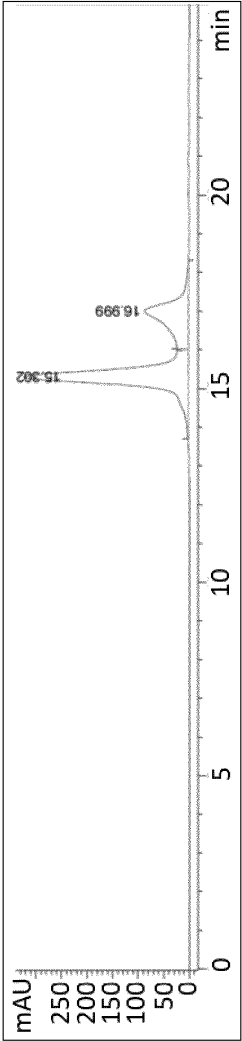


Figure 11: SEC chromatogram of retentate HM-PMaCO₂-SPION - TFF purification - 100 kDa membrane pores

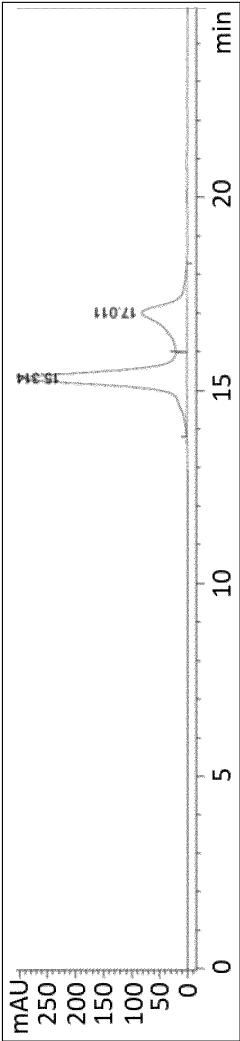


Figure 12: Results of Size exclusion chromatography analysis of the purification of low molecular weight PMAcOD-coated SPIONs

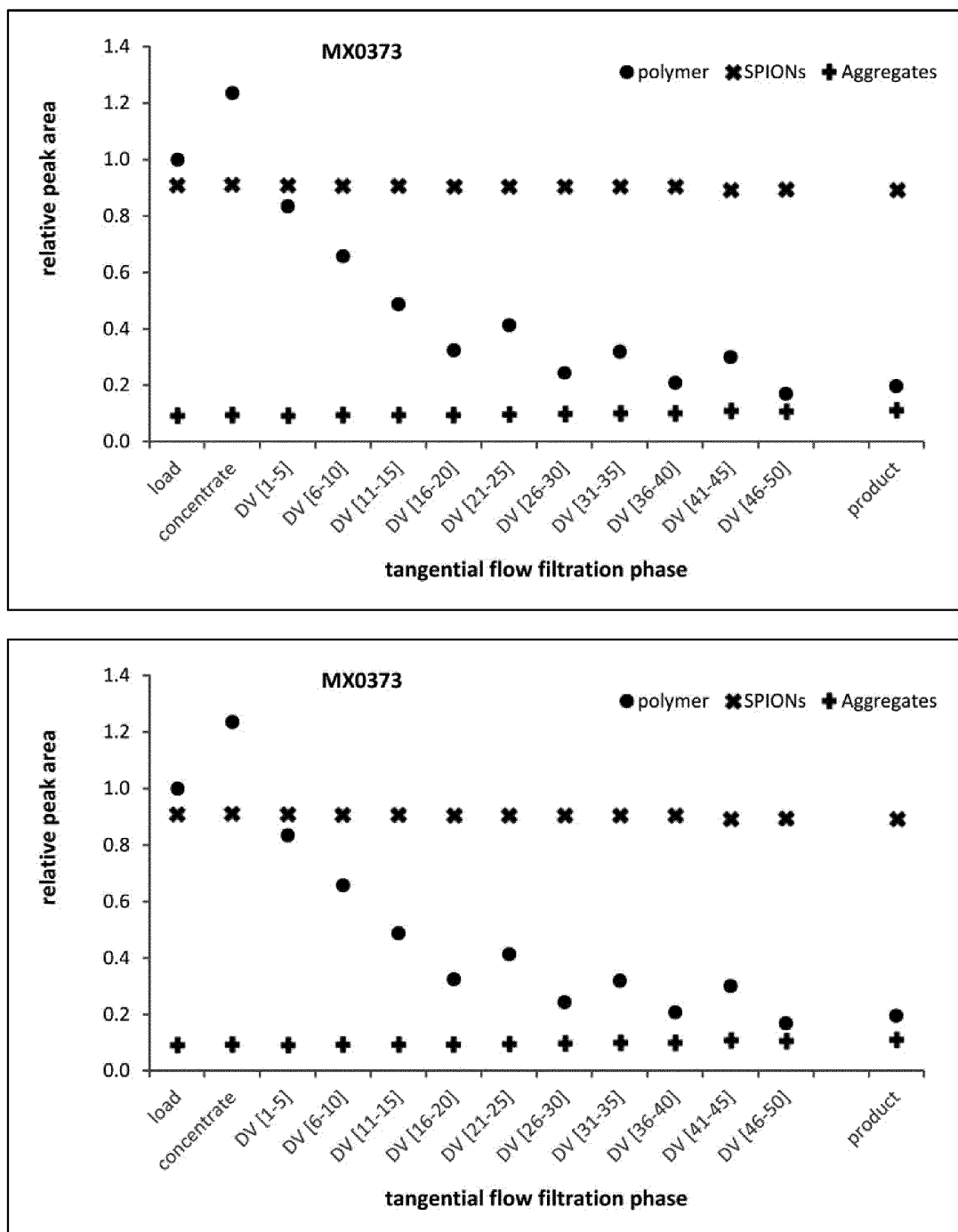


Figure 13: SEC chromatograms of the products after coating (MX0373A and MX0374A), TFF (100 kDa membrane) purification (MX0373E and MX0374E) and final 0.1 μ m filtration (MX0373F and MX0374F)

