The antimicrobial activity of free and immobilized poly (diallyldimethylammonium) chloride in nanoparticles of poly (methylmethacrylate)

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Additional file

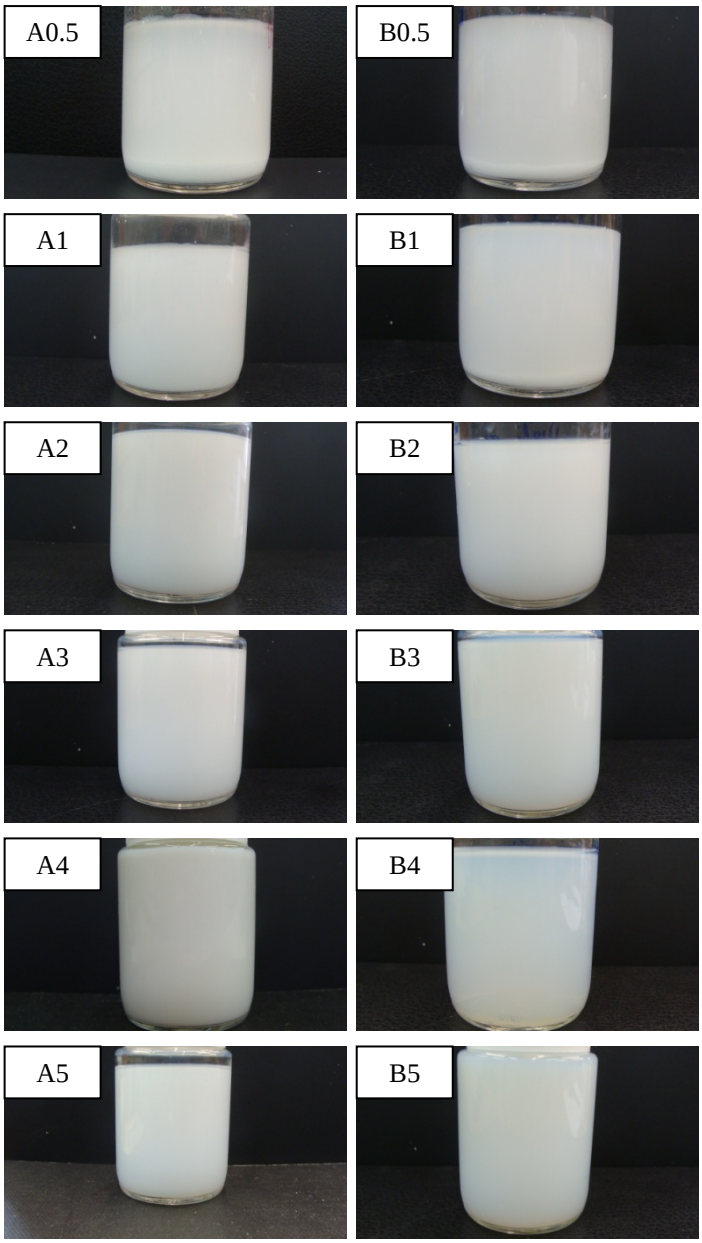

Fig. S1 Photographs of NPs dispersions immediately after dialysis and synthesis.

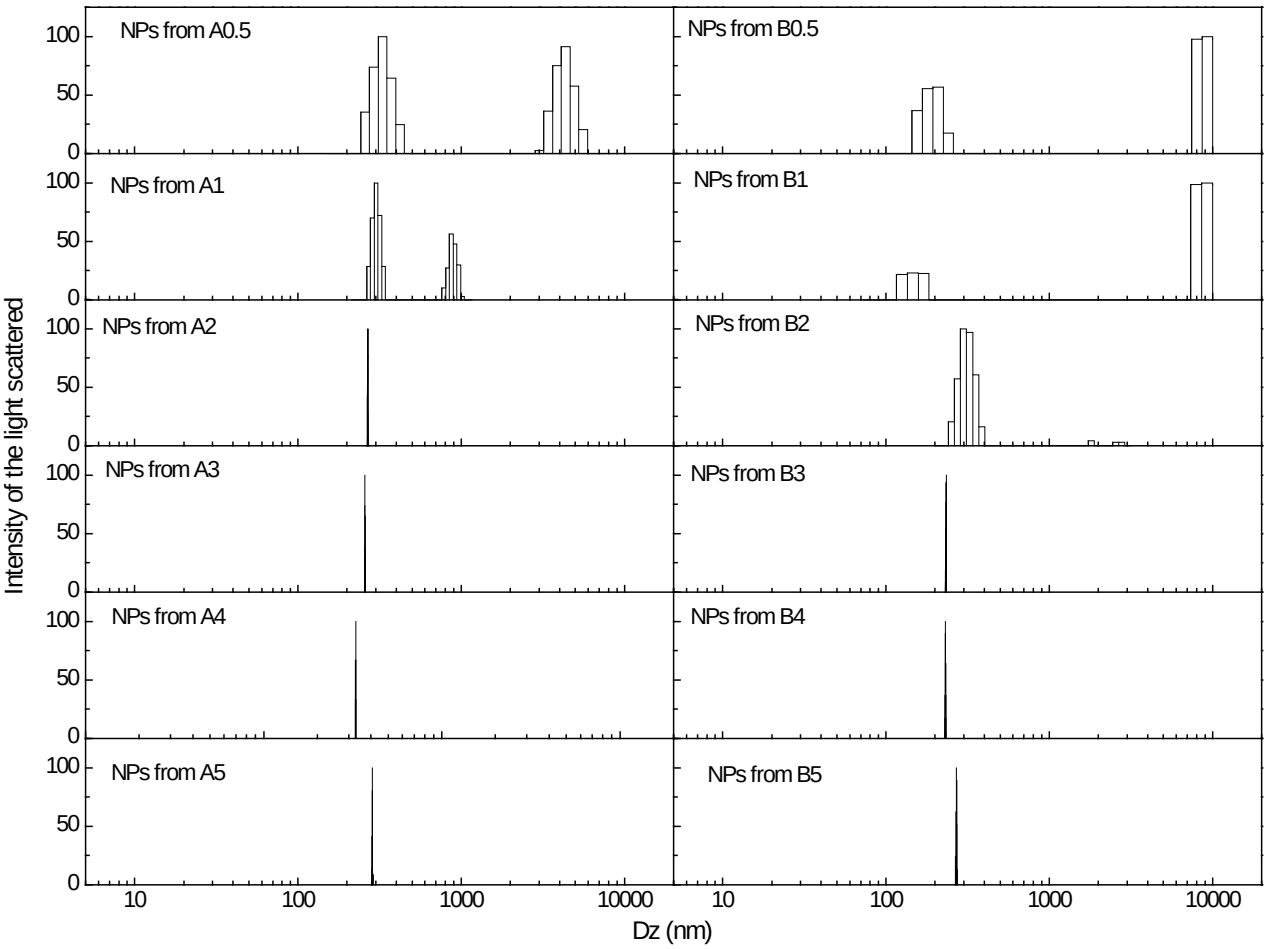

Fig. S2 Intensity of the light scattered as a function of Dz (nm) for NPs immediately after synthesis and dialysis.

Table S1 Data from size exclusion chromatography for determining M_w, M_n, PDI and the degree of polymerization (DP). As products of the polymerization, chains with different lengths are formed so that there will be a distribution of molecular weights. Two molecular weights can be determined from the distributions: the average molecular weight (M_w), that is, the total weight of polymer divided by the total number of polymer molecules (n), and the pondered molecular weight (M_n), which corresponds to the pondered sum of molecular weights divided by the total weight.

NPs	M_w (g/mol)	M_n (g/mol)	PDI	DP
A3	1,173,000	810643	1.447	11716
A4	1,065,000	430129	2.476	10650
A5	2,872,000	1752288	1.639	28686
B3	1,514,000	933416	1.622	15122
B4	2,362,000	1711594	1.380	23592
B5	2,056,000	1113759	1.846	20535

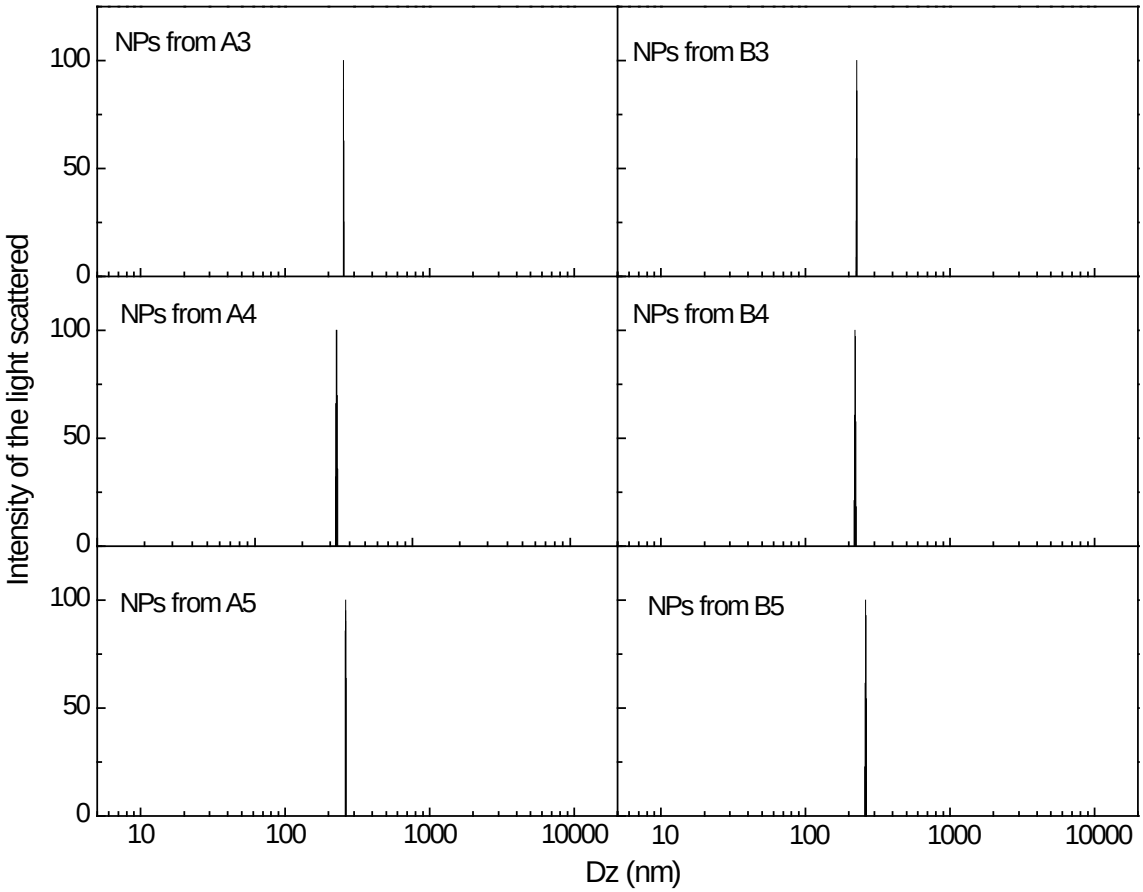

Fig. S3 Intensity of the light scattered as a function of Dz (nm) for NPs 2 years after the synthesis. The data illustrate the high colloidal stability of the dispersions.