

SUPPLEMENTARY MATERIAL

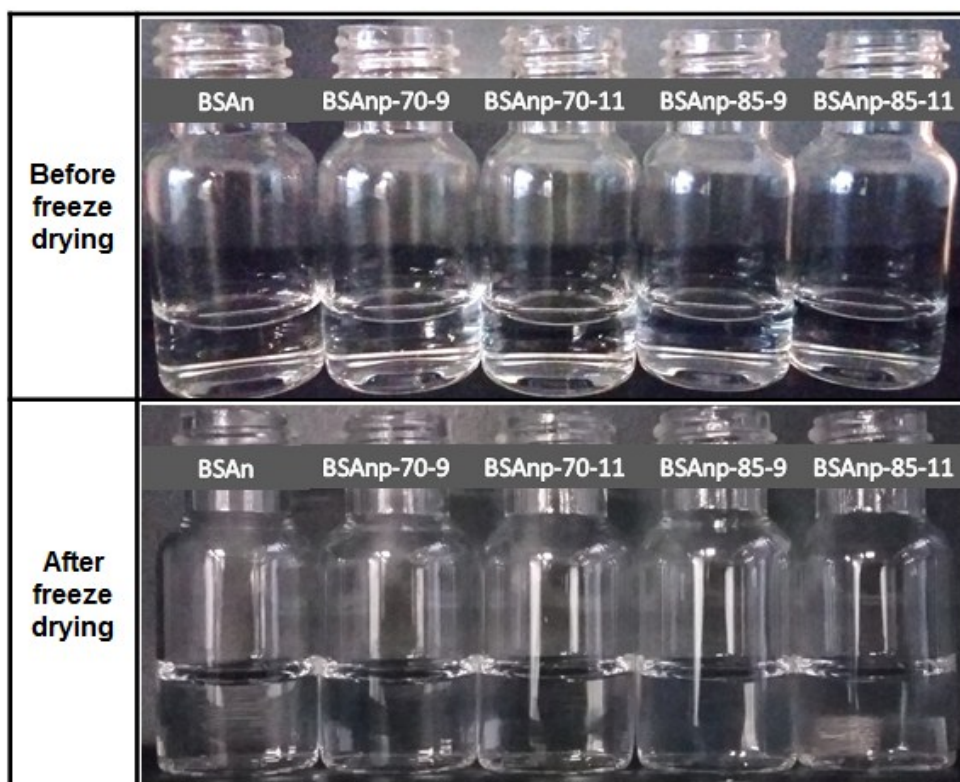


Fig. 1SM. Images of solutions of unloaded BSA and BSAp systems before freeze-drying and after freeze-drying and powder reconstitution.

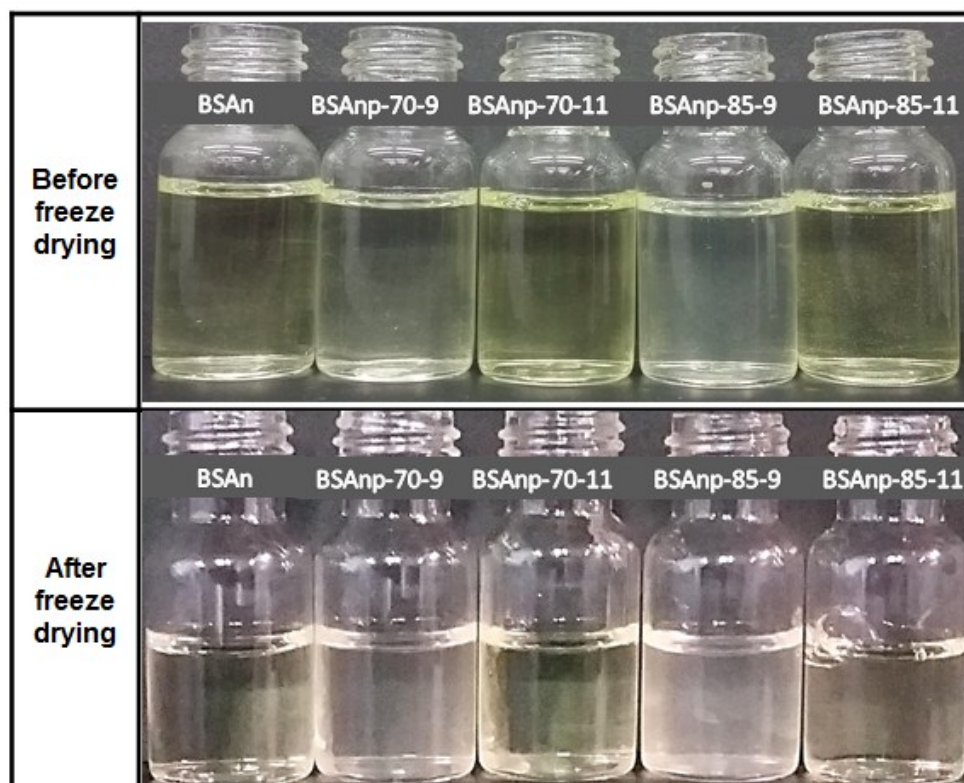


Fig. 2SM. Images of solutions of Chrys-loaded BSA and BSAp systems before freeze-drying and after freeze-drying and powder reconstitution.

Systems	Diameter (nm) [*]		Polydispersity Index (Pdl)		ζ Potential (mV)	
	Before freeze-drying	After freeze-drying	Before freeze-drying	After freeze-drying	Before freeze-drying	After freeze-drying
BSAn	8.4 ± 0.1 ^a	9.8 ± 0.3 ^a	0.34 ± 0.04 ^{d,e}	0.37 ± 0.05 ^{e,f}	-9.9 ± 0.3 ^{h,i,j,k}	-9.2 ± 0.3 ^k
BSAn-Chrys	8.06 ± 0.03 ^a	9.4 ± 0.2 ^a	0.5 ± 0.1 ^g	0.7 ± 0.1 ^h	-11.3 ± 0.2 ^{c,d,e}	-11.2 ± 0.2 ^{c,d,e,f,g}
BSAnp-70-9	15.4 ± 0.1 ^{c,d}	21.0 ± 0.1 ^g	0.23 ± 0.01 ^{b,c}	0.23 ± 0.05 ^{b,c}	-9.5 ± 0.6 ^{j,k}	-10.3 ± 0.3 ^{g,h,i,j}
BSAnp-70-9-Chrys	16.4 ± 0.4 ^{e,f}	19.6 ± 0.5 ^{f,g}	0.27 ± 0.02 ^{b,c}	0.88 ± 0.02 ⁱ	-11.2 ± 0.6 ^{c,d,e,f}	-11.8 ± 0.4 ^c
BSAnp-70-11	13.6 ± 0.2 ^b	18.0 ± 0.1 ^{e,f}	0.24 ± 0 ^{b,c}	0.41 ± 0.06 ^f	-9.8 ± 0.1 ^{ij,k}	-11.6 ± 0.4 ^{c,d}
BSAnp-70-11-Chrys	14.2 ± 0.1 ^{b,c}	20.5 ± 0.9 ^g	0.52 ± 0.02 ^g	0.53 ± 0.07 ^g	-13.0 ± 0.3 ^b	-13.1 ± 0.4 ^b
BSAnp-85-9	27.8 ± 0.1 ⁱ	33.8 ± 0.8 ^k	0.13 ± 0 ^a	0.21 ± 0.01 ^b	-10.8 ± 0.6 ^{d,e,f,g,h}	-10.0 ± 0.4 ^{h,i,j,k}
BSAnp-85-9-Chrys	26.3 ± 0.2 ^h	31 ± 1 ^j	0.30 ± 0.01 ^{c,d}	0.76 ± 0.06 ^h	-10.9 ± 0.4 ^{d,e,f,g,h}	-10.7 ± 0.4 ^{e,f,g,h,i}
BSAnp-85-11	20.3 ± 0.1 ^e	35 ± 3 ^k	0.19 ± 0.01 ^{a,b}	0.51 ± 0.06 ^g	-11.8 ± 0.4 ^c	-11.8 ± 0.1 ^c
BSAnp-85-11-Chrys	17.1 ± 0.2 ^{d,e}	28 ± 4 ⁱ	0.34 ± 0.02 ^{d,e,f}	0.71 ± 0.04 ^h	-14 ± 2 ^a	-10.4 ± 1.2 ^{f,g,h,i,j}

Table 1SM. Characteristics of BSAn and BSAnp systems before and after freeze-drying measured by DLS (mean ± SD). For each parameter obtained before and after freeze-drying an independent analysis of variance was performed and different letters indicate significant differences ($p < 0.05$).

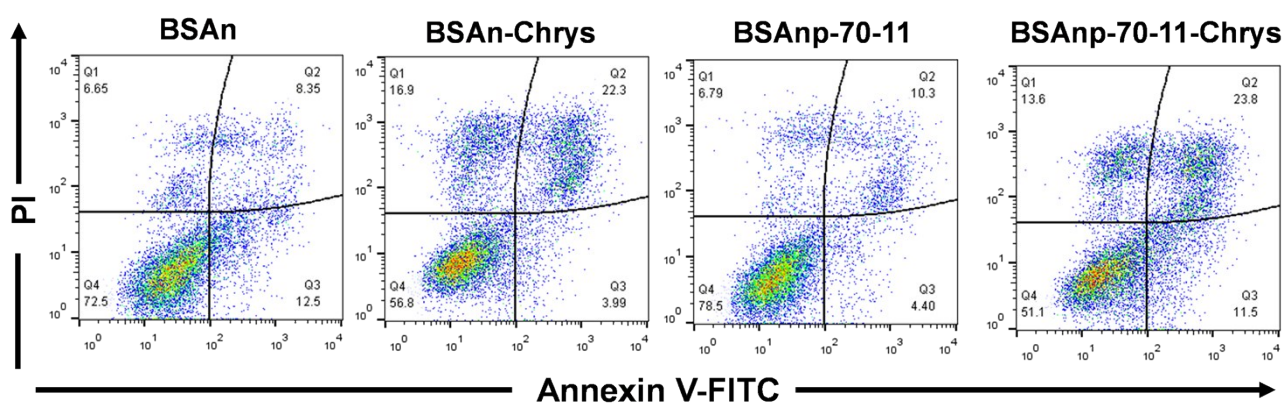


Fig. 3SM. Effect of unloaded and Chrys-loaded BSAn and BSAnp-70-11 systems on apoptosis of MCF-7 cells assessed by flow cytometry using Annexin V-FITC/PI staining. The plots are representative of three independent experiments. The numbers in the Q3 and Q2 quadrants indicate the proportions of cells that are Annexin V positive/PI negative and Annexin V positive /PI positive, respectively.