Supporting Information

Biosafety Evaluations of Well-Dispersed Mesoporous Silica Nanoparticles: Towards in Vivo-Relevant Conditions

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Figure S1. (a) TEM image and (b) the size distribution histogram of the surfactant-extracted wn-R-MSN@PEG. (c) Thermogravimetric analysis (TGA) of various types of R-MSN@PEG.

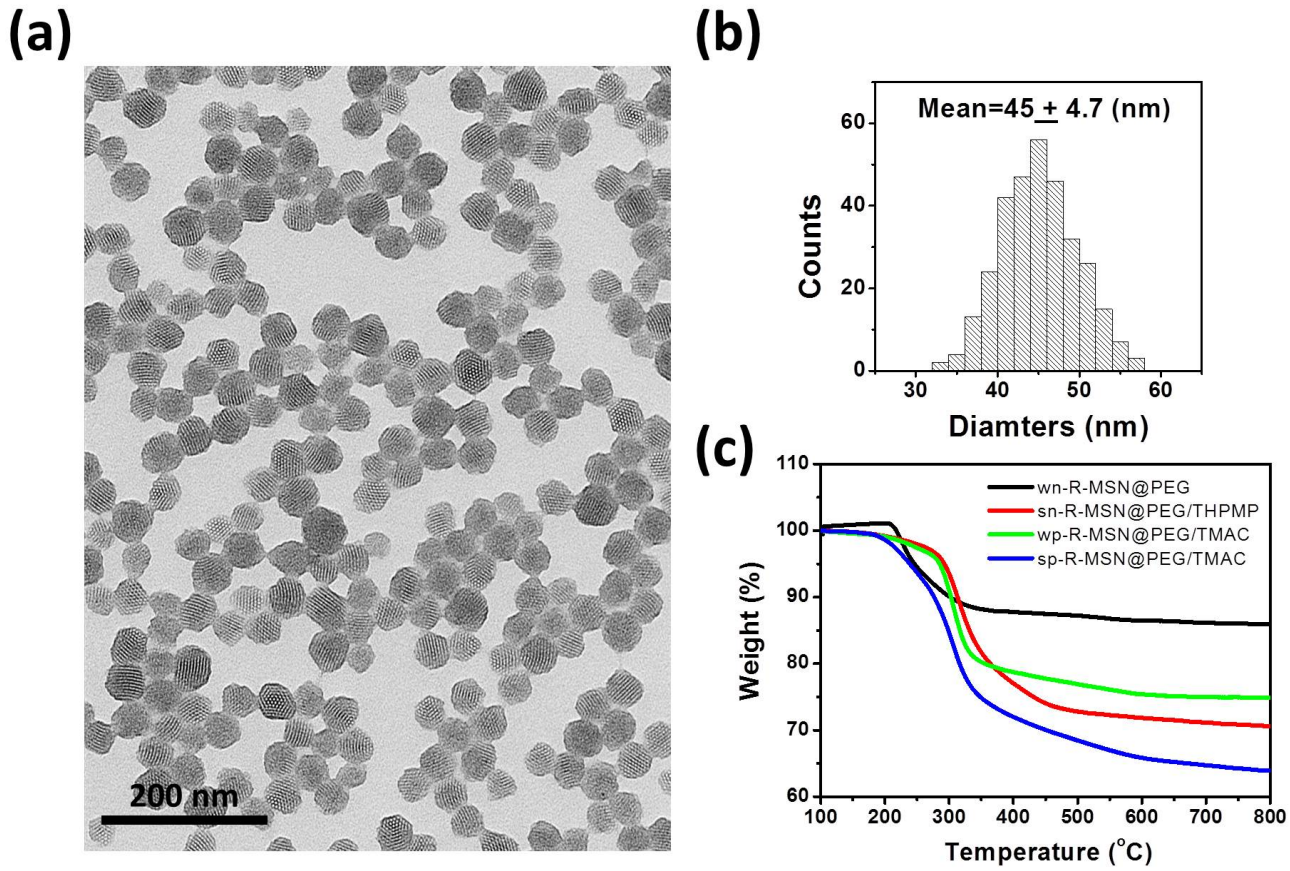

Figure S2. The efficiency of cellular uptake of various types of R-MSN@PEG (200 μg mL^{-1}) by Raw 264.7 cells for 4 h.

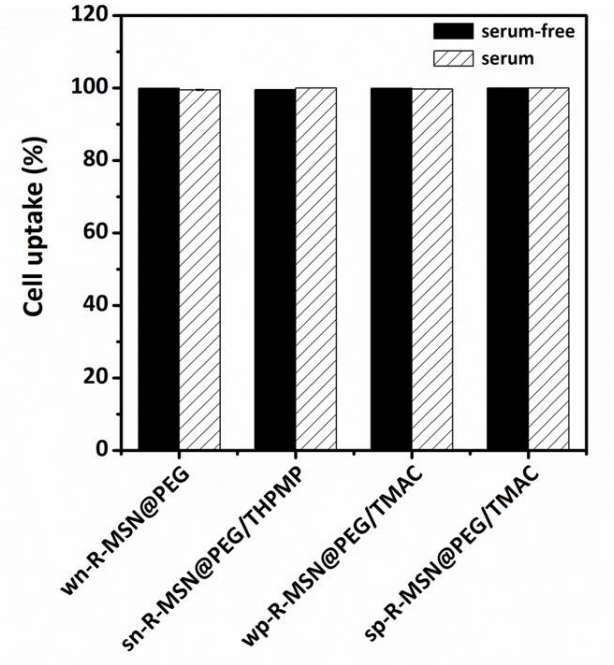

Figure S3. The WST-1 assay in Raw 264.7 cells after treatments of various types of MSN@PEG (200 μg mL^{-1}): (a) for 4 h; (b) for 4 h followed by culturing for an additional 24 h.

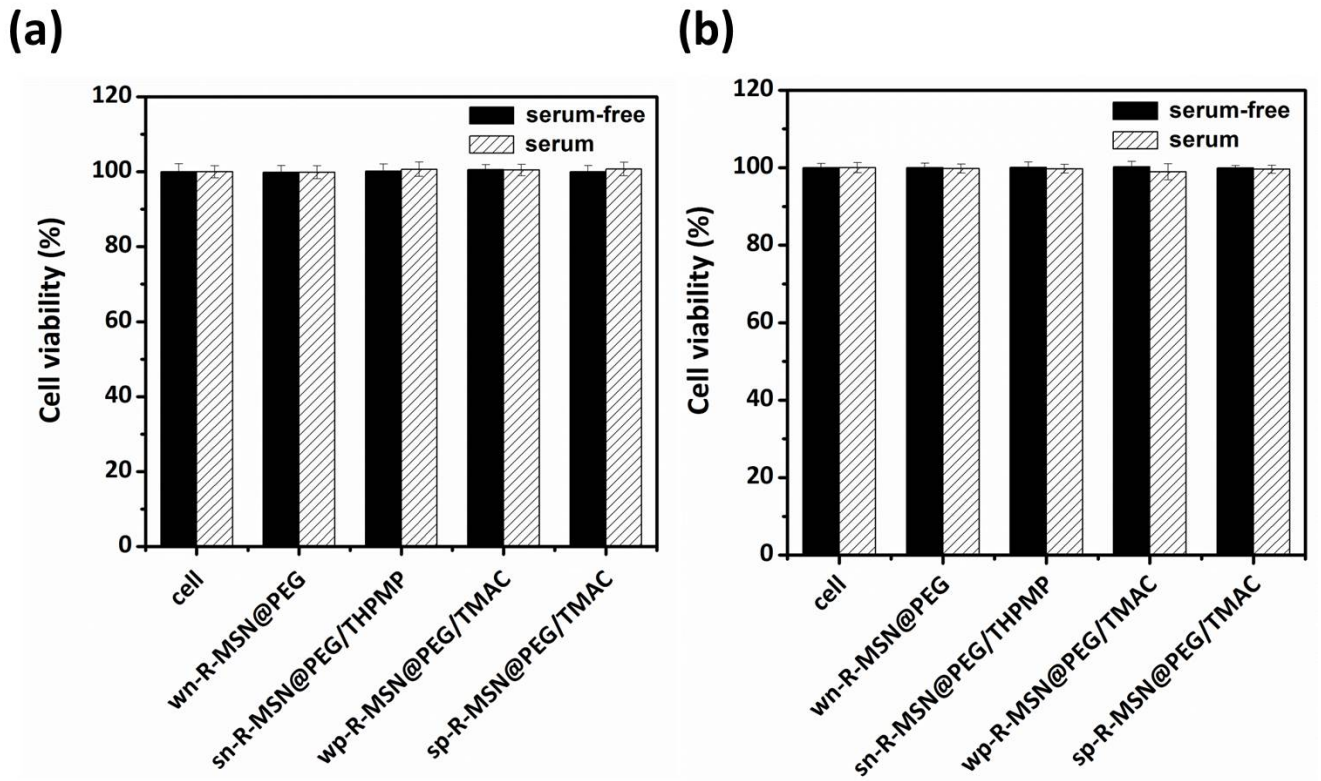

Figure S4. Western blot for the level of p-p38 in Raw 264.7 cells after treatments of sp-MSN@PEG/TMAC for 4 h.

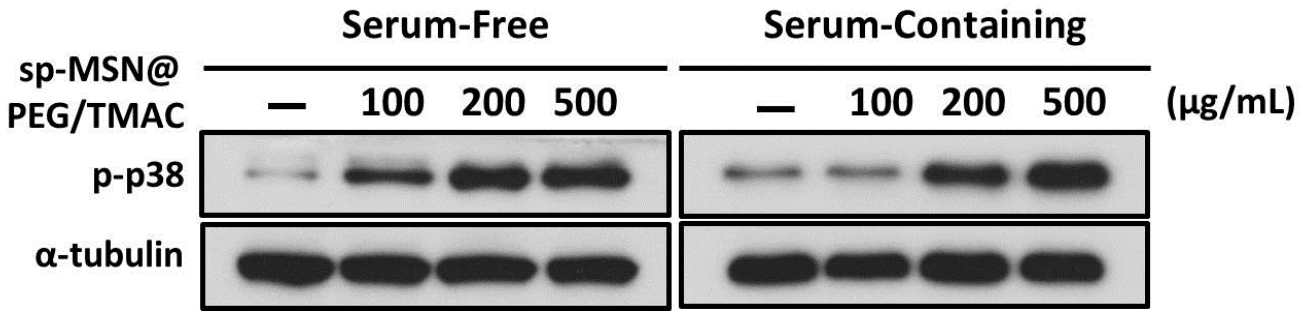

Figure S5. Confocal images of Raw 264.7 cells after treatmetns of nanoparticles at 200 μg mL^{-1} for 4 h in serum-free media. Shown cell nucleus (DAPI-labeled, blue), nanoparticles (FITC-labeled, green) and p65 (Alexa-568-labeled anti-p65 antibody, red).

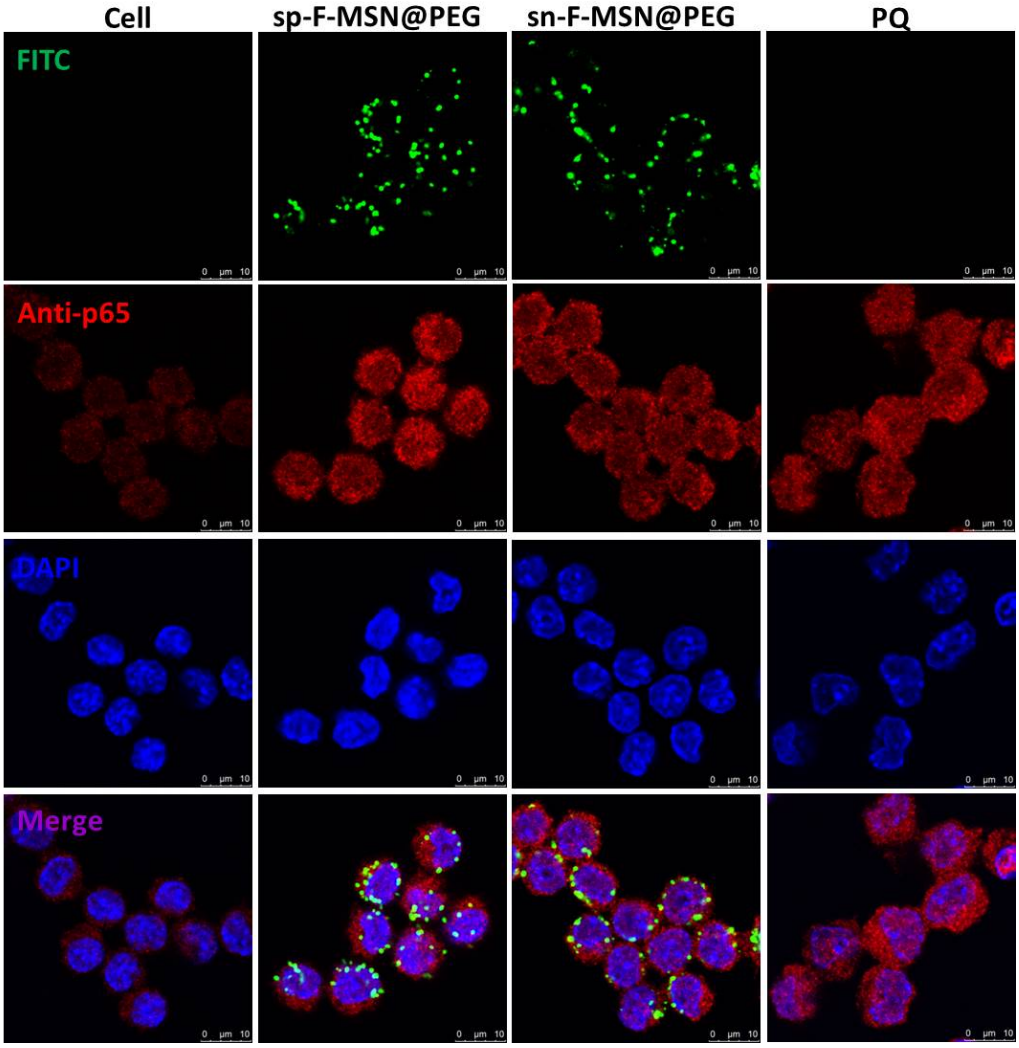

Table S1. The mortality of zebrafish after treatments of various types of R-MSN@PEG at 50 μg mL^{-1} and 100 μg mL^{-1} at selected time points.

25 hpf (5 h treatment)	wn-R-MSN @PEG		sn-R-MSN @PEG/THPMP		wp-R-MSN @PEG/TMAC		sp-R-MSN @PEG/TMAC	
	50 μg/mL	100 μg/mL	50 μg/mL	100 μg/mL	50 μg/mL	100 μg/mL	50 μg/mL	100 μg/mL
Normal/Lethal	16/0	16/0	16/0	16/0	16/0	16/0	16/0	1/15

4 dpf (96 h treatment)	wn-R-MSN @PEG		sn-R-MSN @PEG/THPMP		wp-R-MSN @PEG/TMAC		sp-R-MSN @PEG/TMAC	
	50 μg/mL	100 μg/mL	50 μg/mL	100 μg/mL	50 μg/mL	100 μg/mL	50 μg/mL	100 μg/mL
Normal/Lethal	16/0	16/0	16/0	16/0	16/0	16/0	16/0	1/15