

**Table S1.** Physicochemical properties of ZnO NPs and TiO<sub>2</sub> NPs

Properties	ZnO NPs	TiO <sub>2</sub> NPs
Manufacturer	Sigma-Aldrich	Evonik Degussa
Crystal structure <sup>a</sup>	-	Anatase 72.6%, Rutile 18.4%, Amorphous 9%
Surface coating <sup>a</sup>	No	No
Mean hydrodynamic diameter (nm) <sup>b</sup>		
Deionized water	211±11	354±15
M4 medium	622±30	1389±53
Zeta potential (mV) <sup>b</sup>		
Deionized water	-13.3±1.1	-2.0±1.4
M4 medium	-10.1±2.4	-0.4±0.3
Specific surface area (m <sup>2</sup> /g) <sup>c</sup>	12.0±0.0	55.0±0.4

ZnO NPs, zinc oxide nanoparticles; TiO<sub>2</sub> NPs, titanium dioxide nanoparticles.

<sup>a</sup>Supplied from the manufacturer.

<sup>b</sup>Measured by electrophoretic light scattering spectrophotometer .

<sup>c</sup>Measured by particle size analyzer.