

Supplementary information

Sedeveria pink ruby Extract-Mediated Synthesis of Gold and Silver Nanoparticles and Their Bioactivity against Livestock Pathogens and in Different Cell Lines

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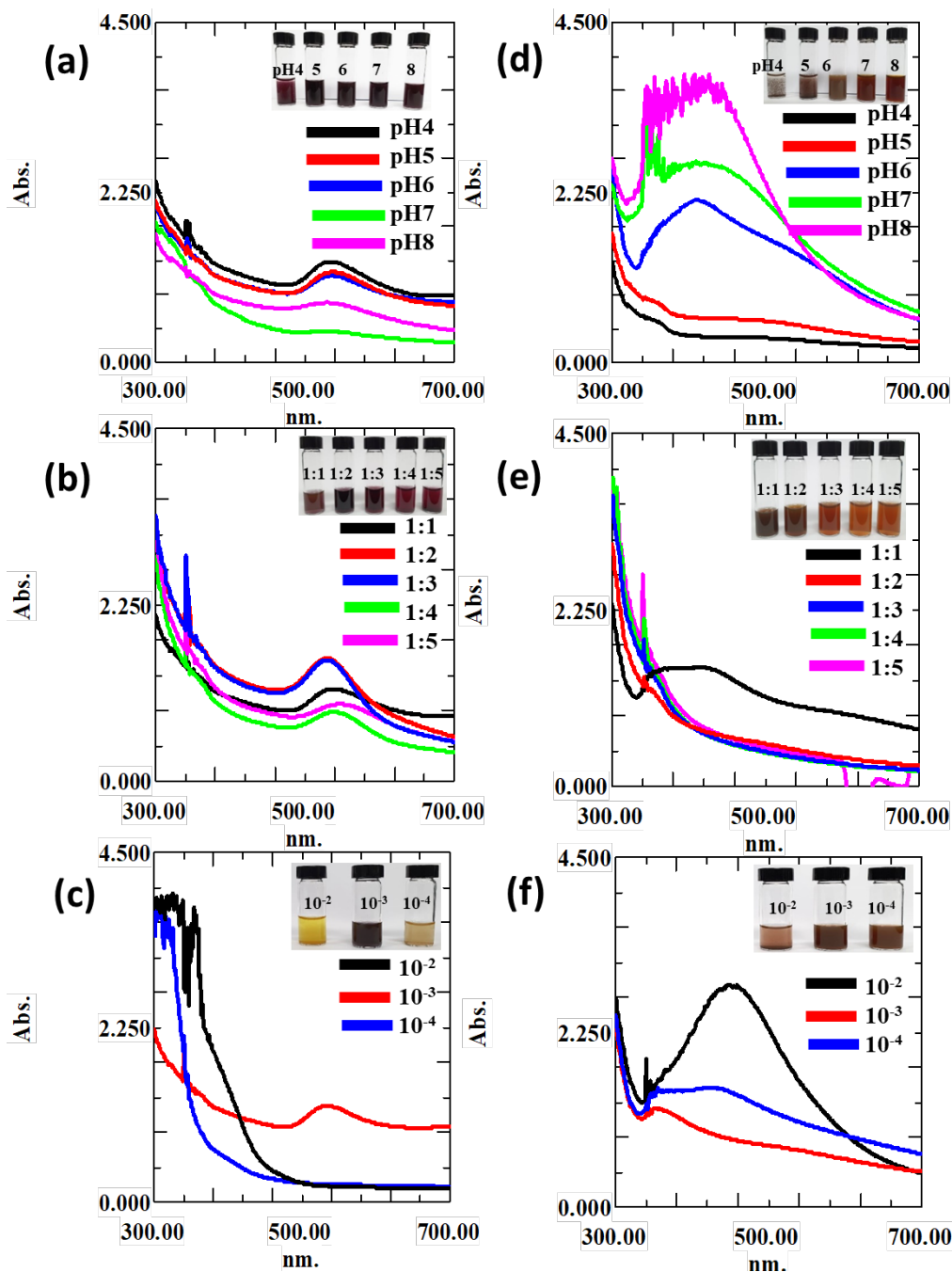


Figure S1. UV-vis absorbance spectra of biosynthesized SP-AuNPs and SP-AgNPs were optimized with different reaction parameters (pH, plant extract ratio and metal salt concentration). (a-c) UV-vis spectra of SP-AuNPs with different optimized ranges of pH, plant extract and metal salt concentration. (d-f) UV-vis spectra for SP-AgNPs prepared with different optimized ranges of pH, plant extract and metal ion concentration for 24 h.

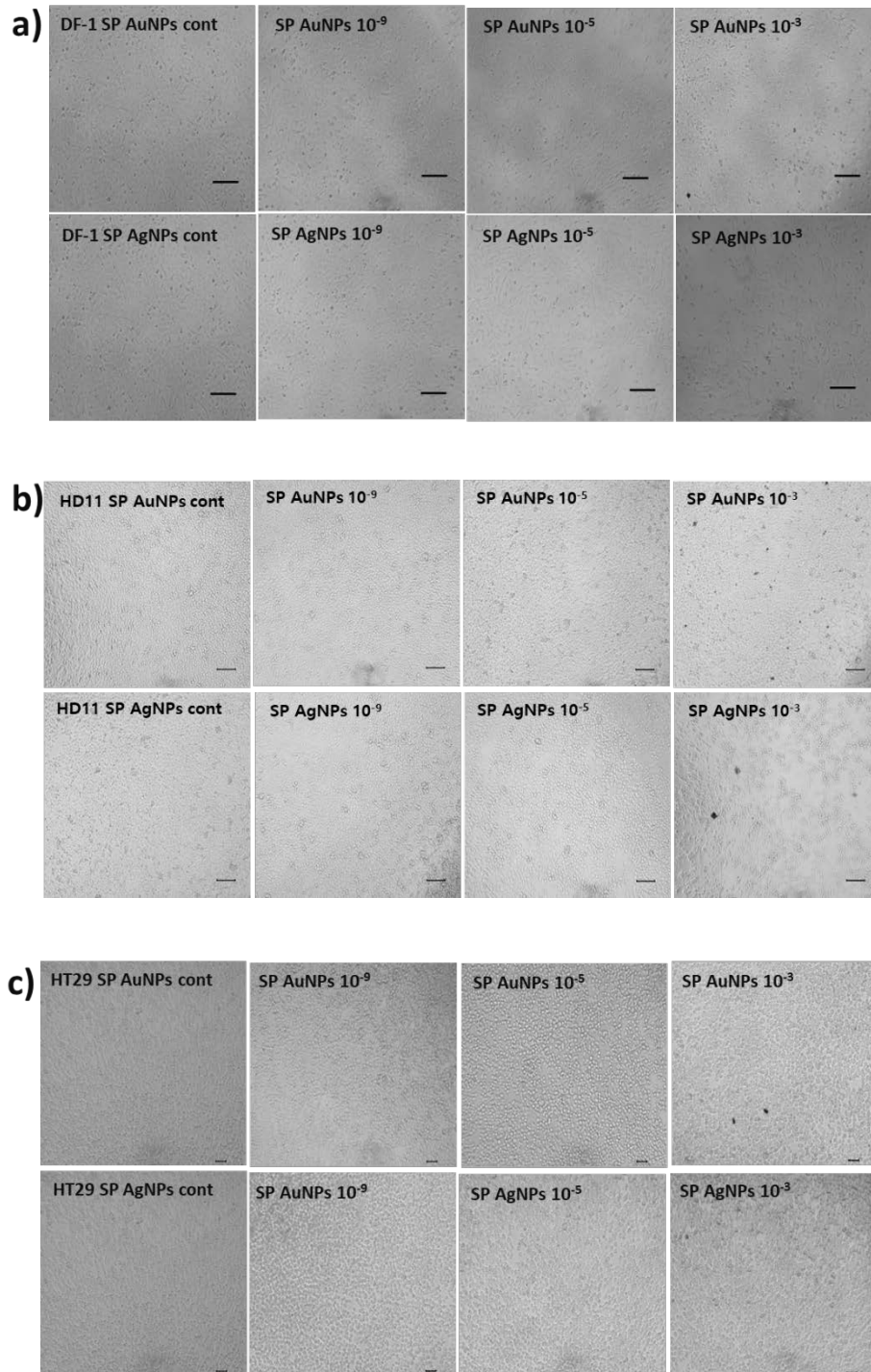


Figure S2. Cells was treated with different concentration of SP-AuNPs and SP-AgNPs (10^{-1} to 10^{-9} dilution) for 24 h. Morphological changes were observed in the nanoparticles treated and control cells by using light microscope (scale bar = x100). **(a)** DF-1 cells **(b)** HD11 cells and **(c)** HT-29 cells.

Table S1: MIC of *S.pink ruby* biosynthesized SP-AuNPs and SP-AgNPs against selected pathogenic microorganisms.

Pathogens	MIC ($\mu\text{g.ml}^{-1}$)		
	SP-AuNPs	SP-AgNPs	Control*
<i>Salmonella typhi</i>	0.102	0.102	0.347
<i>Salmonella enteritidis</i>	-	0.102	0.347
<i>Salmonella derby</i>	0.102	0.102	0.347
<i>E. coli</i>	0.102	0.102	0.039
<i>Yersinia enterocolitica</i>	0.102	0.102	NA
<i>Yersinia pseudotuberculosis</i>	0.076	0.050	NA
<i>Clostridium difficile</i>	0.050	-	0.019
<i>Candida albicans</i>	0.102	-	0.156
<i>Candida tropicalis</i>	0.102	-	0.156
<i>Candida glabrata</i>	-	-	0.156

*Ampicillin was used as standard antibiotic, - No activity.