

Supporting Information

Cytotoxic and Genotoxic Assessment of Glycolipid Reduced Gold and Silver Nanoparticles

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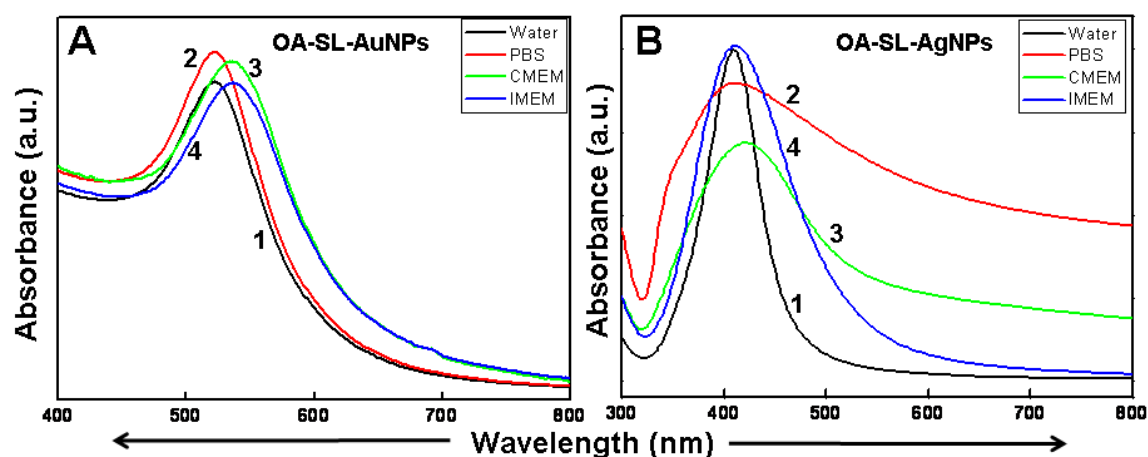
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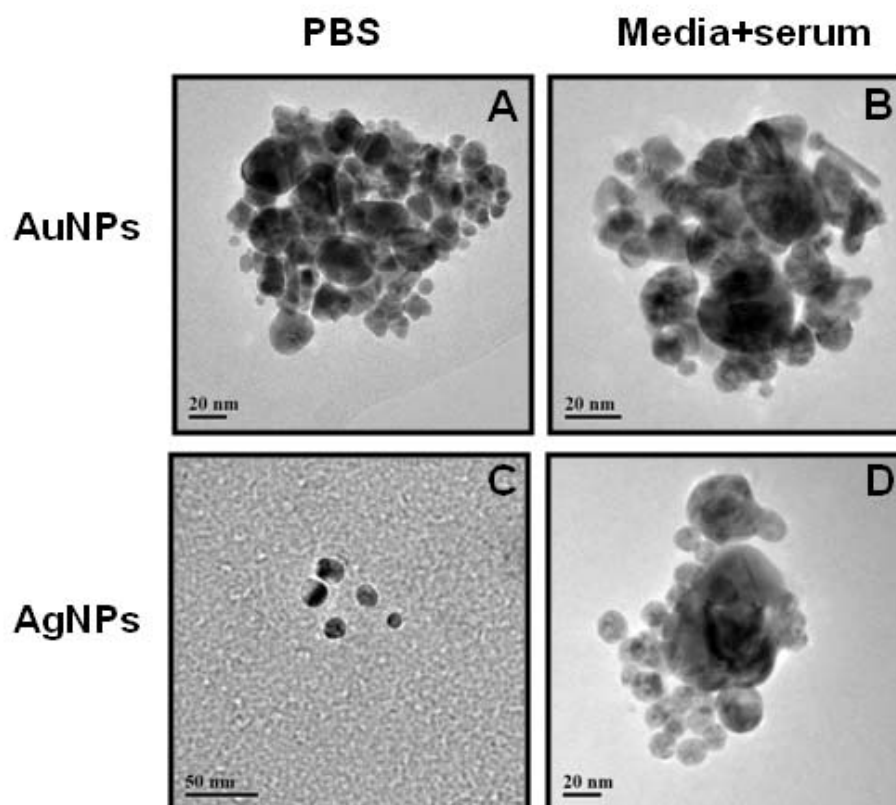
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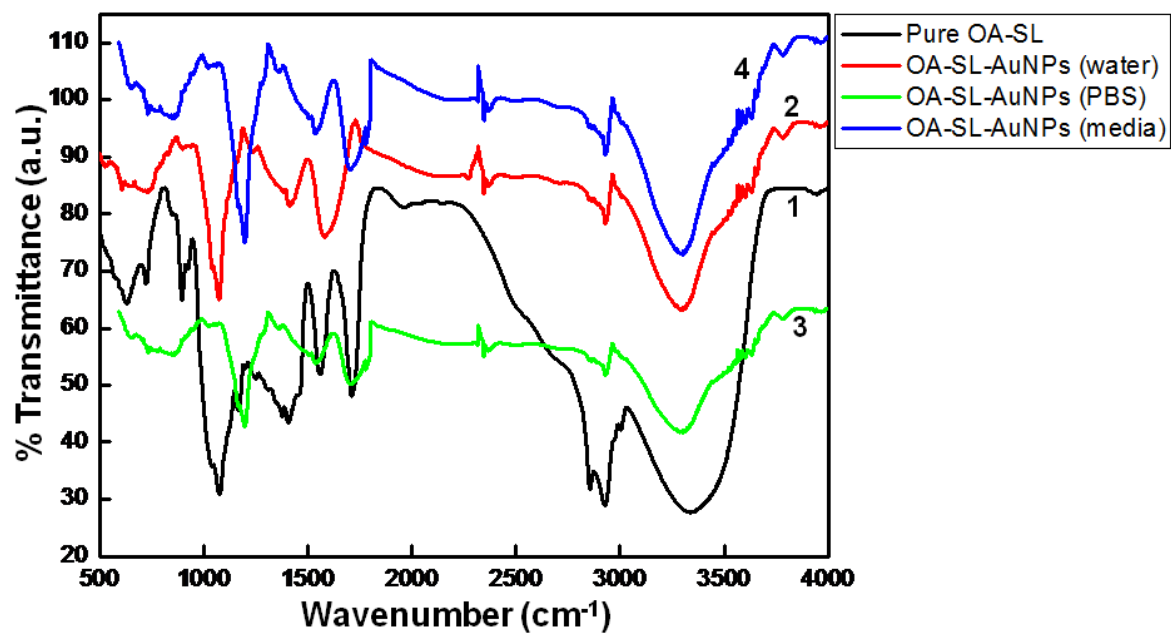


ESI-1: UV-vis spectra of OA-SL-AuNPs (A) and OA-SL-AgNPs (B) dispersed in water (curve 1), PBS (curve 2), CMEM (curve 3) and IMEM (curve 4).

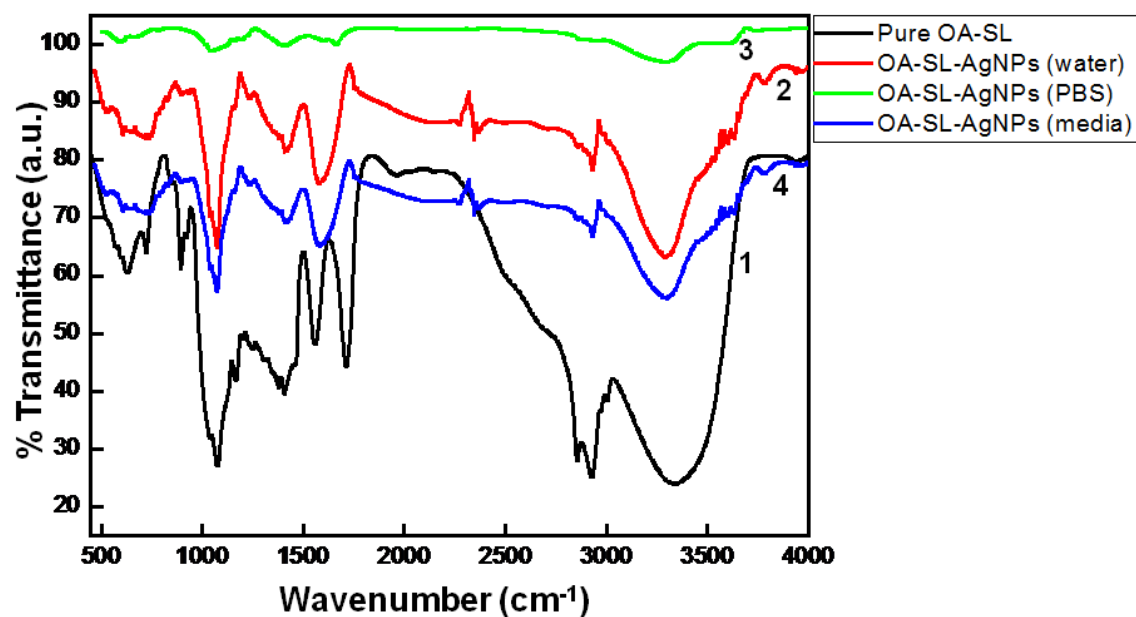
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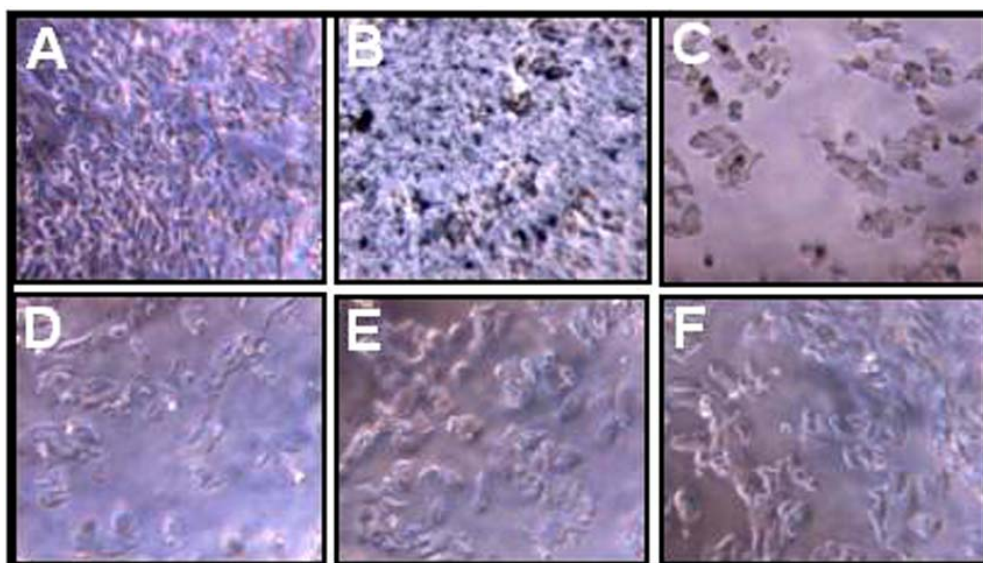
ESI-2: TEM images of AuNPs (A, B, C) and AgNPs (D, E, F) in serum containing media, PBS and water.



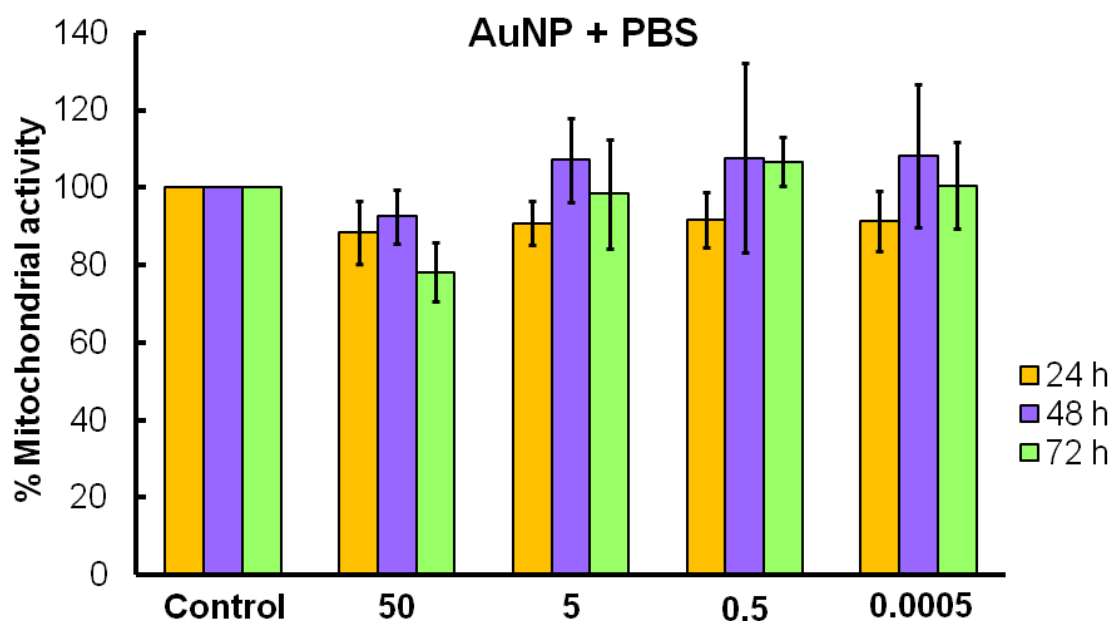
ESI-3: FTIR spectra recorded from pure OA-SL (trace 1), OA-SL-AuNPs dispersed in water (trace 2), OA-SL-AuNPs dispersed in PBS (trace 3) and OA-SL-AuNPs dispersed in CMEM media (trace 4)



ESI-4: FTIR spectra recorded from pure OA-SL (trace 1), OA-SL-AgNPs dispersed in water (trace 2), OA-SL-AgNPs dispersed in PBS (trace 3) and OA-SL-AgNPs dispersed in CMEM media (trace 4)

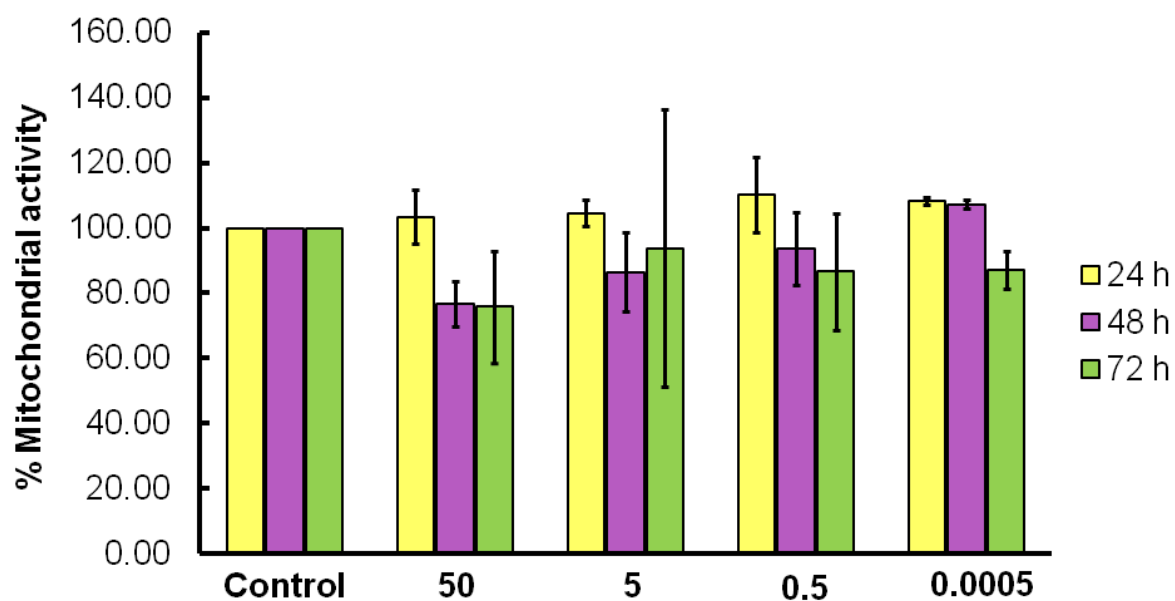


ESI 5: Phase contrast images of HepG2 cells (B to F) incubated respectively with 500 µg/mL, 50 µg/mL, 5 µg/mL, 0.5 µg/mL and 0.0005 µg/mL of OA-SL-AuNPs. Figure A shows the morphology of untreated (control) HepG2 cells incubated for 3 h.

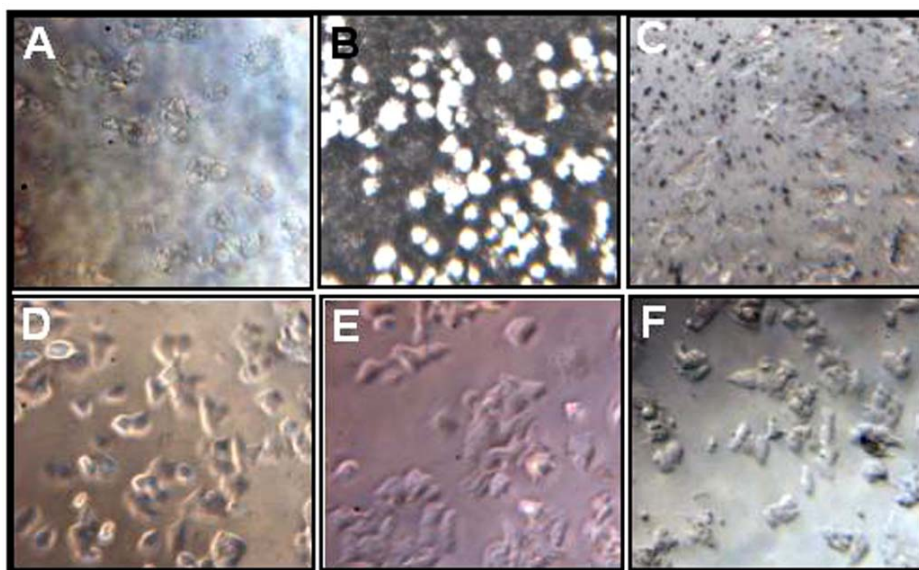


ESI-6: Statistical data representing the toxic effect of OA-SL-AuNPs dispersed in PBS incubated with HepG2 cells for 24, 48 and 72 h.

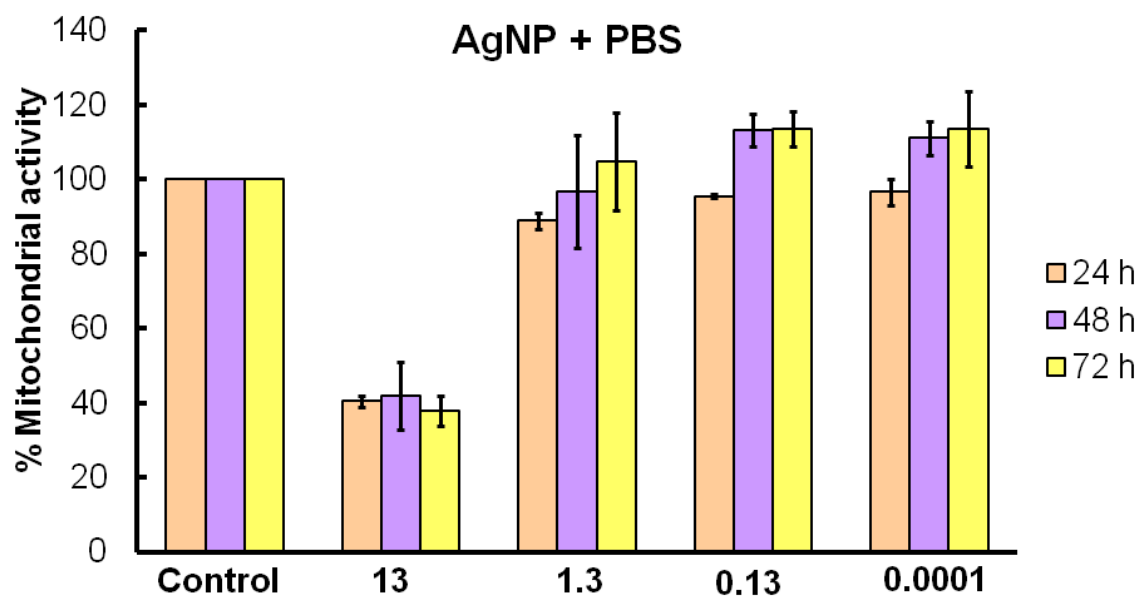
AuNP + CMEM



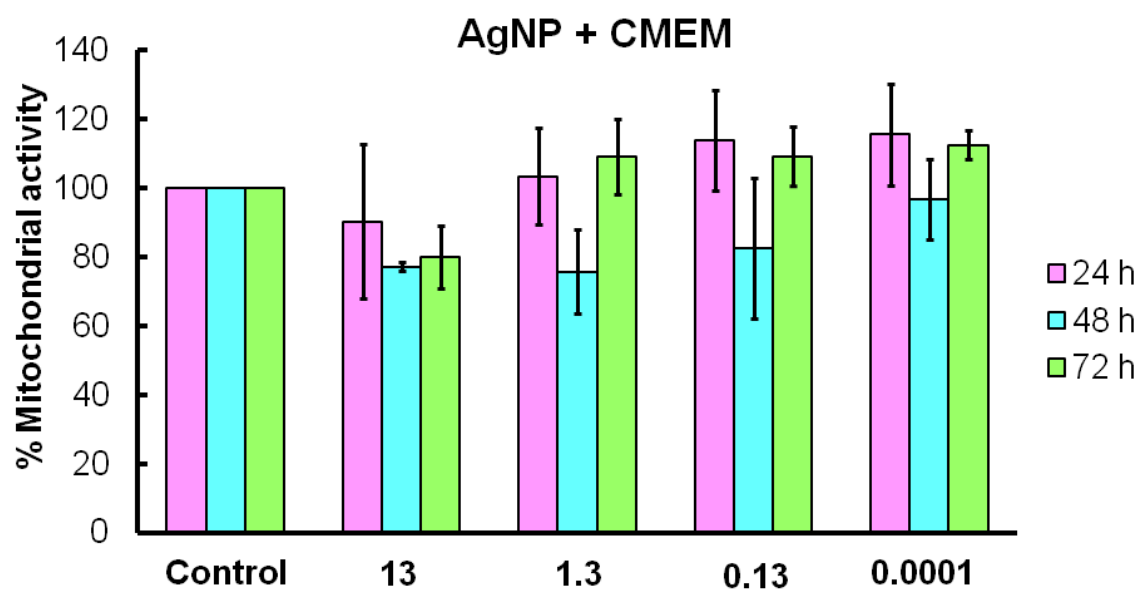
ESI-7: Statistical data representing the toxic effect of OA-SL-AuNPs dispersed in CMEM incubated with HepG2 cells for 24, 48 and 72 h.



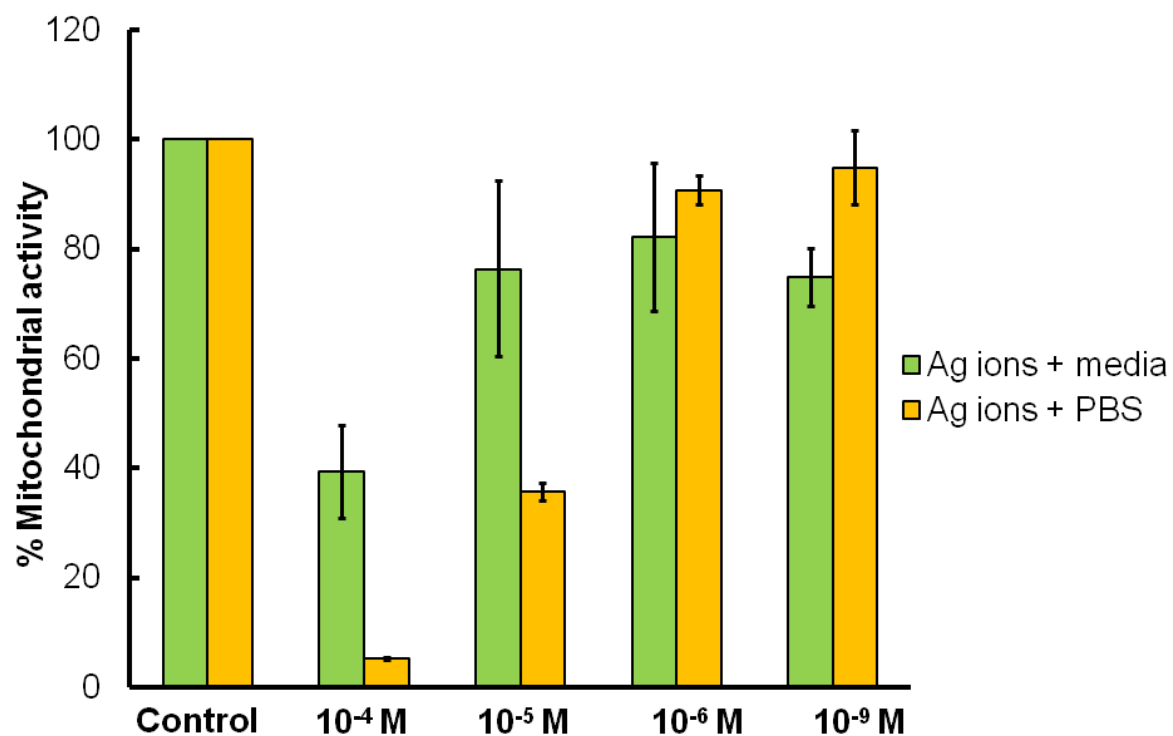
ESI 8: Optical microscope images of HepG2 cells (B to F) incubated respectively with 130 µg/mL, 13 µg/mL, 1.3 µg/mL, 0.13 µg/mL and 0.0001 µg/mL of OA-SL-AgNPs. Figure A shows the morphology of untreated (control) HepG2 cells incubated for 3 h.



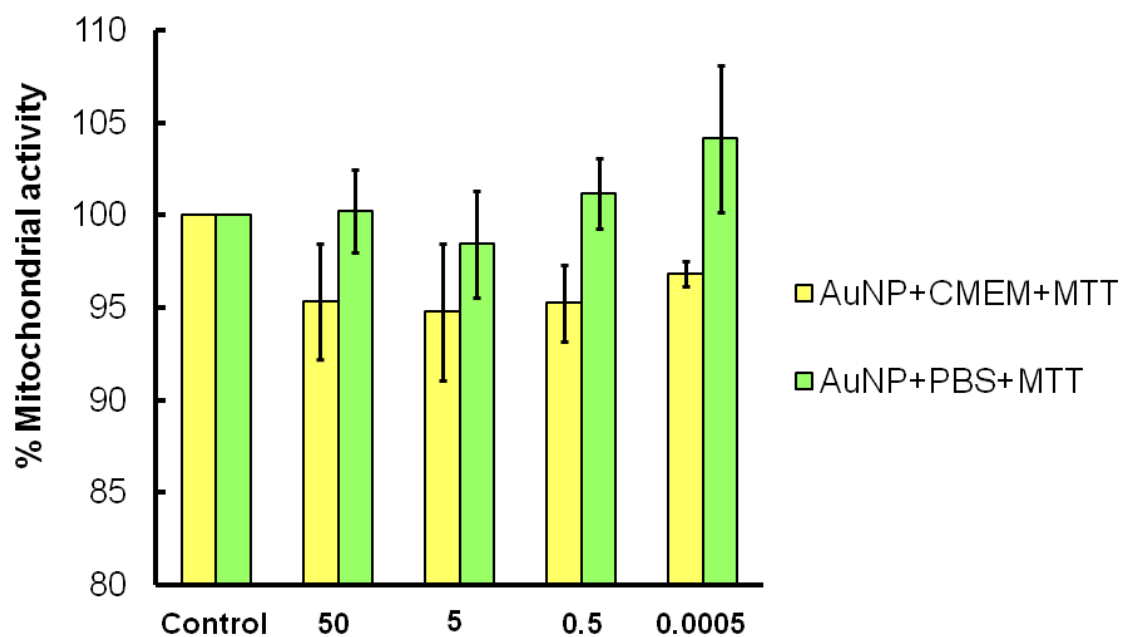
ESI-9: Statistical data representing the toxic effect of OA-SL-AgNPs dispersed in PBS and incubated with HepG2 cells for 24, 48 and 72 h.



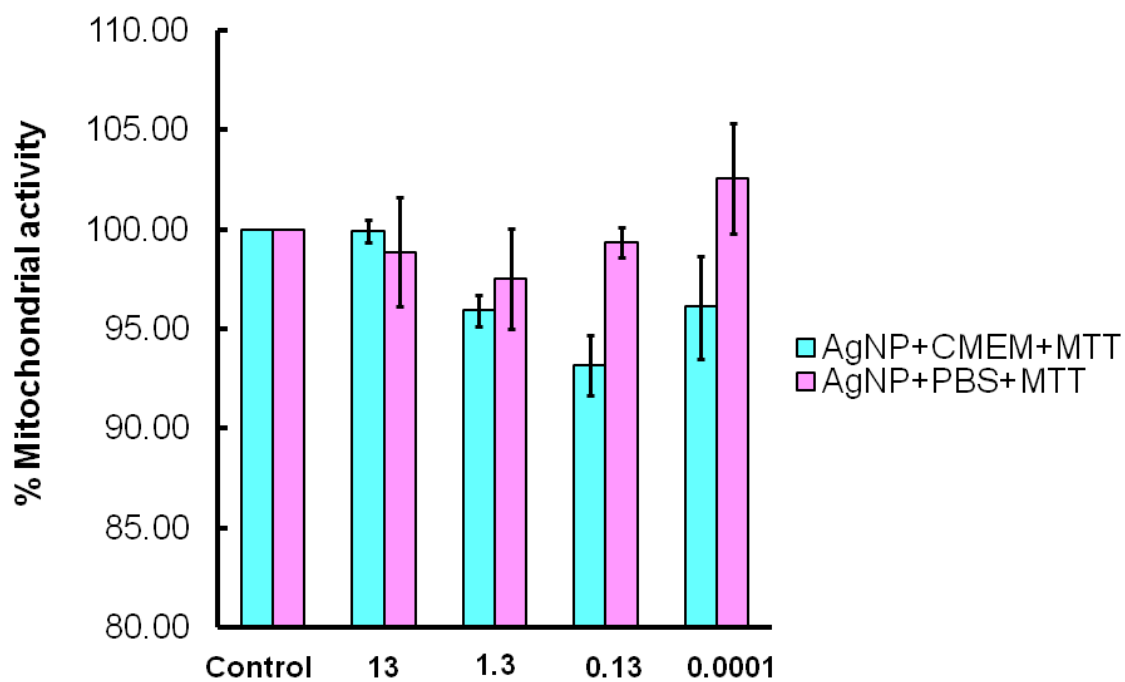
ESI-10: Statistical data representing the toxic effect of OA-SL-AgNPs dispersed in CMEM and incubated with HepG2 cells for 24, 48 and 72 h.



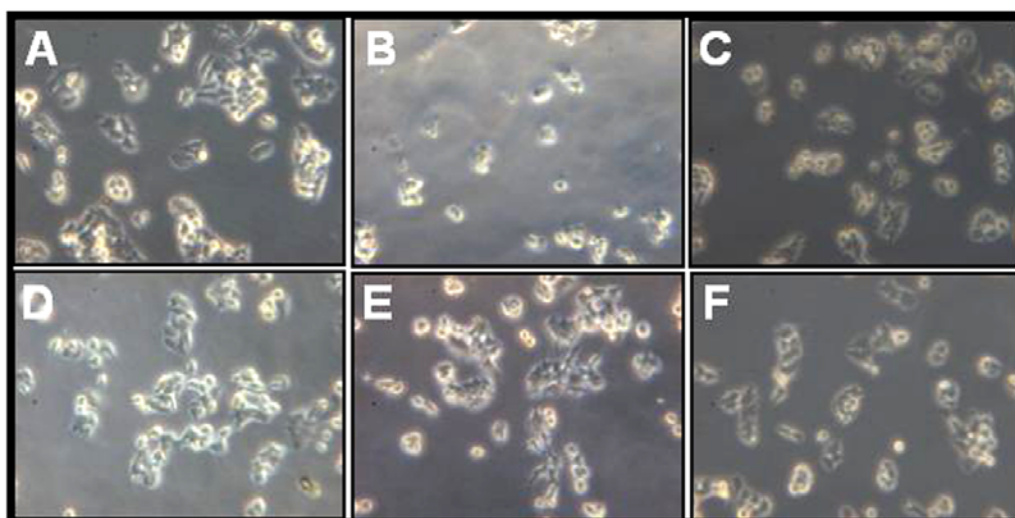
ESI-11: Statistical data representing the toxic effect of Ag⁺ ions incubated with HepG2 cells for 24 h in the presence of serum containing media and PBS.



ESI-12: Statistical data representing the interactions of AuNPs with MTT dye incubated for 24 h in the presence of CMEM and PBS.



ESI-13: Statistical data representing the interactions of AuNPs with MTT dye incubated for 24 h in the presence of CMEM and PBS.



ESI 14: Optical microscope images of HepG2 cells (B to F) incubated respectively with 600 µg/mL, 60 µg/mL, 6 µg/mL, 0.6 µg/mL and 0.0006 µg/mL of OA-SL molecules. Figure A shows the morphology of untreated (control) HepG2 cells incubated for 3 h.