

Supplementary Information for:

**Silver nanoparticles based coatings enhance adipogenesis
compared to osteogenesis in human mesenchymal stem cells
through oxidative stress**

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Table S1 Primer sequences used for RT-PCR

Gene	Primers (5'→3')
<i>RUNX2</i>	F: GCCTTCAAGGTGGTAGCCC R: CGTTACCCGCCATGACAGTA
<i>ALP</i>	F: AGCACTCCCACCTTCATCTGGAA R: GAGACCCAATAGGTAGTCCACATTG
<i>COLI</i>	F: CAGCCGCTTCACCTACAGC R: TTTTGTATTCAATCACTGTCTTGCC
<i>OPN</i>	F: CTCAGGCCAGTTGCAGCC R: CAAAAGCAAATCACTGCAATTCTC
<i>OCN</i>	F: CACTCCTCGCCCTATTGGC R: CCCTCCTGCTTGGACACAAAAG
<i>PPAR γ</i>	F: ATGCCAAAAGCATTCTGGTT R: GAGGCCAGCATTGTGTAAATGA
<i>ADD1</i>	F: ACGGTGTAAATTGGCAGCGT R: GAAGCCCAAAGGGACAATGA
<i>LPL</i>	F: TGCCCACTTCTAGCTGCCCT R: CACACGGCCAGAGTCAGCAC
<i>C/EBPα</i>	F: CCGCCAACGCATCACTG R: AGAGTGAGACTCTACGTTCTCC
<i>aP2</i>	F: TGTCTTGGTACATGTGCAGAAAT R: GACGCCTTTCATGACGCATT
<i>SOD1</i>	F: GGTGGGCCAAAGGATGAAGAG R: CCACAAGCCAAACGACTTCC
<i>SOD2</i>	F: GCTCCGGTTTTGGGGTATCTG R: GCGTTGATGTGAGGTTCCAG
<i>SOD3</i>	F: ATGCTGGCGCTACTGTGTTC R: CTCCGCCGAGTCAGAGTTG
<i>CAT</i>	F: CTCCGCCGAGTCAGAGTTG R: CCTTTGCCTTGGAGTATTTGGTA
<i>GPX1</i>	F: CAGTCGGTGTATGCCTTCTCG R: GAGGGACGCCACATTCTCG
<i>GPX4</i>	F: GAGGCAAGACCGAAGTAAACTAC R: CCGAACTGGTTACACGGGAA
<i>GAPDH</i>	F: GAAGGTGAAGGTCGGAGTC R: GAAGATGGTGATGGGATTTC

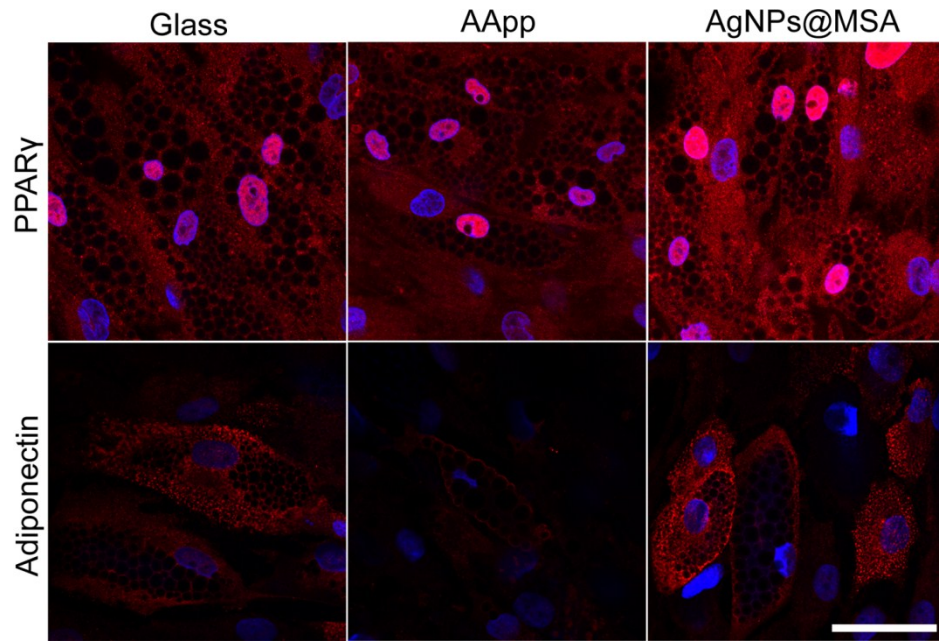


Fig. S1 Higher magnification LSCM images of PPAR γ and adiponectin expressed by hMSCs cultured on different samples after adipogenic induction for 14 days (scale bar = 50 μ m).

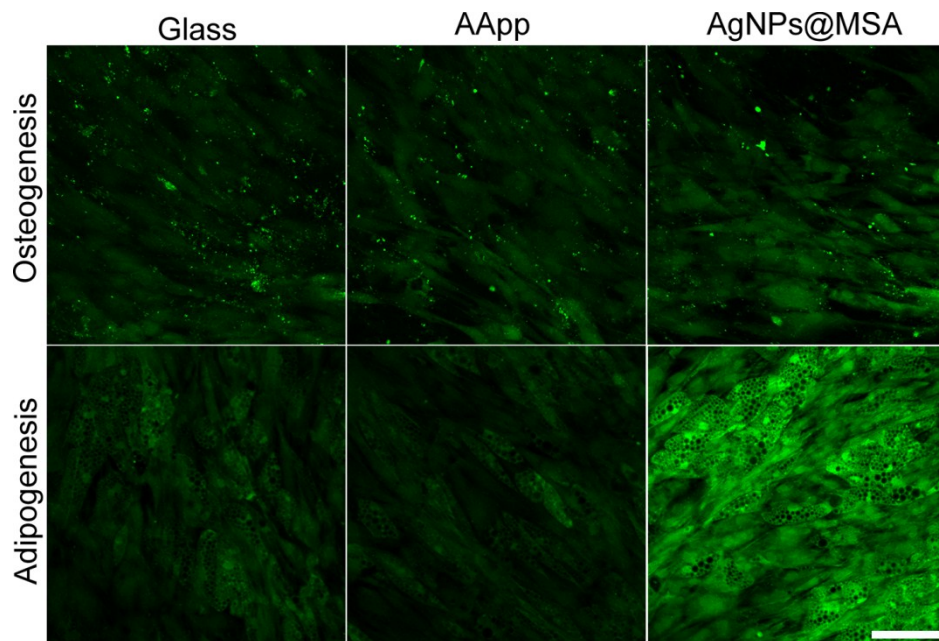


Fig. S2 LSCM images of intracellular ROS in cells on three surfaces after induction in osteogenic and adipogenic medium for 14 days (scale bar = 100 μ m).