



Supplementary Materials

Hyaluronic Acid Derivative Molecular Weight-Dependent Synthesis and Antimicrobial Effect of Hybrid Silver Nanoparticles

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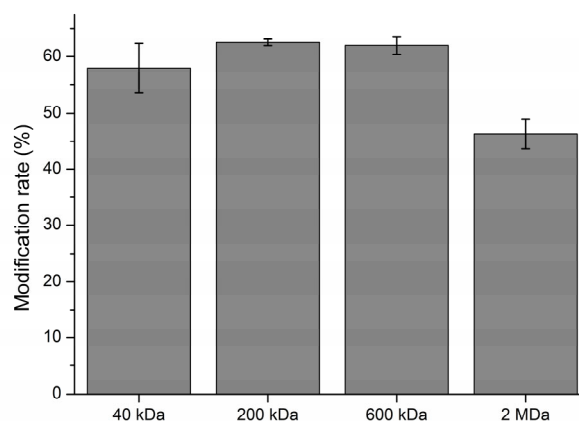


Figure S1. Modification degree of the HA-ADH evaluated by the TNBSA assay.

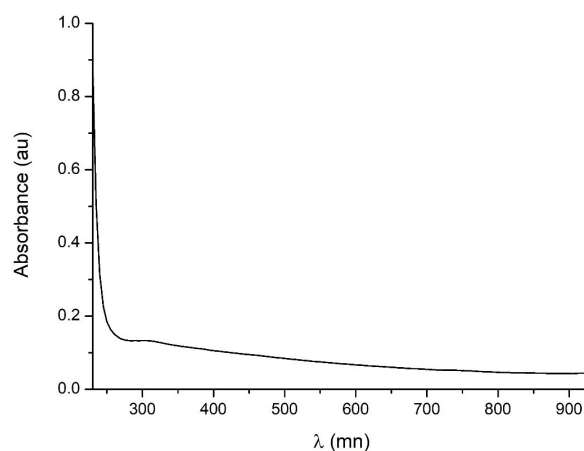


Figure S2. UV-vis spectrum of unmodified 200 kDa HA after 24 h of incubation with silver nitrate.

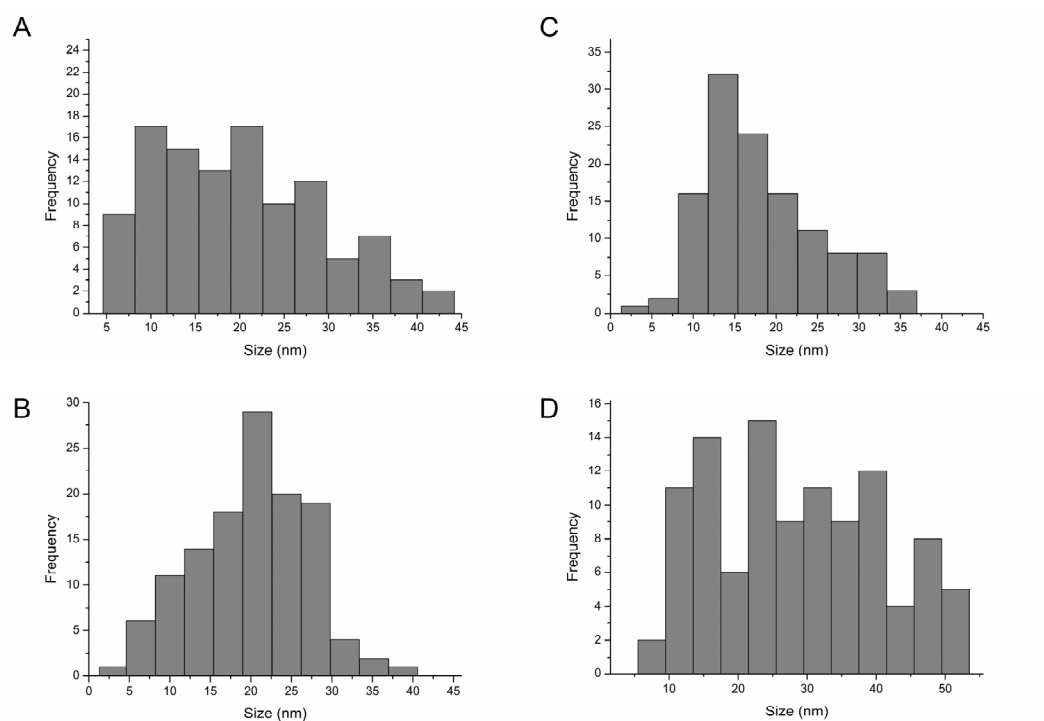


Figure S3. Size histogram of HA-ADH-Ag NPs synthesised with A) 40 kDa, B) 200 kDa, C) 600 kDa and D) 2 MDa.

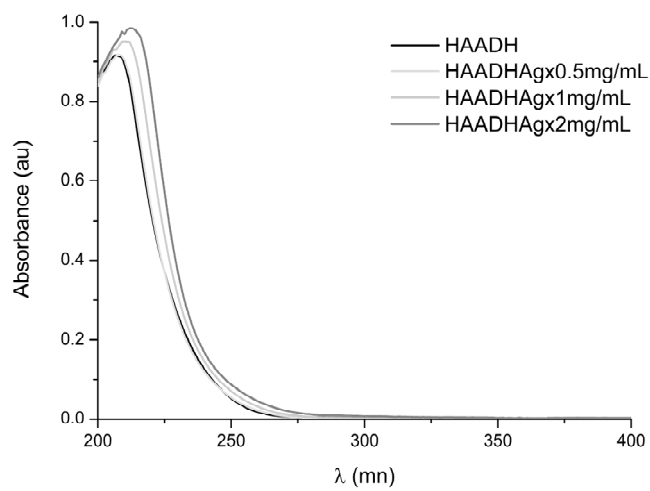


Figure S4. UV-vis spectra of HA-ADH with different concentrations of silver nitrate.

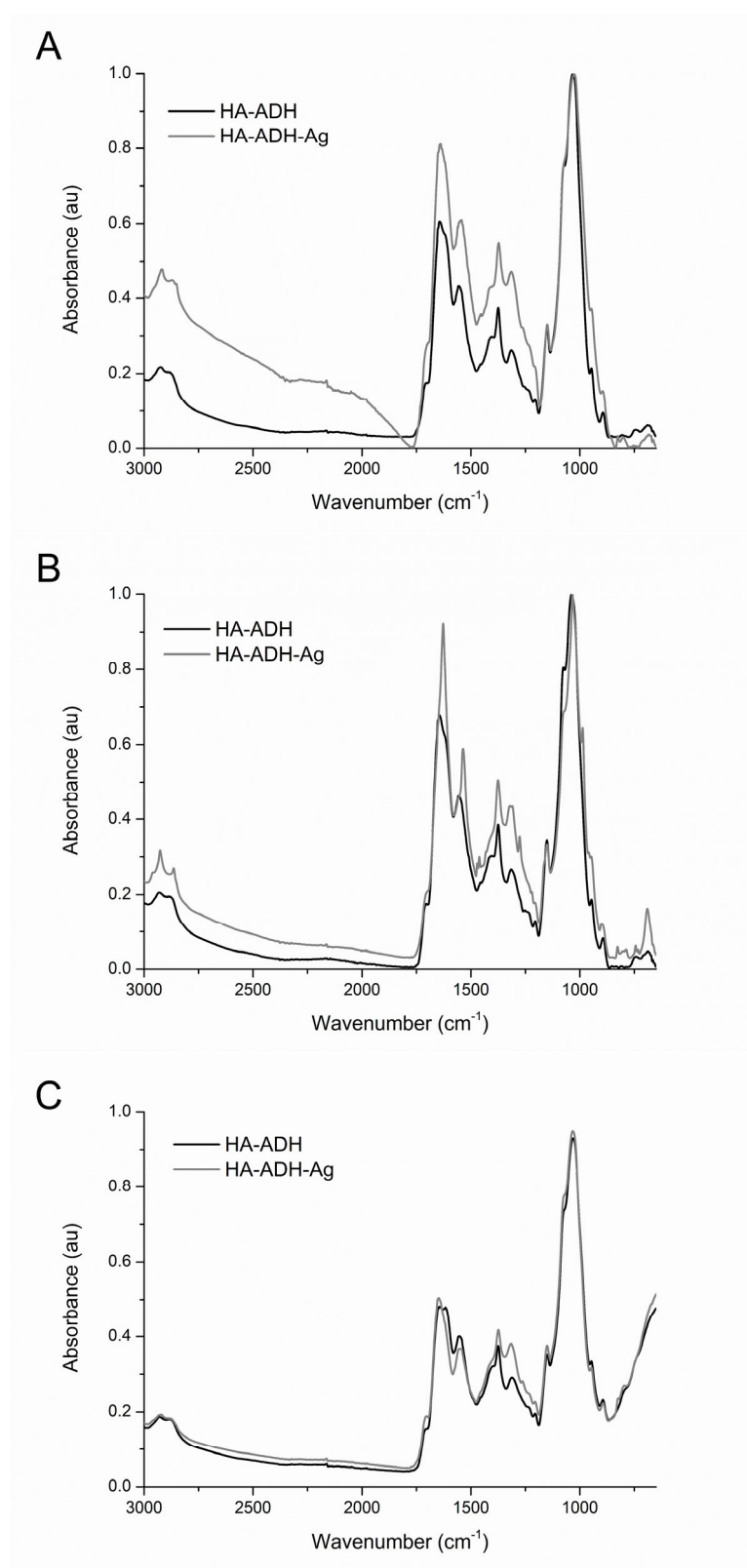


Figure S5. FTIR spectra of HA-ADH and HA-ADH-Ag NPs, A) 40 kDa HA-ADH , B) 600 kDa HA-ADH and C) 2 MDa HA-ADH.

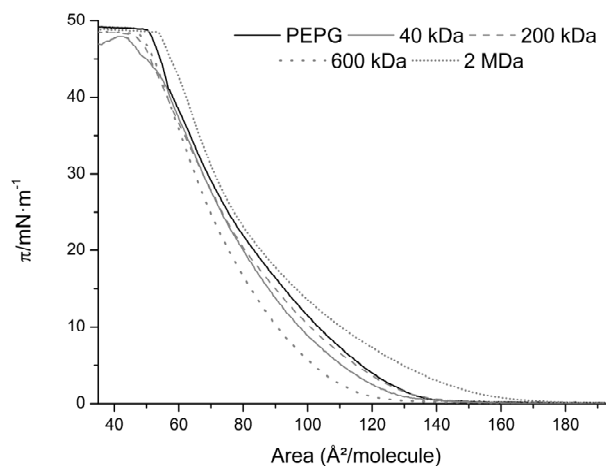


Figure S6. π -A isotherms of a PE:PG 8:2 mix monolayers in PBS subphase (solid black), and with 40 kDa (grey solid), 200 kDa (grey dash), 600 kDa (grey dot) and 2 MDa (grey short dot) unmodified HA.

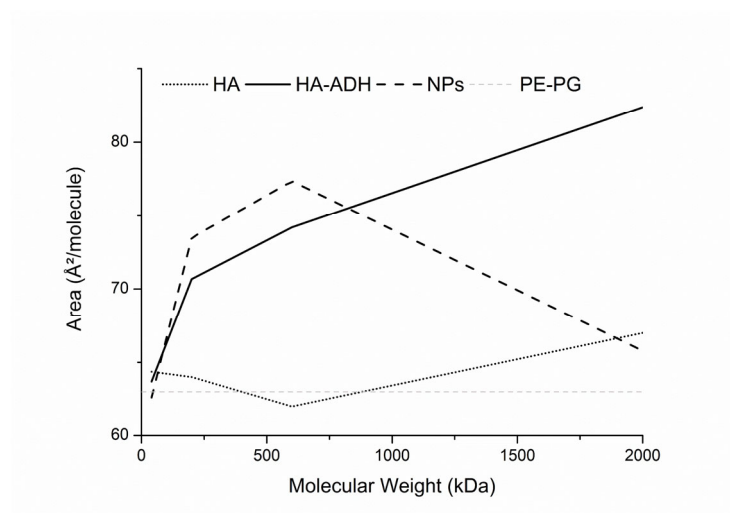


Figure S7. Representation of Area per molecule values at 33 mN m^{-1} vs Mw of unmodified HA, HA-ADH and HA-ADH-Ag NPs. Dash grey line represent the area of the control PE:PG isotherm at this pressure.

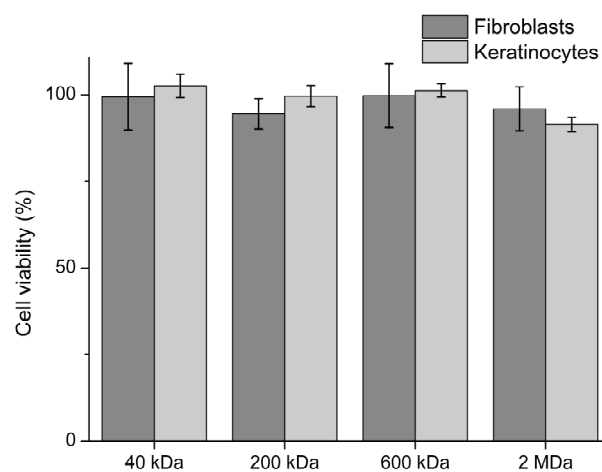


Figure S8. Cytotoxicity of HA-ADH in a concentration of 0.9 % (w/v) towards fibroblasts (BJ5tα) and keratinocytes (HaCat) assessed by alamarBlue assay.