Supporting Information

Quantitative Evaluation of Adhesion of Osteosarcoma Cells to Hydrophobic Polymer Substrate with Tunable Elasticity

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Dependence of indentation depth on the calculated Young's modulus of cP*n*BA substrate.

The apparent Young's modulus, *E*, of cP*n*BA films were calculated from *f-i* curves using the modified Hertz model, which assumes the contact between a cone with infinitely small apex and a flat surface. The calculated *E* value decays with the increase in indentation depth and shows convergence (Figure S1). This asymptotic behavior of *E* is because, in a small indentation region (< 100 nm), the AFM tip has relatively larger contact to cP*n*BA film surface compared to the contact the Hertz model assumes due to the cantilever tip radius (~10 nm). In this work, the *E* values which have difference of < 10% from the estimated convergence given by exponential functions are taken as the apparent Young's modulus of cP*n*BA films.

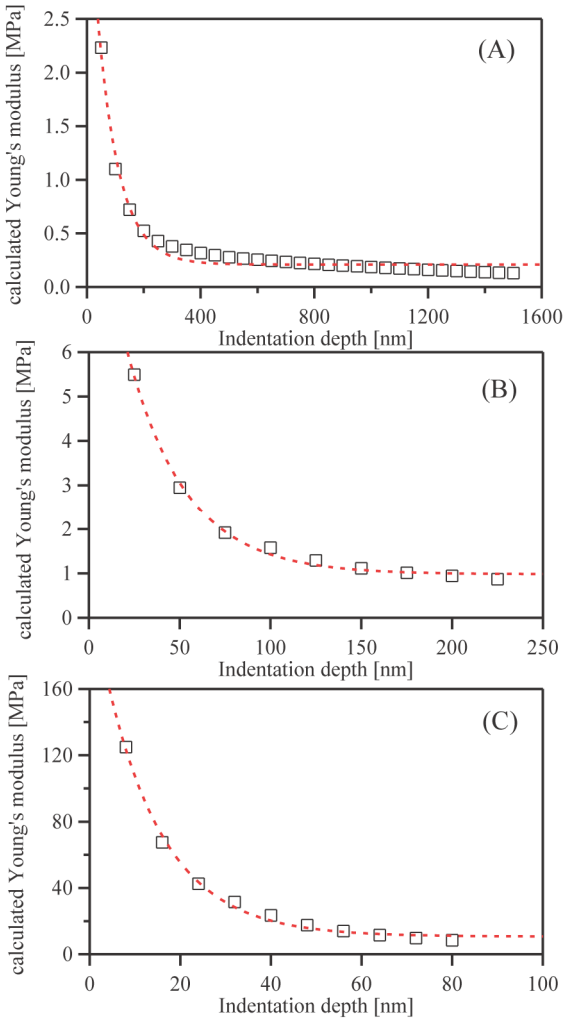

Figure S1: Dependence of indentation depth on the calculated Young's modulus of (A) S1, (B) S3, and (C) S5 samples in air. The dotted lines are given as a guide to the eye.