Electronic Supporting Information

Effect of Interfacial Proteins on Osteoblast-like Cell Adhesion to Hydroxyapatite Nanocrystals

Motohiro Tagaya,^{*,†,‡,§} Toshiyuki Ikoma,^{†,‡} Taro Takemura,[‡]

Nobutaka Hanagata,[‡] and Junzo Tanaka[†]

† Department of Metallurgy and Ceramics Science, Tokyo Institute of Technology,

Tokyo, Tokyo 152-8550, Japan

‡ Biomaterials Center, National Institute for Materials Science,

Tsukuba, Ibaraki 305-0047, Japan

§ Research Fellow of the Japan Society for the Promotion of Science, Tokyo, Japan

* Author to whom correspondence should be addressed:

Tel: +81-3-5734-3960, Fax: +81-3-5734-3369, E-mail: tagaya.m.aa@m.titech.ac.jp



Figure S1. AFM (a–c) topographic and (d–f) phase-shift images of the (a, d) BSA (area: 250 \times 250 nm²), (b, e) Fn (area: 300 \times 300 nm²) and (c, f) Col (area: 2.5 \times 2.5 μ m²) adsorbed on the HAp for 1 h.



Figure S2. (a) ΔD - Δf plot of the cell adhesion on the HAp without the pre-adsorption of FBS for 2 h, and (b) the CLSM image of the adhered cell at 2 h.



Figure S3. AFM topographic images of the interfacial pseudopods of the cells on the (a) FBS, (b) FBS-BSA, (c) FBS-Fn and (d) FBS-Col, which were incubated at 120 min.