

Supporting Information

Blood-compatible poly(2-methoxyethyl acrylate) induces blebbing-like phenomenon and promotes viability of tumor cells in serum-free medium

*Meng-Yu Tsai¹, Fumihiko Aratsu^{1, *}, Shogo Sekida², Shingo Kobayashi¹, and Masaru*

*Tanaka^{1, 2, *}*

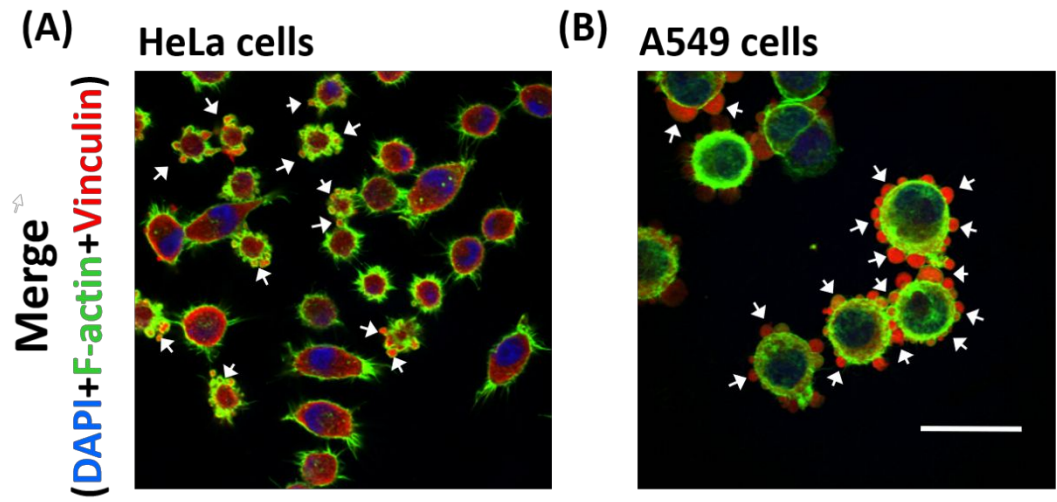
¹Institute for Materials Chemistry and Engineering, Kyushu University, 744 Motoooka, Nishi-ku, Fukuoka 819-0395, Japan.

²Department of Applied Chemistry, Graduate School of Engineering, Kyushu University, 744 Motoooka, Nishi-ku, Fukuoka 819-0395, Japan.

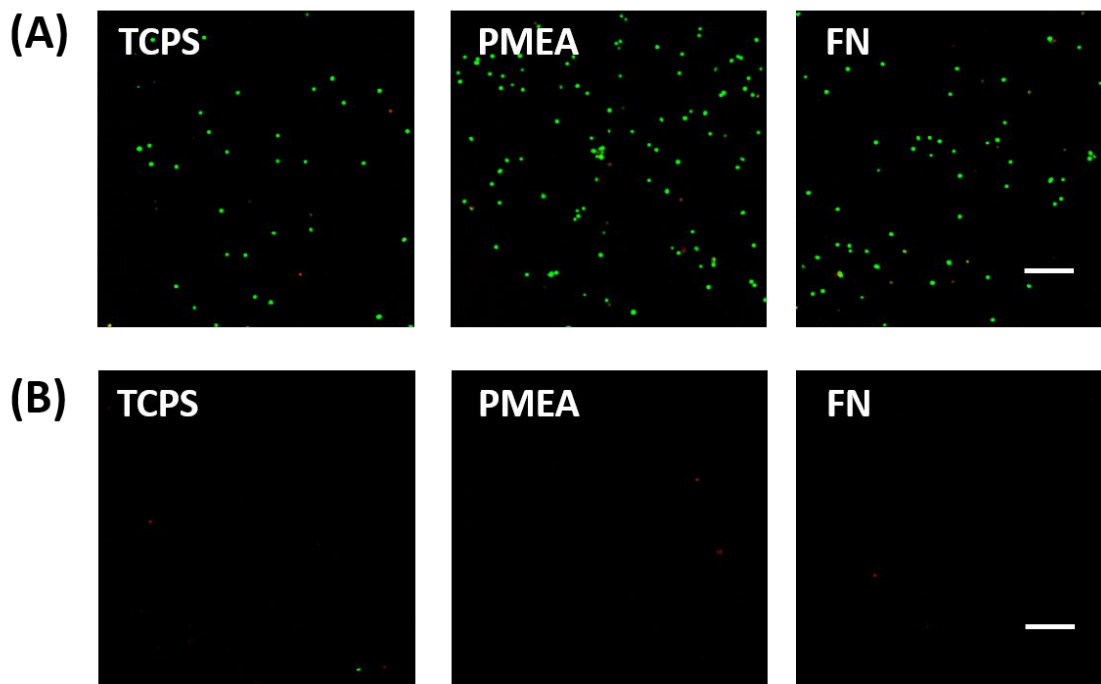
*e-mail:

fumihiko_aratsu@ms.ifoc.kyushu-u.ac.jp (Fumihiko Aratsu)

masaru_tanaka@ms.ifoc.kyushu-u.ac.jp (Masaru Tanaka)



Supplementary Information Figure S1. (A), (B) Observation of cell morphology of HeLa and A549 cells on PMEAs substrate. Cells cultured on PMEAs substrate for 1 h in serum-free medium were fixed and stained for vinculin, F-actin, and nuclei. The white arrows and arrowheads respectively indicate blebbing-like structures. Scale bar, 30 μm .



Supplementary Information Figure S2. Evaluation of cell viability on each substrate. (A) Live/dead staining of HT-1080 cells after 4 days culture in serum-free medium on TCPS, PME, and FN-coated substrate. Green (calcein-AM positive cells): viable cells; Red (PI positive cells): dead cells. Scale bar, 200 μm . (B) Staining of apoptotic cells and dead cells after 4 days culture in serum-free medium on TCPS, PME, and FN-coated substrate by using an Annexin V-FITC/PI apoptosis detection kit. Green (Annexin V positive cells): apoptotic cells; Red (PI positive cells): dead cells. Scale bar, 200 μm .

Supplementary Information Video S1. Movie depicted in Figure 3. Images were acquired at 12-sec intervals, and the movie was converted to 12 fps. Scale bar, 10 μm .

Supplementary Information Video S2, S3, S4. Movie depicted in Figure 4A, B, and C. Images were acquired at 5-min intervals, and the movie was converted to 60 fps. Scale bar, 30 μm .