Electronic Supplementary Information

Thermoresponsive Block Copolymer Brush for Temperature-modulated Hepatocyte Separation

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S.1 Cell culture

Cell culture media are described in Table S1. Cells were cultured on a 100-mm tissue culture polystyrene dish (TCPS) at 37°C in 5% CO_2 using a CO_2 incubator (9000EX; WakenBtech, Kyoto, Japan). The cell culture medium was changed every 3 days. At 80% confluency, the medium was removed by aspiration. Then, the cells were rinsed with phosphate-buffered saline (2 mL), and trypsin solution (2.5 mL) was added to the dish. The dish was incubated for 3 min. After the detachment of the cells from the dish, the cell culture medium (2.5 mL) was added to the dish, and the cell suspension was collected in a centrifuge tube. Centrifugation was performed at 1500 rpm for 3 min. The supernatant was removed, and the medium was added to the cells. Then, 10 μL of the cell suspension was collected, and the cells in the cell suspension were counted. The cells were seeded at 5.0×10^4 cells/cm^2 in the 100-mm TCPS for passage culture.

Table S1 Cell culture media

Cells	Culture media [a)]	Additives [b)]
HepG2	DMEM, high glucose, pyruvate	FBS (10%) NEAA (1%) Penicillin-Streptomycin (1%)
TWNT-1	DMEM, high glucose, pyruvate	FBS (10%) NEAA (1%) Penicillin-Streptomycin (1%)
RAW264.7	DMEM, high glucose, pyruvate	FBS (10%) NEAA (1%) Penicillin-Streptomycin (1%)

a) Volume of cell culture medium was 500 mL. b) Additives were added to 500 mL of the cell culture medium.

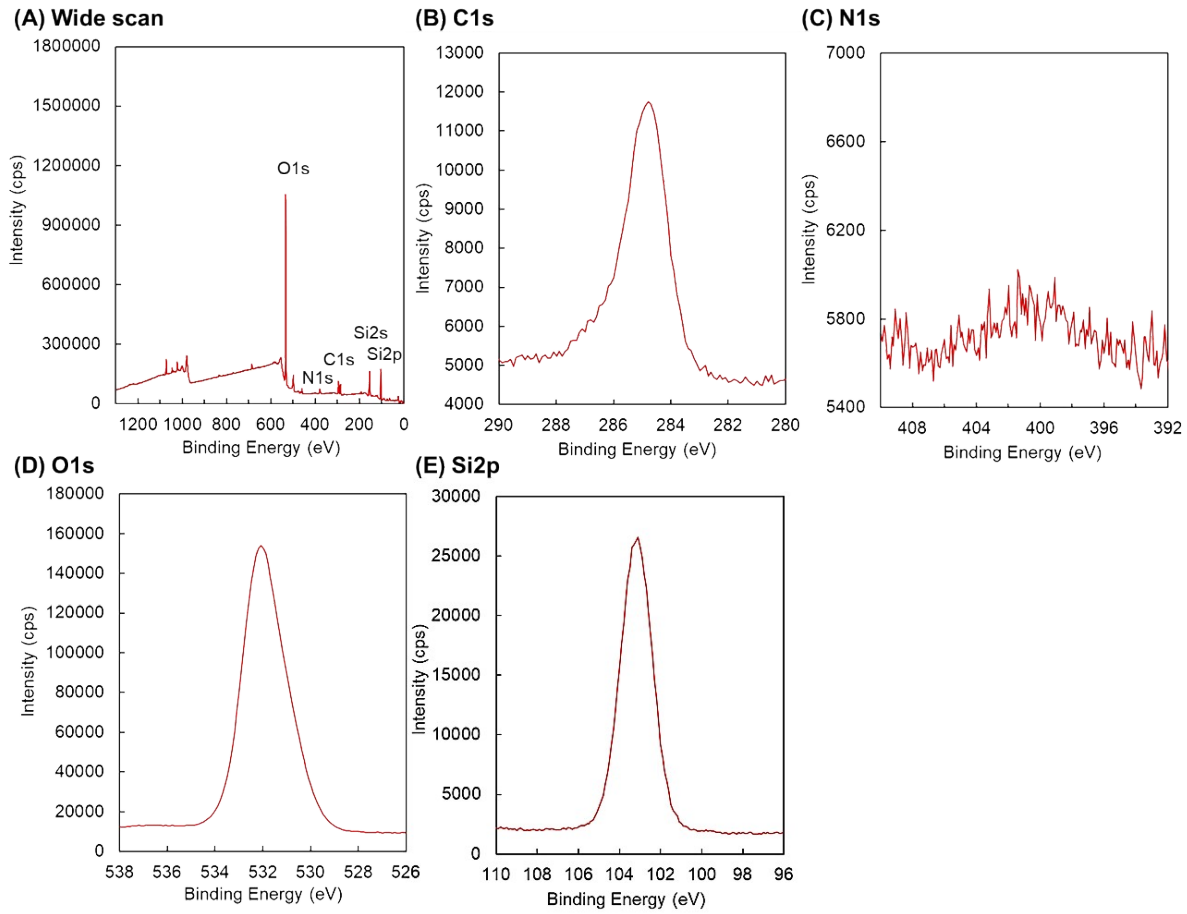

Fig. S1 XPS spectra of the ATRP initiator-modified glass substrate. Take-off angle of 90°

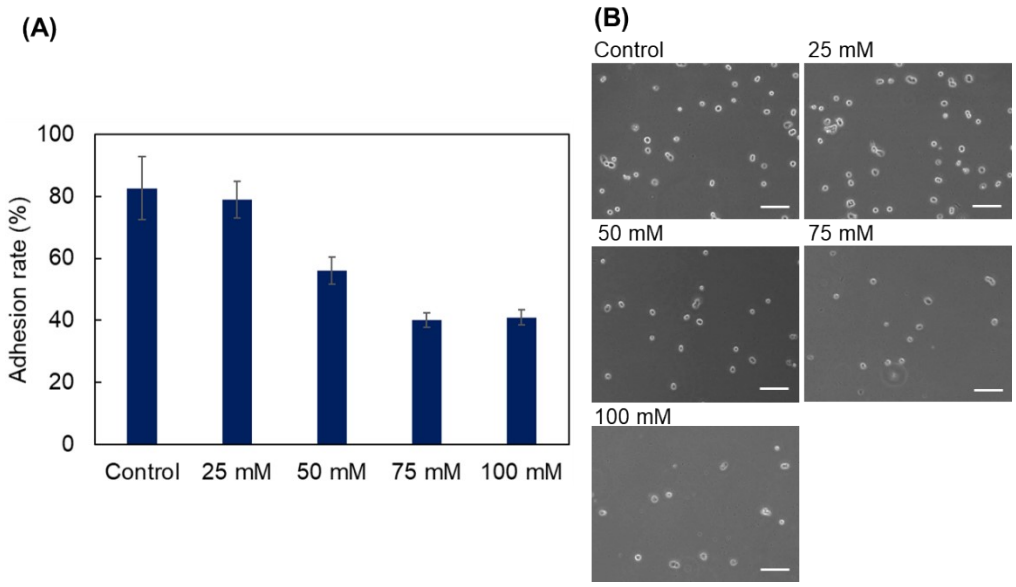

Fig. S2 Effect of the galactose concentration in the culture medium on HepG2 adhesion on the prepared PVLA-*b*-PNIPAAm brush with incubation at 37°C for 24 h. (A) Cell adhesion ratio with various concentration of galactose. (B) Cell morphology on the PVLA-*b*-PNIPAAm brush. Scale bars: 100 μm.