Supplementary Materials

Development of an Antibody Delivery Method for Cancer Treatment by Combining Ultrasound with Therapeutic Antibody-Modified Nanobubbles Using Fc-Binding Polypeptide

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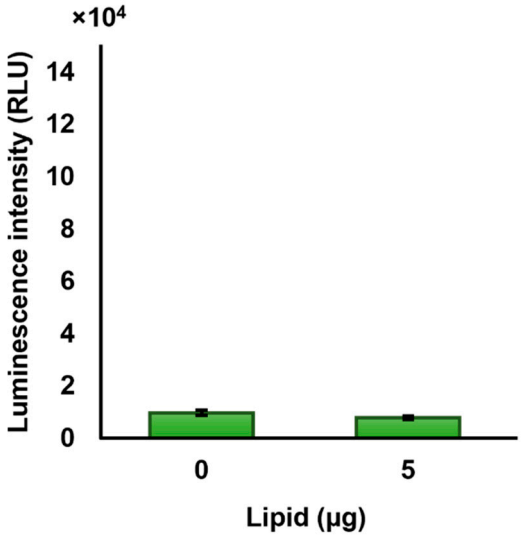
Figure. S1 Experimental section

ADCC activity of PEG-NBs after TUS exposure

The preparation of PEG-NBs is same as the manuscript. SKOV3 (0.5×10^4 cells/ 100 μL /well) were seeded onto a 96-well plate the day before observation and incubated overnight at 37°C in 5% CO_2. The next day, after the removal of the medium, 25 μL of assay buffer (RPMI 1640 containing 4% (v/v) low IgG FBS) was added to each well, and PEG-NBs (5 μg as a Lipid) which was exposed to TUS were added. Then, Jurkat effector cells were added to the wells at a density of 7.5×10^4 cells/ 25 μL and incubated at 37℃ in 5% CO_2 atmosphere. After 6 h, 75 μL of Bio-Glo™ luciferase assay reagent was added to the wells and incubated at room temperature for 15 min. The resulting luminescence in the culture supernatants was measured using a Synergy HTX Multi-Mode Plate Reader (BioTek Instruments, Inc., Whiting, VT, USA). TUS condition is same as the manuscript.



Supplement Figure S1

Luminescence intensity of PEG-NBs exposed ultrasound

To evaluate the ADCC activity, luminescence intensity of Jurkat effector cells, expressing NFAT-RE-luc2, was measured by ADCC reporter bioassay against SKOV3 (T). SKOV3 cells were plated in a 96-well plate the before assay. On the day of assay, the samples and effector cells (E) were added to the plate (cell rate; E: T= 15: 1). After 6 h of incubation at 37℃/5% CO_2 condition, Bio-Glo™ luciferase assay regent was added, and the luminescence intensity was determined using luminometer.