

Fig. S1 APC binding to the mEERL-hEGFR cells

To confirm the binding of IR700 conjugated antibodies to mEERL-hEGFR cells, the cells ( $2 \times 10^5$ ) were seeded into each corner well of 12-well plate. After one day, the cells were incubated with 10 µg/mL of each APC for 1 h at 37°C. After washing with PBS, the fluorescence of the cells was analyzed with a flow cytometer (FACSCalibur, BD Biosciences, San Jose, CA, USA) and FlowJo software (BD Biosciences). To confirm the specific binding of the APCs, 10-fold excess of each unconjugated antibody was added to some samples 1 h prior to the administration of the APC. Histograms are representative results (left). Bar graphs shows Mean fluorescence intensity (MFI) of each sample (n = 4; two-way ANOVA followed by Tukey's test; \*\*\*\*, p < 0.0001; ns, not significant) (right)

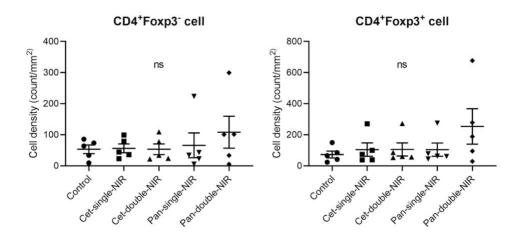


Fig. S2 CD4<sup>+</sup> T cell accumulation into tumor

Tumors were extracted 7 days after the initial light exposure. The specimens were assessed by multiplex IHC staining (Fig. 5). Intratumoral CD4<sup>+</sup>Foxp3<sup>-</sup> and CD4<sup>+</sup>Foxp3<sup>+</sup> cell density was compared and showed no significant difference between any two groups (n = 5; one-way ANOVA followed by Tukey's test).