

Figure S1 Effects of PEM on the expression of EGFR, HLA class I and class II on PC9 and A549 cells. (A) PC9 and A549 cells were treated with PEM (2  $\mu$ M) for 2 days. These cells were tested for the expression of EGFR using FITC-conjugated anti-human EGFR antibody (bold line). Isotype-matched antibody was used as a control (gray background). (B) PC9 and A549 cells were treated with PEM (4  $\mu$ M) for 2 days. These cells were tested for the expression of HLA class I and class II after the 1<sup>st</sup> staining with anti-HLA class I (pan-HLA class I) or anti-HLA class II (HLA-DP) molecules (bold line), followed by the staining with FITC-conjugated anti-mouse IgG. Black background is the 1<sup>st</sup> staining with control mouse IgG, followed by the staining with FITC-conjugated anti-mouse IgG.



Figure S2 Sensitivity of untreated and PEM-treated PC9 and A549 cells to NK cells. PC9 or A549 cells were cultured with PEM (2  $\mu$ M) for 2 days. Untreated or PEM-treated PC9 or A549 cells were cultured with NK cells in 96-well plates for 6 hr. After harvesting, whole cells were stained with anti-CD45-APC, followed by annexin V-FITC. A representative result from flow cytometry is shown.



Figure S3 Increased sensitivity of PEM-treated PC9 and A549 cells to activated T cells. PC9 or A549 cells were cultured with PEM (2  $\mu$ M) for 2 days. Untreated or PEM-treated PC9 or A549 cells were cultured with *in vitro* expanded activated T cells in 96-well plates for 6 hr. After harvesting, whole cells were stained with anti-CD45-APC, followed by annexin V-FITC. A representative result from flow cytometry is shown. In some groups, the indicated antibodies (10  $\mu$ g/mL) were added to the wells.



Figure S4. Increased sensitivity of PEM-treated PC9 and A549 cells to NK cells. PC9 or A549 cells were cultured with PEM (2  $\mu$ M) for 2 days. Untreated or PEM-treated PC9 or A549 cells were cultured with NK cells in 96-well plates for 12 hr. In some groups, the indicated antibodies (10  $\mu$ g/mL) were added to the wells. After harvesting, whole cells were stained with anti-CD45-APC, followed by annexin V-FITC. A representative result from flow cytometry is shown.



Figure S5. Effects of IL-6 and IFN- $\gamma$  on the expression of PD-L1 on PC9 and A549 cells. PC9 and A549 cells were treated with IL-6 or IFN- $\gamma$  at the indicated doses for 24 hr. Thereafter, these cells were examined for the expression of PD-L1 using PE-conjugated anti-PD-L1 antibody (dotted line). PE-conjugated mouse IgG was used as a control (gray background).



**Figure S6.** The expression of NKG2D on NK cells from healthy donors. The peripheral blood mononuclear cells from 4 healthy donors (HDs) were stained with PE-conjugated anti-CD56 antibody with either FITC-conjugated anti-NKG2D or mouse IgG. After gating on CD56<sup>+</sup> cells, the histograms are shown. Black background is the staining with FITC-conjugated control mouse IgG, and the bold lines are the staining with FITC-conjugated anti-NKG2D antibody.



**Figure S7.** The sensitivity of PC9 cells and CAR-T cells to PEM. PC9 and CAR-T cells were cultured in the presence of the indicated doses of PEM for 2 days, The percent cell viability was determined by WST8 assay. The assay was performed in triplicate.