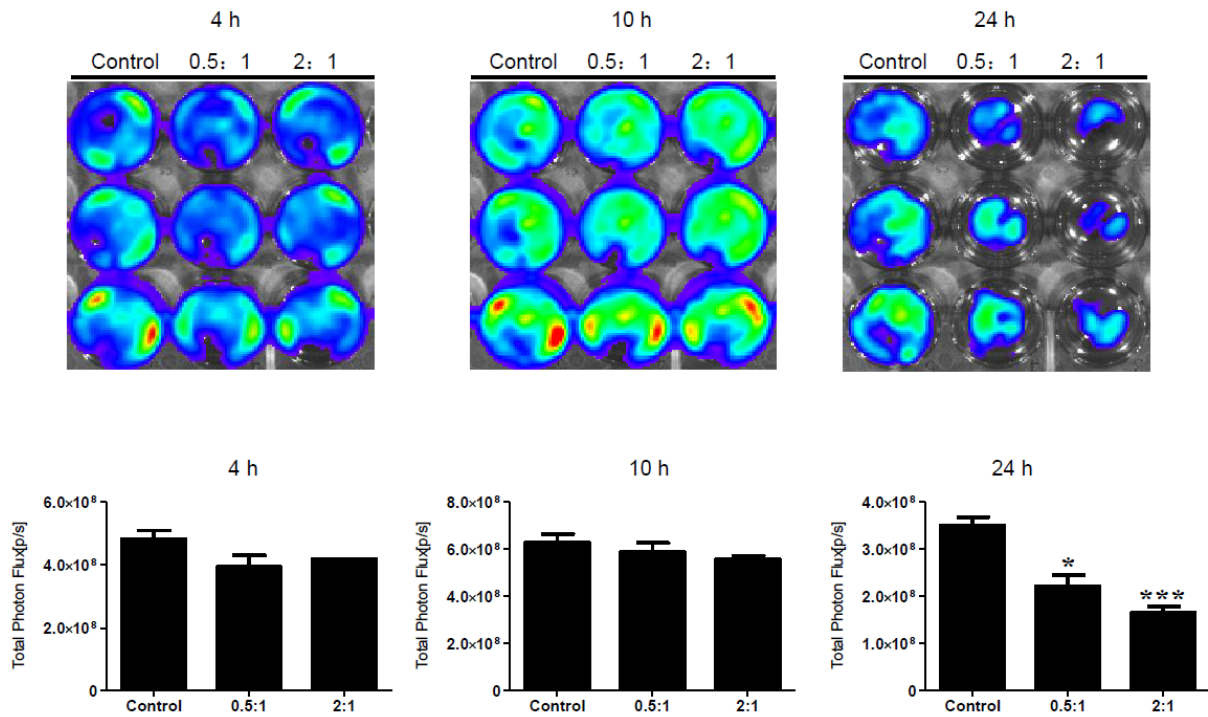


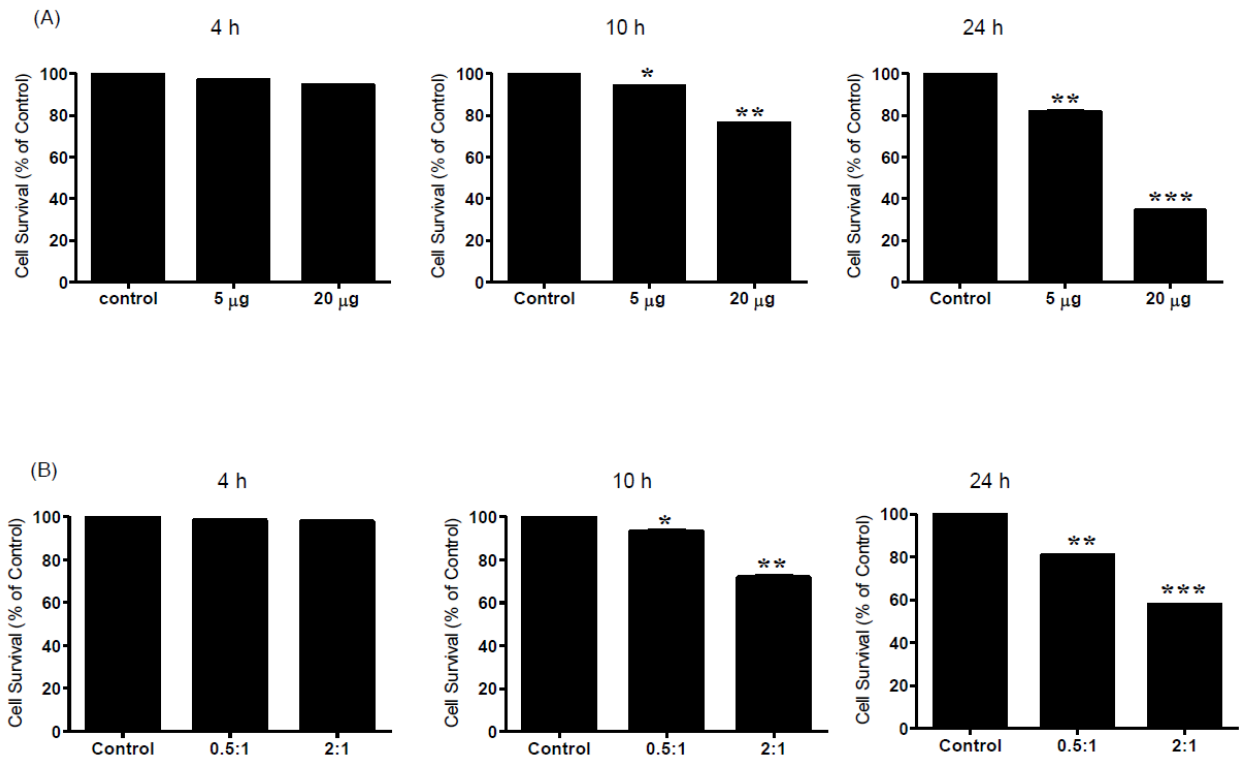
Supplementary Fig 1. Establishment of a stable reporter gene-expressing melanoma cell line.

(A) and (B) Firefly luciferase activity was determined by bioluminescence imaging (BLI) and the intensity of the signal increased in a cell number-dependent manner, $R^2 = 0.90$. (C) and (D) Reverse transcriptase polymerase chain reaction and western blotting showed enhanced firefly luciferase (effluc) expression at the mRNA and protein levels, respectively, in B16F10/effluc melanoma cells.



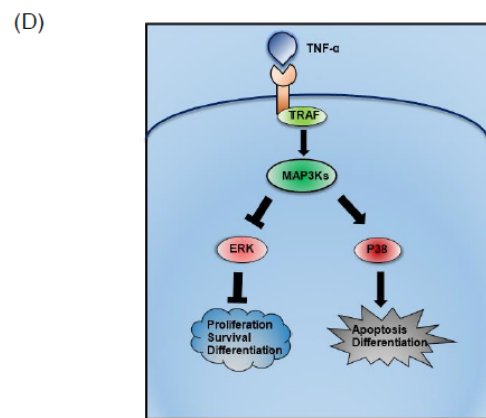
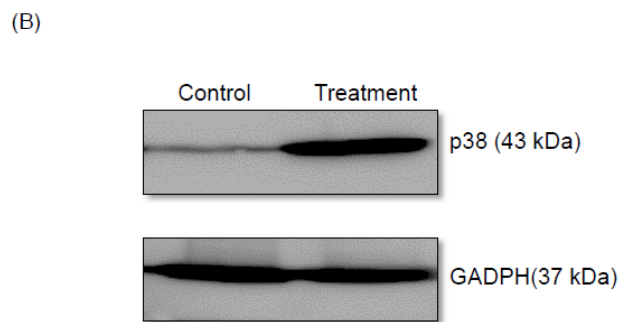
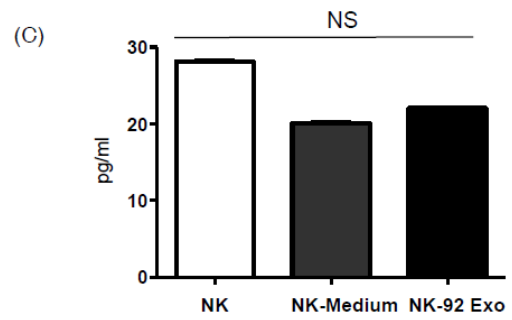
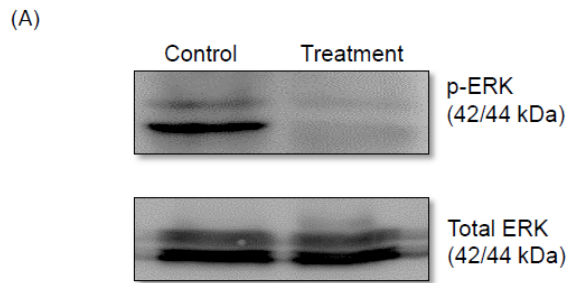
Supplementary Fig 2. NK cell cytotoxicity against melanoma cells.

Bioluminescence signals were monitored in the B16F10/effluc cells after co-incubation with NK cells. The signal was decreased by co-incubation in a time- and cell number-dependent manner. Experiments were performed at least in triplicate and mean \pm SD were plotted. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.



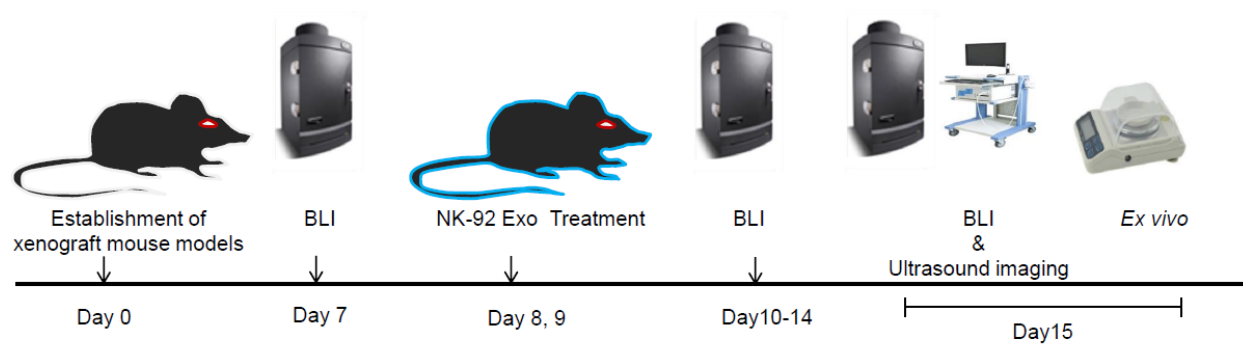
Supplementary Fig 3. Measurement of NK-92 Exo and NK cell anti-tumor effects by CCK-8 assay.

The cytotoxicities of NK-92 Exo (A) and NK cells (B) against B16F10/effluc cells were evaluated by CCK-8 assay and both increased in a dose- and time-dependent manner. Experiments were performed at least in triplicate and mean \pm SD were plotted. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

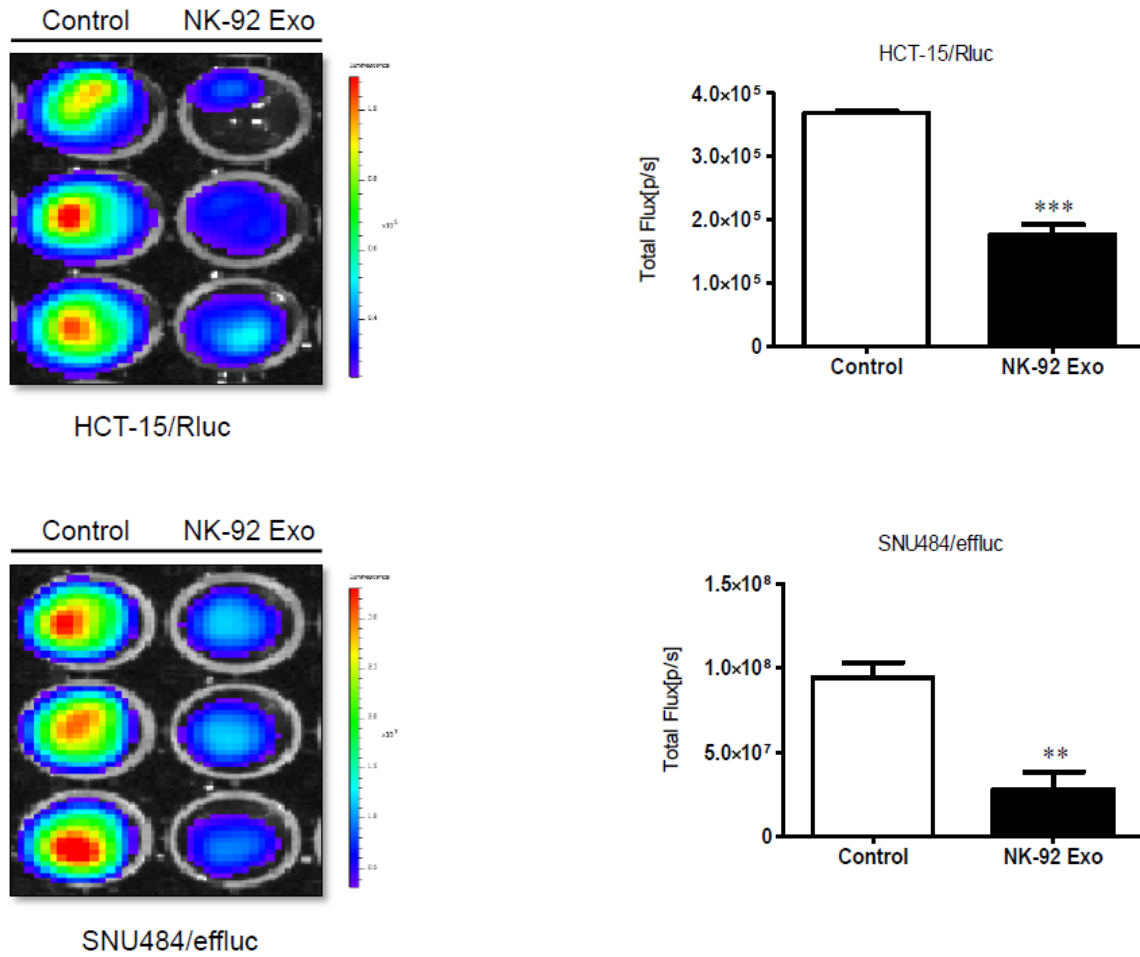


Supplementary Fig 4. Effect of NK-92 Exo on p-ERK and p38.

(A) and (B) NK-92 Exo treatment decreased p-ERK levels by 0.53-fold and increased p38 protein levels by 4.71-fold compared with the control group. (C) Enzyme-linked immunosorbent assay for TNF- α with NK cells, medium, and NK-92 Exo. (D) Diagram depicting the anti-proliferative effect of TNF- α .



Supplementary Fig 5. Scheme of *in vivo* experiments.



Supplementary Fig 6. Cytotoxicity of NK-92 Exo against colon cancer cells and gastric carcinoma cells.

Bioluminescence signals were obtained for HCT-15/Rluc and SNU484/effluc cells after 24 h co-culture with 20 μ g NK-92 Exo. The signal was evidently decreased by the co-culture. Experiments were performed at least in triplicate and mean \pm SD were plotted. $**p < 0.01$, $***p < 0.001$.