

Figure S1. MPR up-regulation *in vivo* and *in vitro*. **A.** B16F10 cells were irradiated in vitro to indicated dose, and after 24h culture, cells were stained for MPR. **B.** Effects of ionizing radiation *in vivo*. B16F10 tumor-bearing mice received 10Gy of local radiation therapy. Tumors were excised at day 3, and tumor cells were analyzed by flow cytometry. Cells were gated on the CD45⁺7AAD⁻ population.

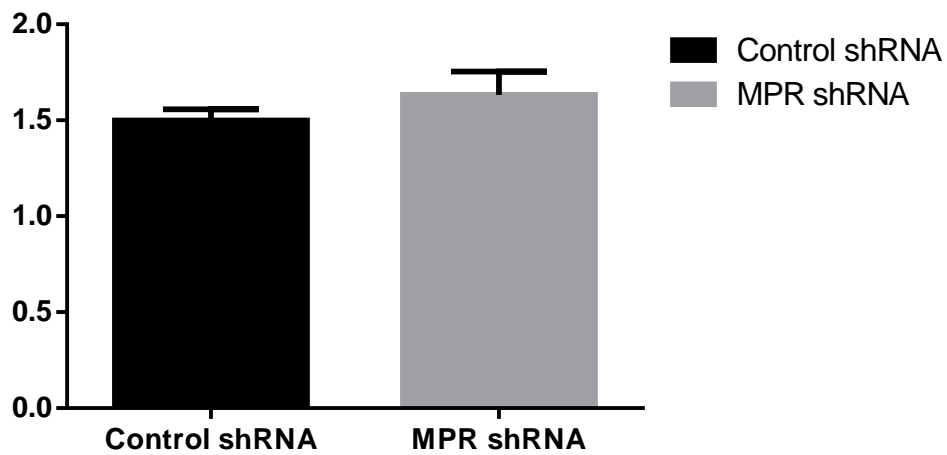


Figure S2. MPR shRNA B16F10 melanoma cells exhibit comparable growth *in vitro*.

B16F10 cells transfected with control shRNA or MPR shRNA were cultured for 24 hr. The number of cells recovered was calculated. The graph shows fold increase in the number of cells after culture. Means and SEM from three performed experiments are shown.

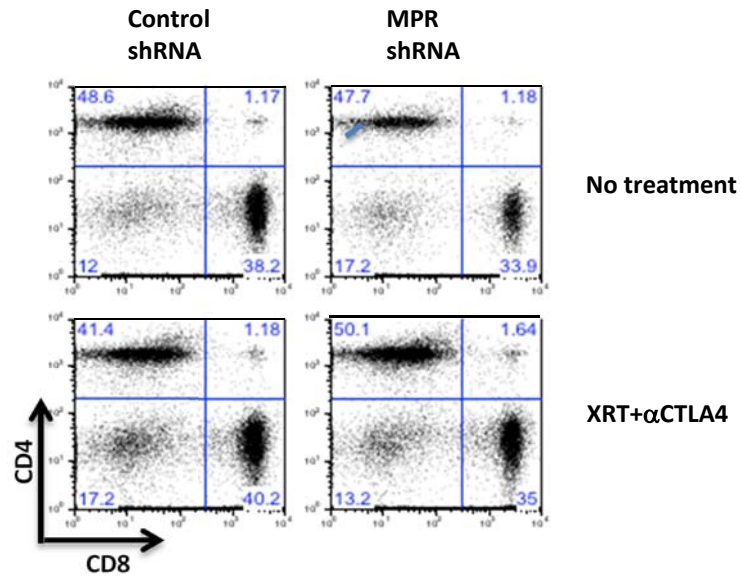


Figure S3. CD3 T cell purification for *ex vivo* experiments. shRNA control and MPR shRNA B16F10 tumors were established in the hind limb of the mice. Mice either received no treatment or were treated with XRT+αCTLA4 mAb. 10 days after the treatment, single cell suspension of splenocytes were prepared and CD3 T cells were MACS purified, and then stained for CD4 PE and CD8 FITC.