Supporting Information

Palmer *et al*. 10.1073/pnas.0710929105

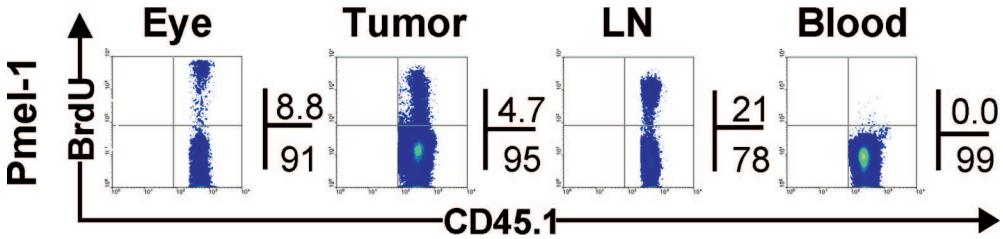

Fig. S1. MDA-specific $CD8^+$ T cells proliferate in the eye. Proliferation of pmel-1 $CD45.1^+$ T cells in multiple tissues 4 days after adoptive cell transfer and 2 h after BrdU injection (i.p.). Flow cytometric analysis of $CD45.1^+BrdU^+$ T cells in multiple organs after perfusion and harvest. Data are derived from 3 mice pooled and are representative of 2 independent experiments.

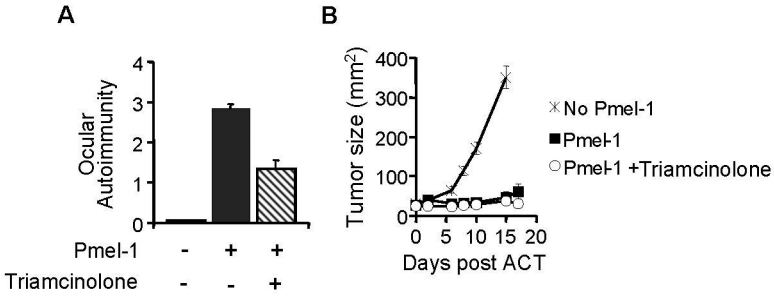

Fig. S2. Administration of high doses of steroids locally mitigate ocular autoimmunity without impairing the antitumor effect. (*A*) Evaluation of ocular autoimmunity 5 days after ACT of pmel-1 with or without periocular injection of triamcinolone. (*B*) Administration of local steroids does not impair tumor therapy. Mice treated with or without local steroids 1 day after ACT-therapy had durable regression of established tumor (n = 5 mice per group). Data are representative of two independently performed experiments.

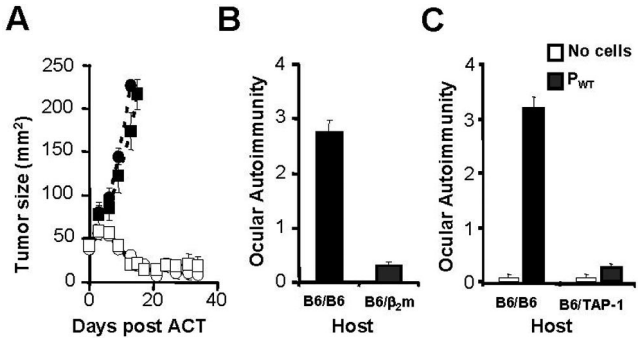

Fig. S3. Ocular autoimmunity is MHC class I and TAP-1-dependent. (*A*) Tumor therapy after ACT of pmel-1 in B6 bone marrow into B6 (λ) or $\beta 2m^{-/-}$ (*ν*) hosts or no cells B6>B6 (○) or B6>$\beta 2m^{-/-}$ (♦). Evaluation ocular autoimmunity of immunity in β2m (*B*) or TAP-1 (*C*) deficient eyes after the ACT of pmel-1 ($n = 5$ mice per group); Data are representative of two independently performed experiments.

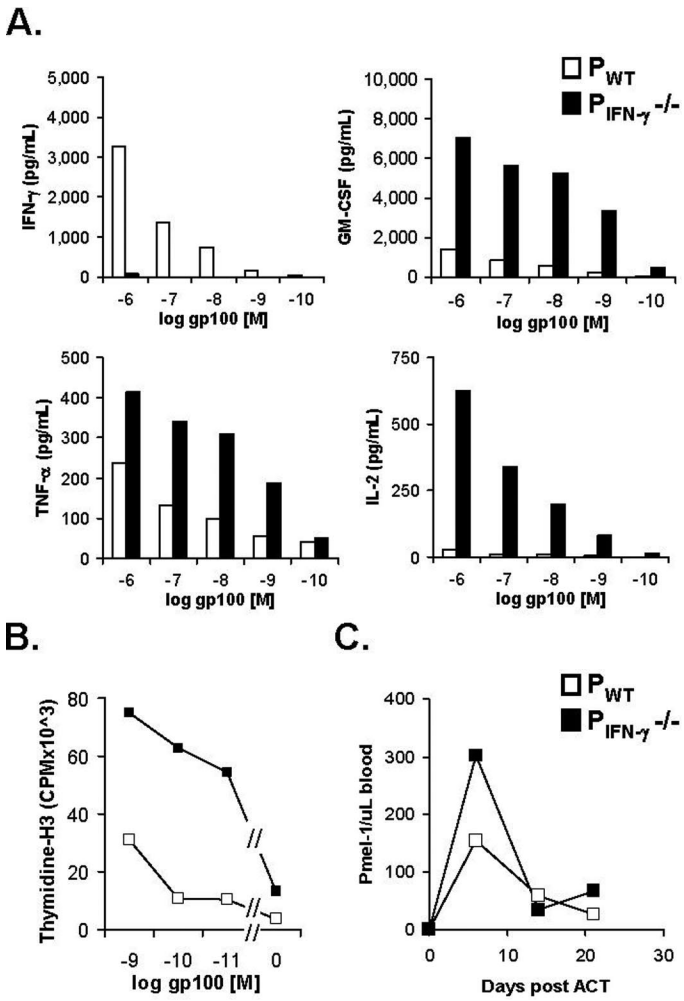

Fig. S4. IFN-γ-deficient pmel-1 T cells are hyperproliferative and secrete increased levels of cytokines. (*A*) Absence of IFN-γ results in increased effector cytokine production of activated pmel-1 T cells. Concentrations of IFN-γ, GM-CSF, TNF-α and IL-2 in supernatants from an overnight coculture of one week stimulated wild-type or IFN-γ-/- pmel-1 T cells with irradiated splenocytes pulsed with $gp100_{25–33}$ determined by ELISA. (*B*) Increased *in vitro* proliferation of IFN-γ deficient pmel-1 T cells. Thymidine-H3 incorporation in an overnight coculture of one week stimulated wild-type or IFN-γ-/- pmel-1 T cells with irradiated splenocytes pulsed with $gp100_{25–33}$. (*C*) Increased *in vivo* proliferation of IFN-γ deficient pmel-1 T cells. Enumeration of congenic wild-type or IFN-γ-/- pmel-1 T cells in blood after adoptive transfer determined by flow cytometry analysis and absolute lymphocyte count.

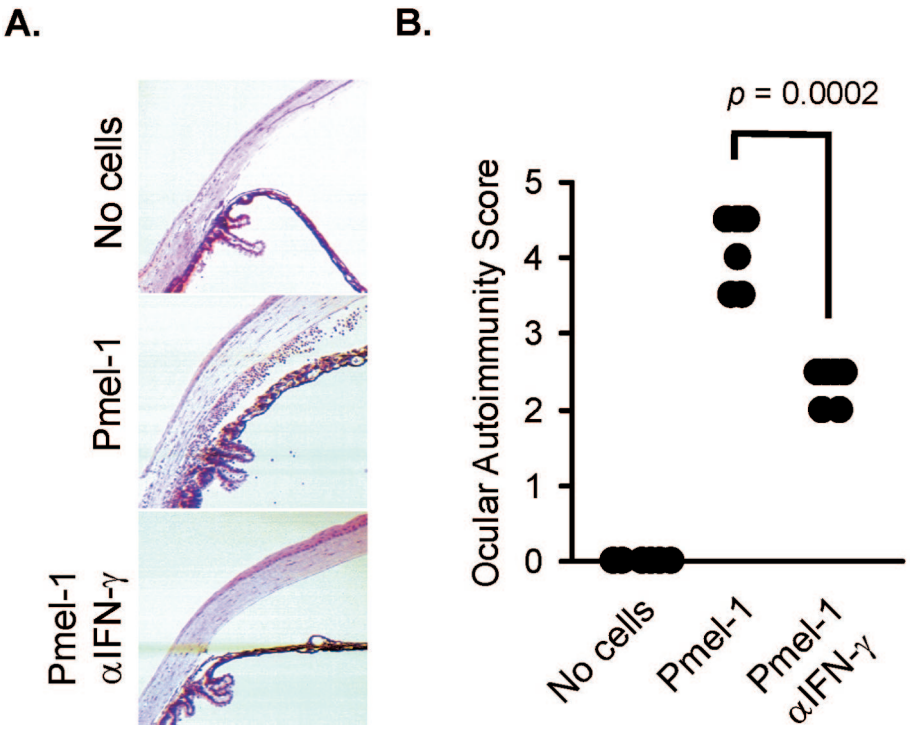

Fig. S5. Administration of IFN-γ neutralizing antibody diminishes ocular immunity. (*A*) Evaluation of ocular autoimmunity after ACT of pmel-1 with or without the administration IFN-γ neutralizing antibody. Images are representative of multiple fields. (*B*) The induction of ocular autoimmunity was blindly evaluated 5 days after the ACT. Data are representative of 2 independently performed experiments.