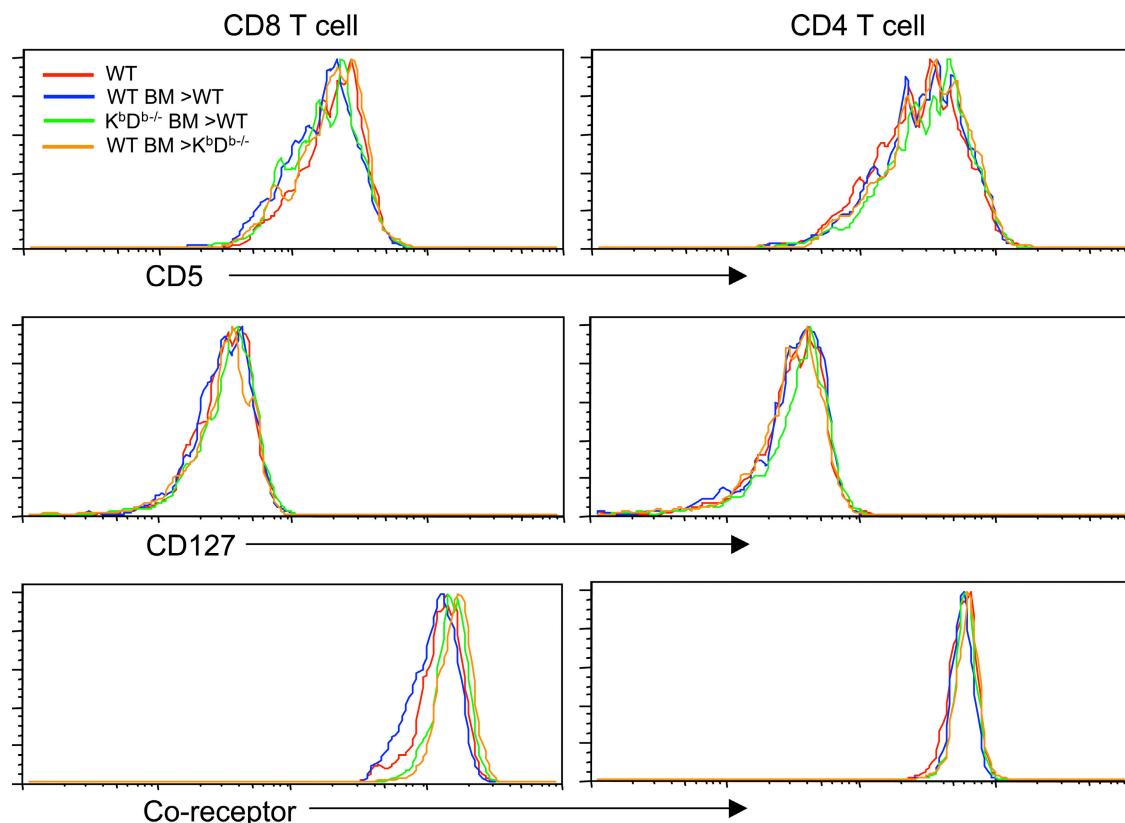
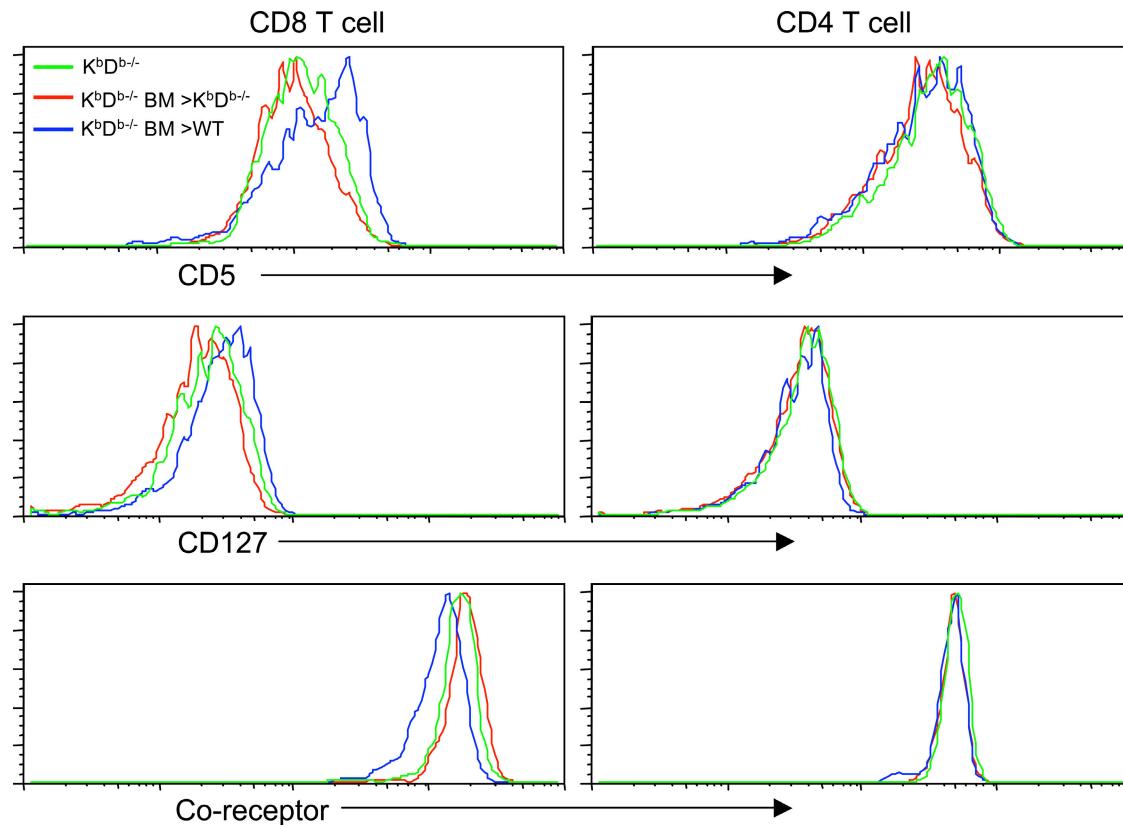


## SUPPLEMENTAL FIGURE LEGENDS

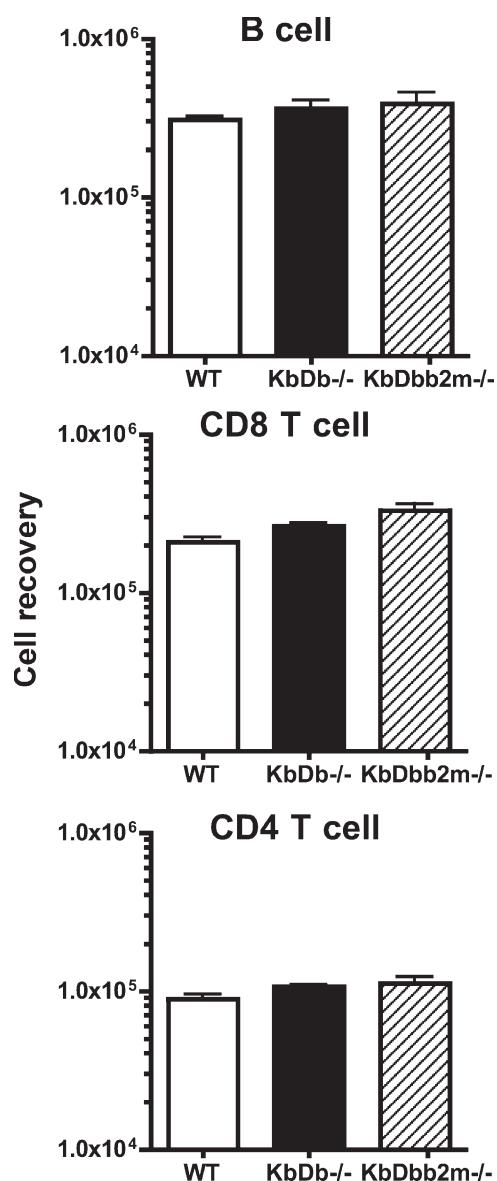
Takada and Jameson, <http://www.jem.org/cgi/content/full/jem.20082553/DC1>



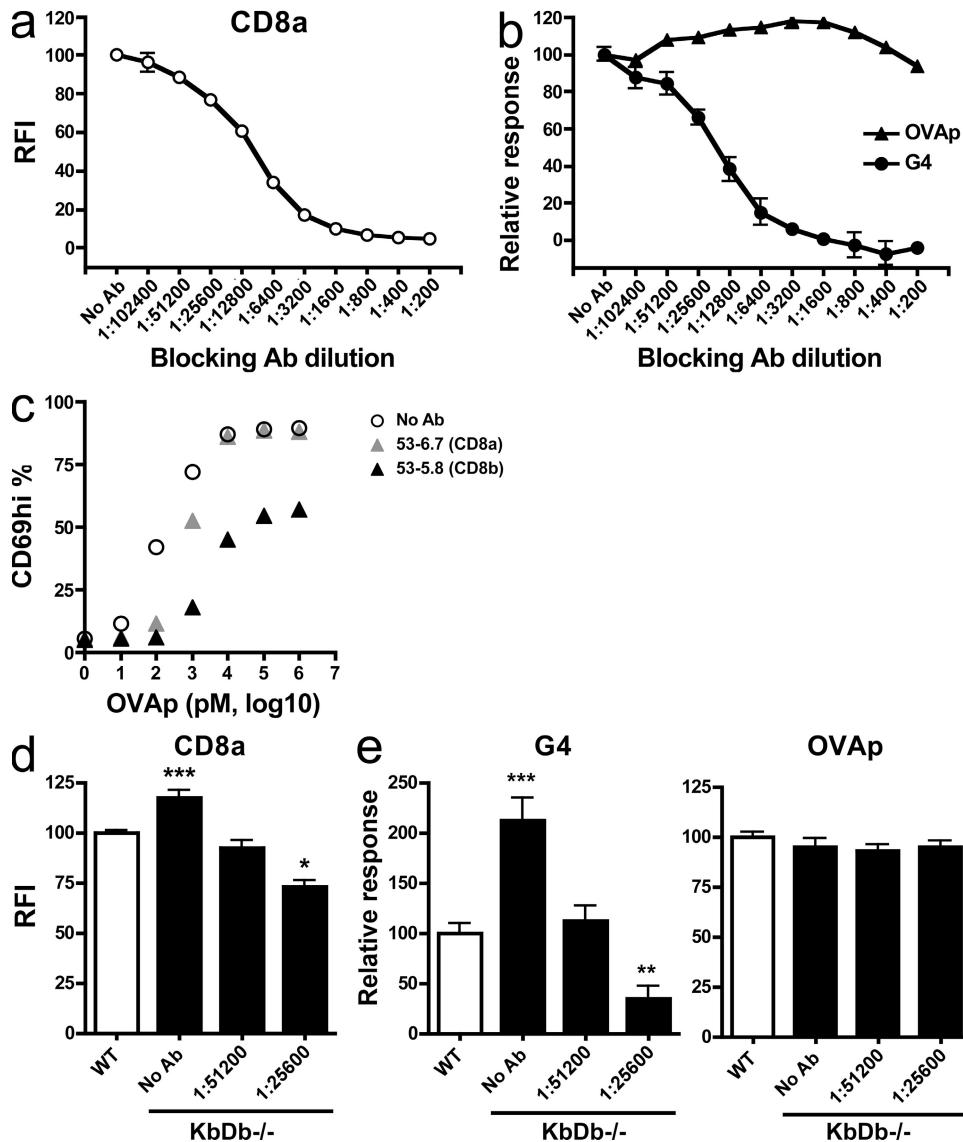
**Figure S1. Phenotype of WT donor cells after transfer to BM chimeric recipients that are partially defective of MHC I.** CFSE-labeled lymphocytes from WT mice were injected i.v. ( $5 \times 10^6$ /mouse) into intact WT and various BM chimeric recipients. 30 d after transfer, host spleen cells were analyzed for surface expression of IL-7R $\alpha$ , CD5, and coreceptors (CD8 $\alpha$  or CD4) on donor CD8 (left) and CD4 (right) T cells. Fluorescence histograms of CFSE $^{hi}$ CD44 $^{lo}$  donor cells are shown. Data are representative of two independent experiments.



**Figure S2. Phenotype of K<sup>b</sup>D<sup>b</sup>−/− donor cells after transferred to BM chimeric recipients that partially or completely lack MHC-I.** Purified K<sup>b</sup>D<sup>b</sup>−/− lymphocytes from K<sup>b</sup>D<sup>b</sup>−/− → WT BM chimeras were stained with CFSE and injected i.v. (5 × 10<sup>6</sup>/mouse) into normal K<sup>b</sup>D<sup>b</sup>−/− mice or various BM chimeras. Surface expression of IL-7R $\alpha$ , CD5 and coreceptors (CD8 or CD4) on donor CD8 (left) and CD4 (right) T cells. Fluorescence histograms of CFSE-hiCD44<sup>lo</sup> donor cells are shown. Data are representative of two independent experiments with at least three mice per group.



**Figure S3. WT cells are maintained for at least 48 h after transfer into MHC-I-deficient mice.** Spleen cells from WT mice (CD45.1) were transferred ( $5 \times 10^6$ /mouse) to WT,  $K^bD^b-/-$  and  $K^bD^b-/-\beta 2m-/-$  mice. 48 h later, the spleens and lymph nodes were harvested and analyzed for the presence of donor cells. Recovery of donor CD8<sup>+</sup> (left), CD4<sup>+</sup> (middle), and B220<sup>+</sup> (right) cells from indicated hosts are shown. Data represent mean  $\pm$  SD. All data are representative of two independent experiments.



**Figure S4. Enhanced reactivity of MHC I-deprived CD8 T cells is restored by low dose 53–6.7 antibody.** (a and b) Purified anti-CD8 $\alpha$  (53–6.7; 1 mg/ml) antibody was added at indicated titration to OT-I cell (Thy1.1) suspension. Cells were incubated with irradiated WT splenocytes pulsed or non-pulsed with G4 and OVAp. After incubation, cells were stained with fluorochrome-conjugated anti-CD8 $\alpha$ , and the levels of unblocked CD8 in peptide-free group are shown as MFI relative to the cells nontreated with the blocking antibody (a). Response of OT-I cells to G4 and OVAp splenocytes is shown (b). Relative response indicates the percentage of CD69 $^{hi}$  cells after the background value (no peptide control) was blanked and shown relative to the mean of no blocking antibody group defined as 100. (c) OT-I cells (Thy1.1) were stimulated with irradiated WT splenocytes pulsed with OVAp (0–10<sup>6</sup> pM) in the presence or absence of anti-CD8 (diluted at 1:200), including 53–6.7 (anti-CD8 $\alpha$ ) and 53–5.8 (anti-CD8 $\beta$ ; 0.5 mg/ml). (d and e) OT-I cells (Thy1.1) were transferred (3–5 × 10<sup>6</sup>/mouse) to WT or K $b$ D $b^{-/-}$  mice. 36 h later, host lymph node cells were stimulated with irradiated WT splenocytes pulsed or non-pulsed with G4 and OVAp. Cells from K $b$ D $b^{-/-}$  hosts were also stimulated in the presence of blocking anti-CD8 $\alpha$  diluted at 1:51,200 and 1:102,400. CD8 $\alpha$  MFI in peptide-free group (d) and the percentage of peptide-responding cells (e) are shown relative to the average value obtained from WT hosts, and asterisks indicate the statistical significance in comparison with WT hosts. Data represent mean ± SD. Data are representative of 2 independent experiments (a–c) or combined results of two independent experiments (d and e). \*P < 0.05; \*\*P < 0.01; \*\*\*P < 0.001.