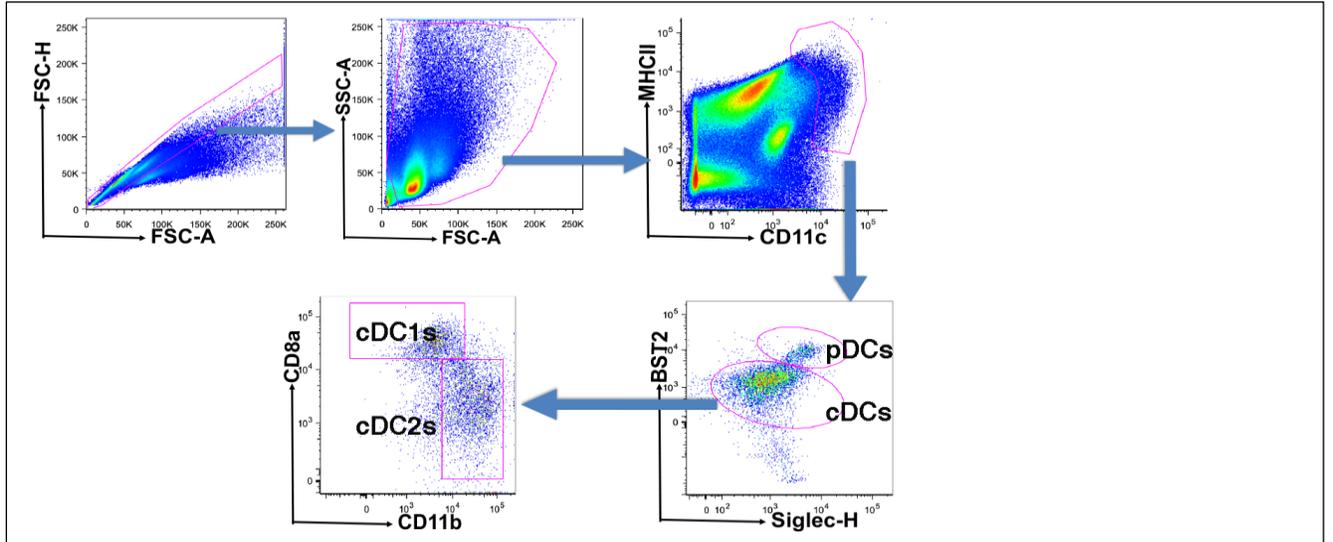
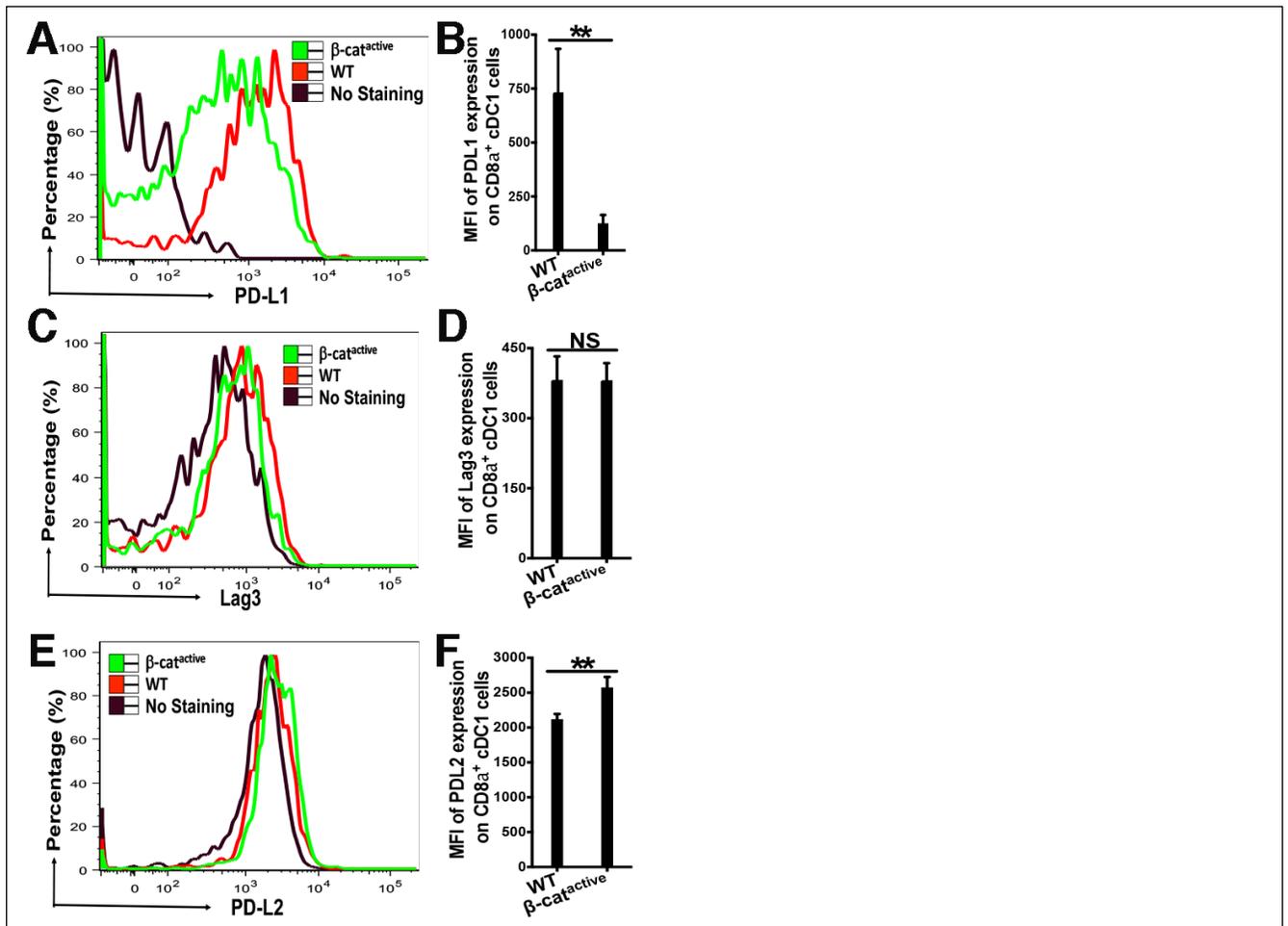


Supplemental Figures

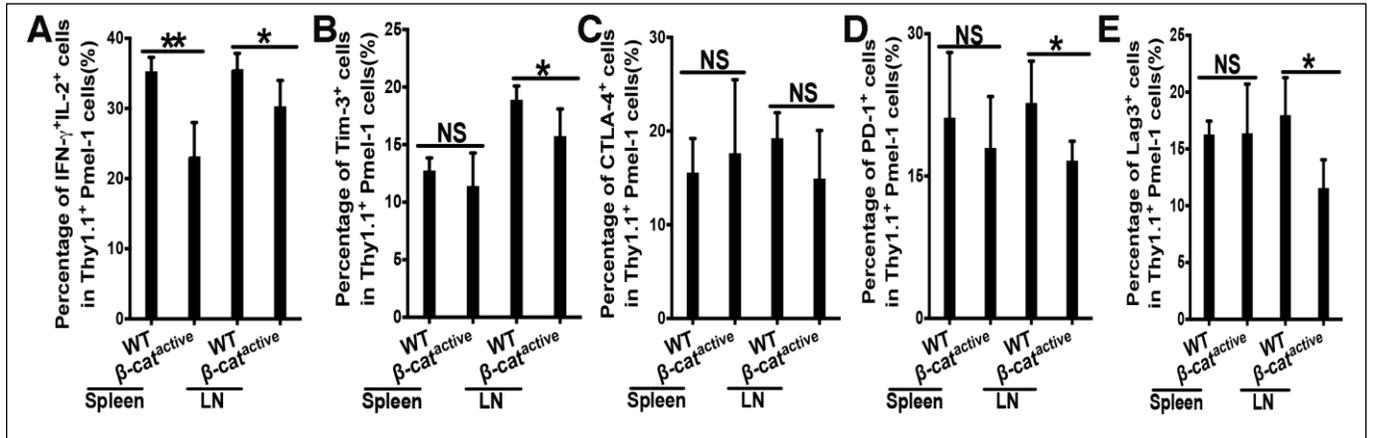
Supplemental Figure S1



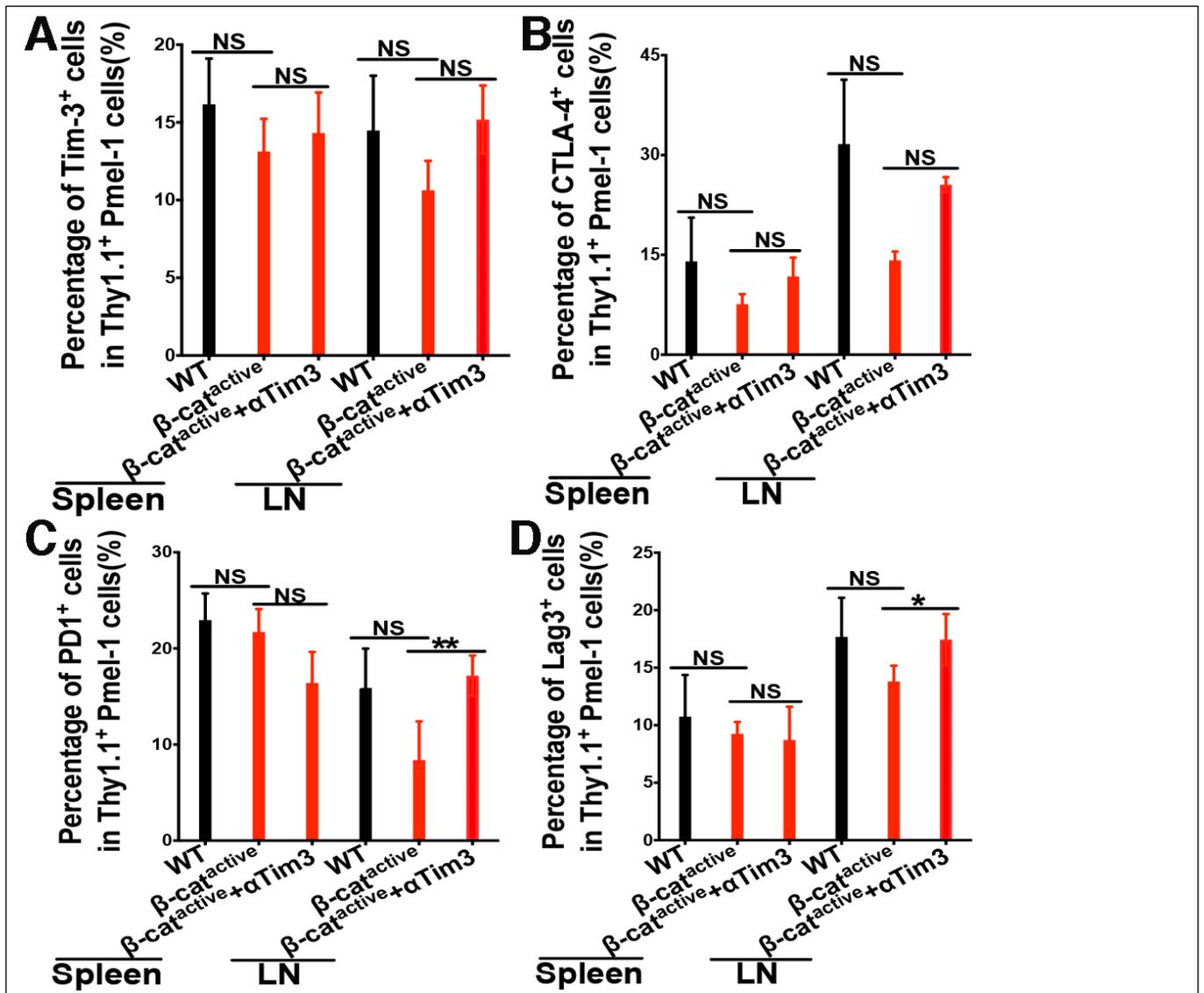
Supplemental Figure S2



Supplemental Figure S3



Supplemental Figure S4



Supplemental Figure Legends

Figure S1. Gating strategy for splenic DCs.

Figure S2. The effects of β -catenin on expression of inhibitory molecules PD-L1, PD-L2 and

Lag3 in splenic cDC1s. Splenic cells from WT and CD11c- β -catenin^{active} mice (n=4) were stained and analyzed by flow cytometry, and the expression of inhibitory molecules PD-L1 (A-B), Lag3 (C-D), and PD-L2 (E-F) on gated CD8 α ⁺ cDC1s were shown as in Figure 1. Student's t test, *** $P < 0.001$, ** $P < 0.01$, * $P < 0.05$, and NS > 0.05 . Data shown are representative of three experiments.

Figure S3. β -catenin in DCs negatively regulates DC vaccine-cross-priming against tumor

antigen. WT and CD11c- β -catenin^{active} mice (n=5) were immunized with anti-DEC-205-hgp100 plus CpG, and cross-priming of adoptively transferred Thy1.1⁺ Pmel-1 CD8 T cells was examined at day 5 following 5 hour *in vitro* stimulation with hgp100₂₅₋₃₃ with Brefeldin A (BFA). The percentages of IFN- γ ⁺IL-2⁺ (A), Tim-3⁺ (B), CTLA-4⁺ (C), PD-1⁺ (D), and Lag3⁺ (E) cells out of total Thy1.1⁺ Pmel-1 cells are shown. Student's t test, *** $P < 0.001$, ** $P < 0.01$, * $P < 0.05$, and NS > 0.05 . Data are representative of three experiments.

Figure S4. Anti-Tim-3 treatment reverses β -catenin-mediated inhibition of cross-priming.

WT and CD11c- β -catenin^{-/-} mice (n=4-5) were immunized with anti-DEC-205-hgp100 plus CpG with or without anti-Tim-3 treatment, and cross-priming of adoptively transferred Thy1.1⁺ Pmel-1 CD8 T cells was examined at day 5 after immunization. The percentages of Tim-3⁺ (A),

CTLA-4⁺ (B), PD-1⁺ (C), and Lag3⁺ (D) Pmel-1 cells in total Thy1.1⁺ Pmel-1 cells are shown.

Data are representative of two experiments. . One-way ANOVA and Post-hoc T tests with

Bonferroni correction were used. *** $P < 0.001$, ** $P < 0.01$, * $P < 0.05$ and NS > 0.05 .