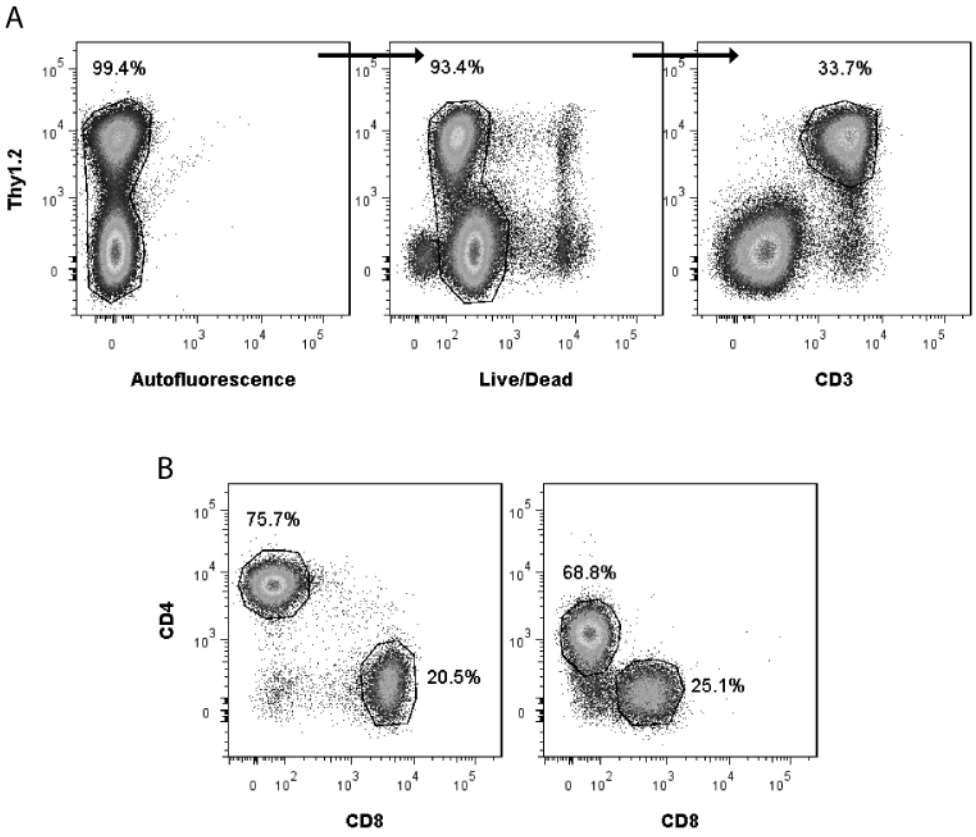
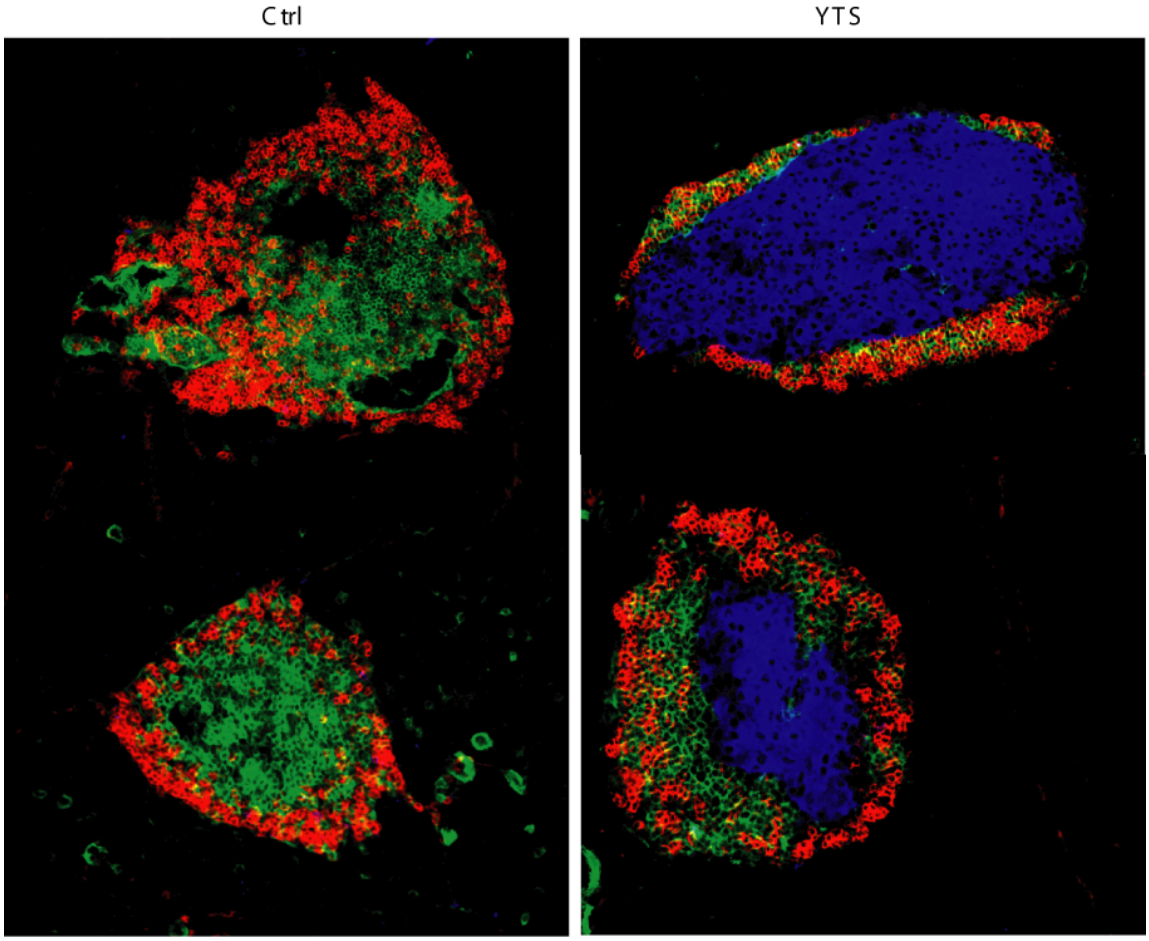
SUPPLEMENTARY DATA

Supplementary Figure 1. Representative FACS gating scheme used to detect $CD4^+$ and $CD8^+$ T cells following YTS treatment.
(A) PLN cells were gated on FSC and SSC, and doublet discrimination performed. Cellular auto-fluorescence was gated out, and dead cell discrimination determined by Live/Dead staining. T cells were then identified based on CD3 and Thy1.2 (CD90.2) co-staining. (B) Identification of $CD4^+$ and $CD8^+$ T cell subsets can still be determined after YTS Ab treatment following staining with clone RM4-5 (CD4) and 53-5.8 (CD8β chain). Left panel are control cells, right panel showing CD4 versus CD8 staining after YTS treatment.



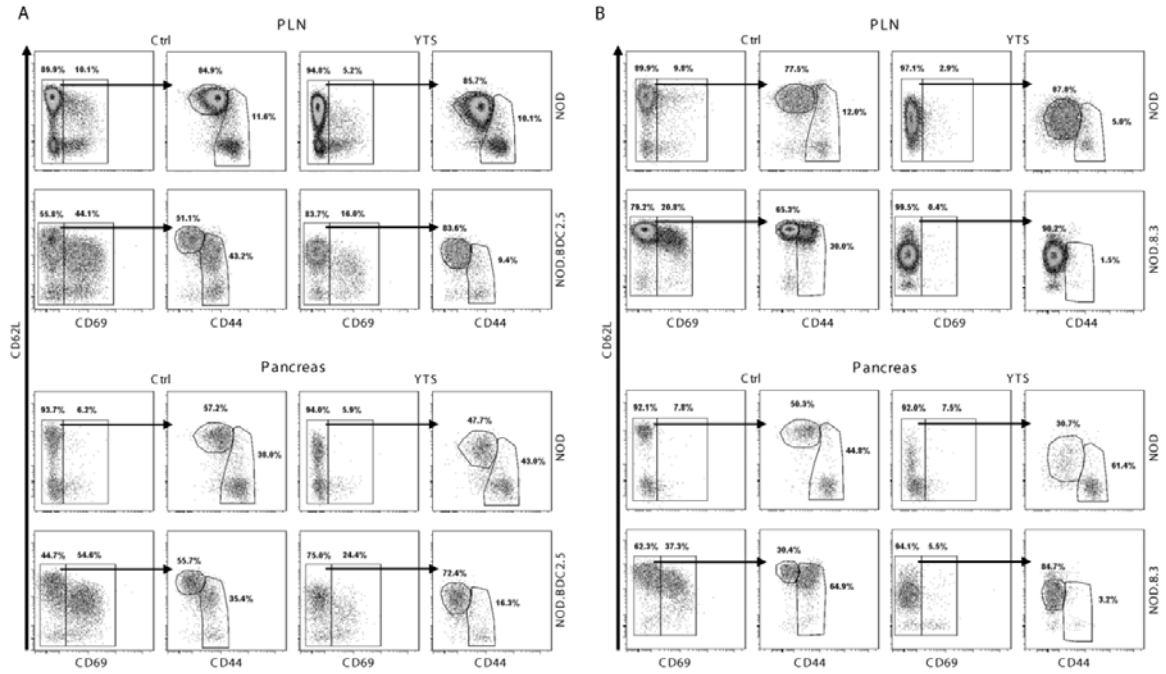
SUPPLEMENTARY DATA

Supplementary Figure 2. Reduced islet T cell infiltration in YTS-treated recent onset diabetic NOD mice.
Representative islets in recent onset diabetic NOD mice 6d after treatment with YTS177 and YTS105 or control 2A3. Pancreatic sections were stained with αCD90.2 (FITC), αB220 (PE) and αinsulin (Alexa 647).



SUPPLEMENTARY DATA

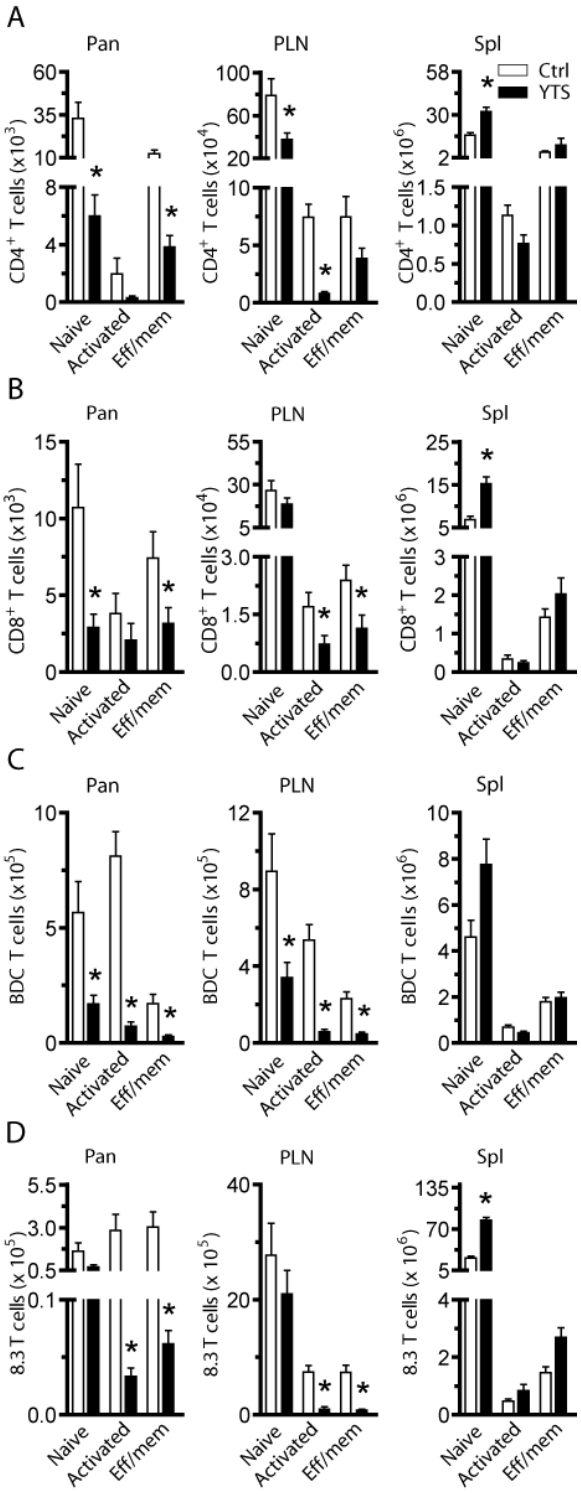
Supplementary Figure 3. Representative FACS plots for defining T cell subsets in the PLN and pancreas of YTS mAb-treated NOD, NOD.BDC2.5 and NOD.8.3 mice.
(A) $CD4^+$ and (B) $CD8^+$ T cells from the PLN and pancreas of NOD, NOD.BDC2.5 and NOD.8.3 mice 6d following YTS mAb-treatment were gated on. Arrows indicates population gated ($CD69^-$) for further analysis of CD44 expression to distinguish between naïve ($CD62L^{hi}$ $CD44^{lo}$) and memory/effector ($CD62L^{mid/lo}CD44^{hi}$) T cells.



SUPPLEMENTARY DATA

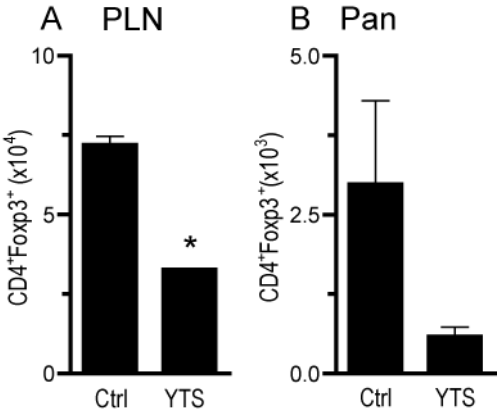
Supplementary Figure 4. T cell loss in PLN and pancreas of YTS-treated NOD, NOD.BDC2.5 and NOD.8.3 mice.

The average number of naïve, recently activated and effector/memory T cells in the pancreas (Pan), PLN and spleen (Spl) of groups of 7-15 female mice 6d following mAb-treatment. NOD (A) $CD4^+$ T cells (*$p \leq 0.032$) and (B) $CD8^+$ T cells (*$p \leq 0.05$), (C) NOD.BDC2.5 $CD4^+$ T cells (*$p \leq 0.034$), and (D) NOD.8.3 $CD8^+$ T cells (*$p \leq 0.012$).



SUPPLEMENTARY DATA

Supplementary Figure 5. Foxp3⁺Treg numbers are reduced in YTS treated NOD mice.
The number of $CD25^+CD4^+Foxp3^+$ Treg was examined in the (A) PLN and (B) pancreas of groups of 3-5 diabetic NOD female mice 6 d after treatment with 2A3 (Ctrl) or YTS105 and YTS177; *$p<10^{-2}$; YTS versus Ctrl.



Supplementary Figure 6. Representative FACS plot of the frequency of Foxp3⁺ Treg in sorted $CD25^+CD4^+$ T cells.
FACS-sorted $CD25^+CD4^+$ T cells from the PLN of YTS treated remission and control NOD mice were stained with αFoxp3.