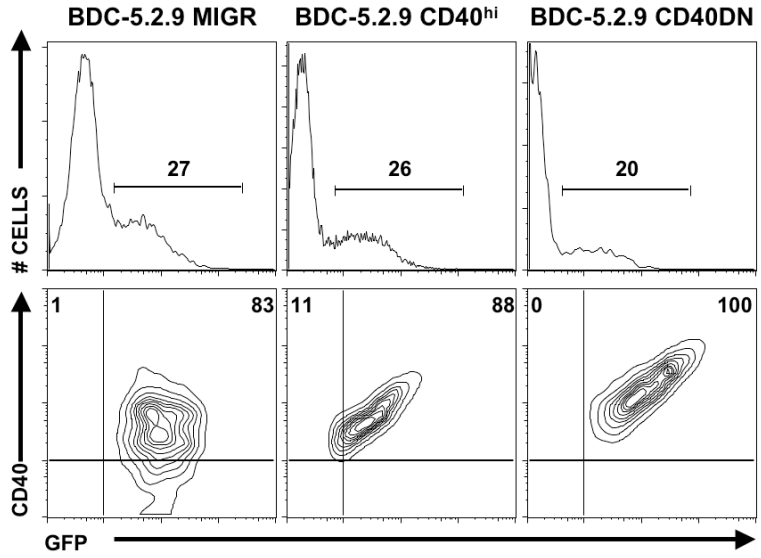
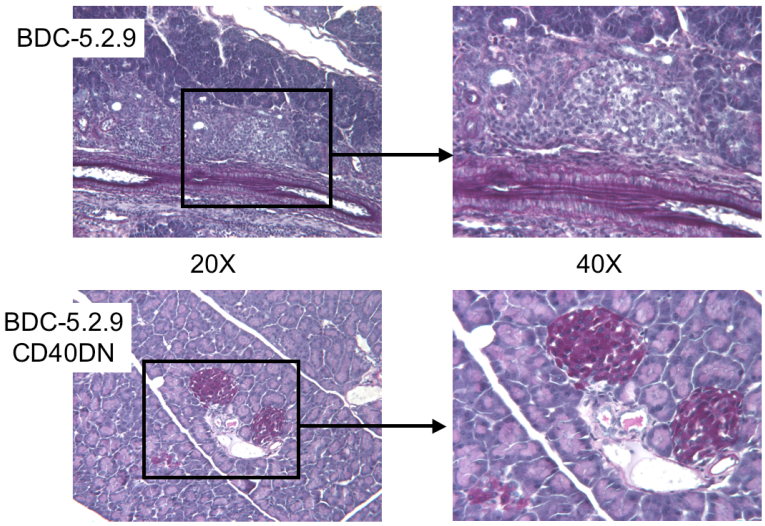
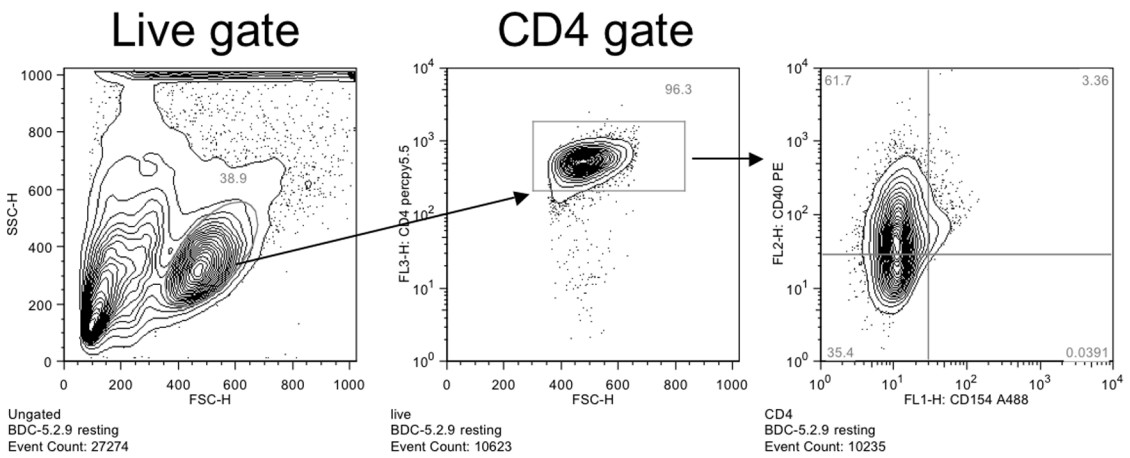


Supplementary Figure 1. Transduction of a diabetogenic T cell clone with CD40 or CD40DN results in high expression of CD40 on the surface of the clone.

The BDC-5.2.9 T cell clone was transduced with the empty vector MIGR, with the full length CD40 molecule ($CD40^{hi}$), or with the truncated CD40 molecule (CD40DN). GFP expression was assessed by flow cytometry and histograms indicate the percentage of cells that were GFP+ 3 days after transduction. GFP-sorted T cell clones were stained with anti-CD4 APC and anti-CD40 PE and gates were set to include only live CD4 cells. Contour plots show that there was a correlation between CD40 and GFP in the CD40-transduced T cell clones.



Supplementary Figure 2. Histological analysis from recipient mice that received the parent BDC-5.2.9 clone or the BDC-5.2.9 CD40DN variant. Pancreata were harvested at time of disease onset or at the end of the experimental period. Pancreatic sections from recipient mice were stained with aldehyde/fuchsin. The degree of infiltration and islet degranulation was analyzed on at least 100 islets from mice receiving BDC-5.2.9 or BDC-5.2.9 CD40DN. Representative photos are provided.



Supplementary Figure 3. Gating strategy for Fig. 1A. The BDC-5.2.9 T cell clone was harvested and stained with anti-CD154/A488, Anti-CD40 PE and anti-CD4 PerCP-Cy5.5. Expression of these markers were analyzed by flow cytometry. The left panel indicates the live gate, the middle panel shows the CD4 gate and the right panel is the contour plot represented in Fig 1A. Similar gating strategies were used in Fig. 2, Fig. 3 and Figure 5.