

Supplementary Figures and Figure Legends

Figure S1. Gating of mouse B cell subsets

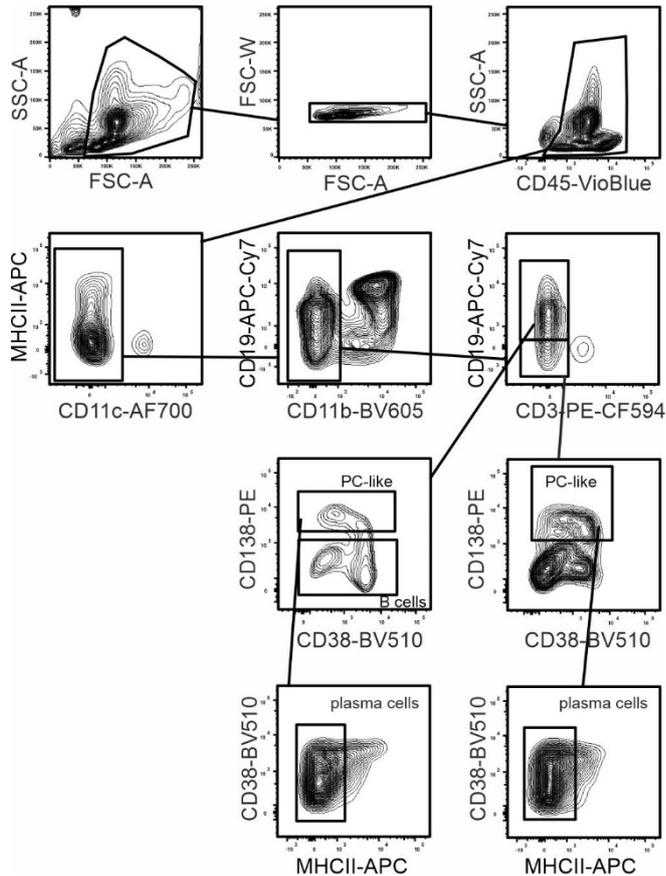


Figure S1. Gating of mouse B cell subsets. First, viable cells and cell doublets were discriminated by their SSC and FSC characteristics and further characterised as immune cells (CD45⁺). Then, non-DCs were discriminated with CD11c and MHCII (CD45⁺, CD11c⁻, MHCII^{+/-}). Lymphoid cells were discriminated with CD11b (CD45⁺, CD11c⁻, MHCII^{+/-}, CD11b⁻). Then, CD19^{hi} & int and CD19^{low} & neg were discriminated with CD19 and CD3e (CD19^{hi} & int: CD45⁺, CD11c⁻, MHCII^{+/-}, CD11b⁻, CD19^{hi/int}, CD3e⁻; CD19^{low} & neg: CD45⁺, CD11c⁻, MHCII^{+/-}, CD11b⁻, CD19^{low/-}, CD3e⁻). From both populations, plasma cell (PC)-like cells were discriminated with CD138 and CD38 (CD45⁺, CD11c⁻, MHCII^{+/-}, CD11b⁻, CD19^{hi/int} or ^{low/-}, CD3e⁻, CD138⁺, CD38^{int/+}), and plasma cells were discriminated from PC-like cells with CD38 and MHCII (CD45⁺, CD11c⁻, MHCII⁻, CD11b⁻, CD19^{hi/int} or ^{low/-}, CD3e⁻, CD138⁺, CD38^{int/+}). B cells were discriminated with CD138 and CD38 from CD19^{hi} & int (CD45⁺, CD11c⁻, MHCII^{+/-}, CD11b⁻, CD19^{hi/int}, CD3e⁻, CD138⁻, CD38^{+/-}).

Figure S2

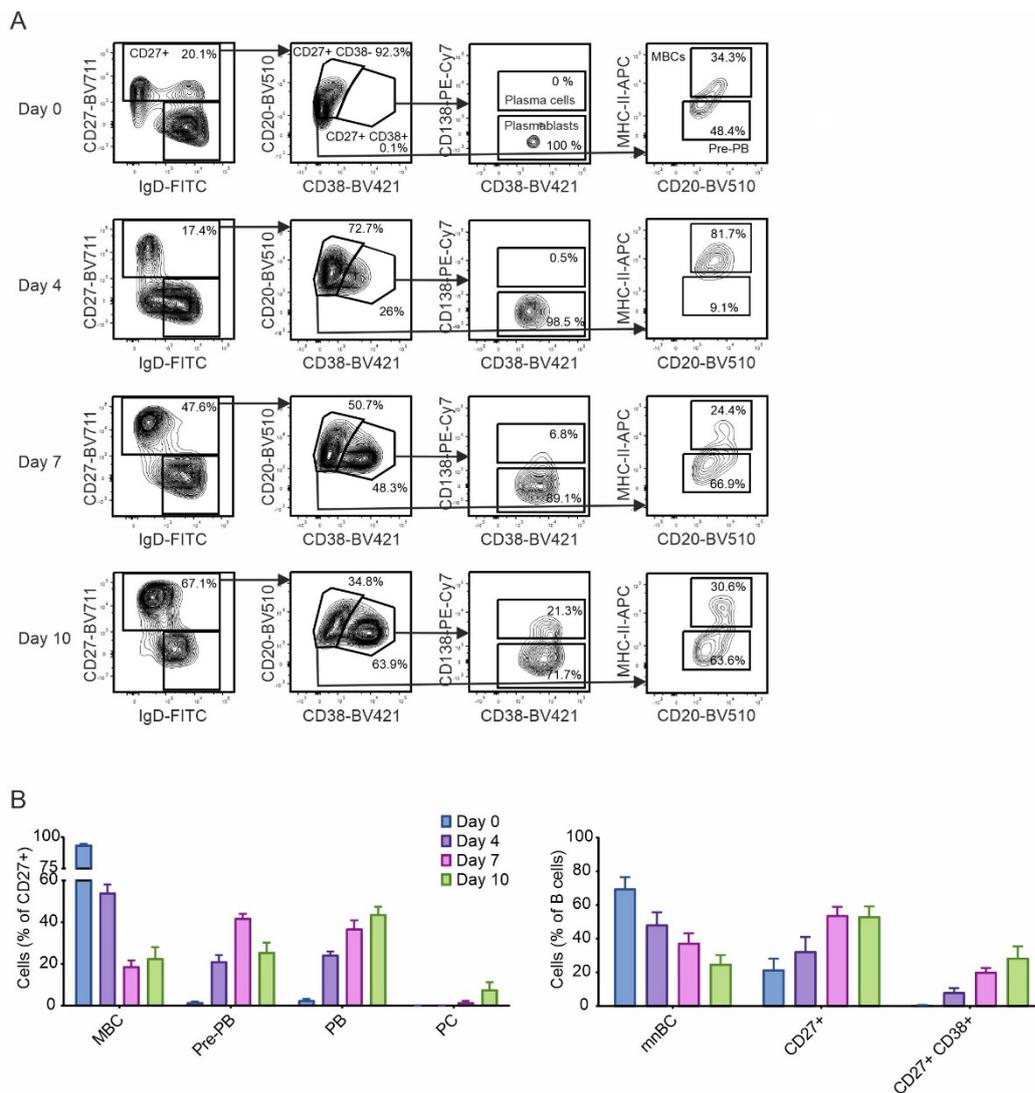


Figure S2. Human B cell differentiation to plasma cells. (A) Gating strategy for analysis of B cell differentiation to plasma cells from day 0 to day 10. First, viable cells and cell doublets were discriminated by their SSC and FSC characteristics and further characterised as B cells after removal of dead cells and non-immune cells, then discriminated with CD27 and IgD. The CD27⁺ cell population was separated with CD20 and CD38. CD27⁺ CD38⁺ cells were further discriminated with CD138 and CD38. CD27⁺ CD38⁻ cells were discriminated with CD20 and MHCII. Subsets were then identified as such: mnBC (CD27⁻, IgD⁺), CD27⁺ (CD27⁺, IgD^{+/-}), CD27⁺CD38⁺ (CD27⁺, IgD^{+/-}, CD20⁺, CD38⁺), MBC (CD27⁺, IgD^{+/-}, CD20⁺, CD38⁻, MHCII⁺), pre-PB (CD27⁺, IgD^{+/-}, CD20⁺, CD38⁻, MHCII⁻), PB (CD27⁺, IgD^{+/-}, CD20⁺, CD38⁺, CD138⁻), PC (CD27⁺, IgD^{+/-}, CD20⁺, CD38⁺, CD138⁺). The shown experiment is representative for

six individual experiments. (B) Quantification of B cell subsets is shown (n = 6). Data are means \pm SEM.