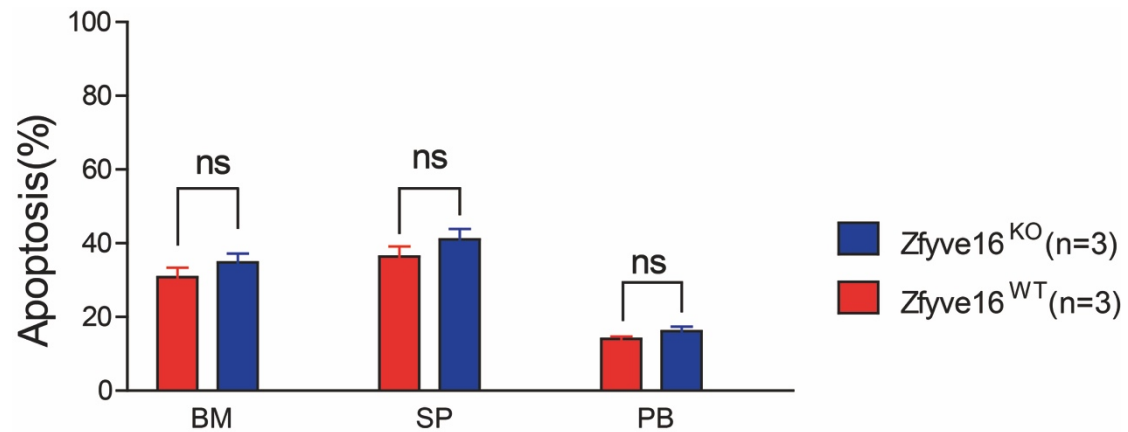
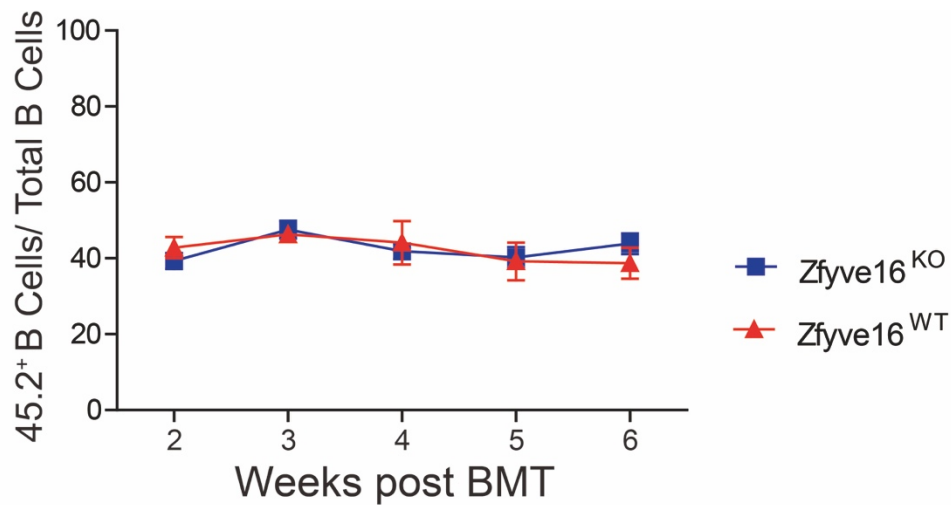


## Supplementary figures



**Supplementary Fig. 1** Loss of *Zfyve16* does not induce Pre-B and B cells apoptosis. The apoptosis of Pre-B cells (from BM) and B cells (from spleen and peripheral blood) were analyzed using Annexin V and 7AAD. The percentage of cells apoptosis in *Zfyve16*<sup>KO</sup> and *Zfyve16*<sup>WT</sup> mice has no significant difference. ns: no statistical significance.



**Supplementary Fig. 2** The capacity of reconstruction in *Zfyve16*<sup>KO</sup> B cells have no difference with that in *Zfyve16*<sup>WT</sup> mice during the mixed adoptive transplantation. *Zfyve16*<sup>KO</sup> (CD45.2) / *Zfyve16*<sup>WT</sup> (CD45.2) mixed with wild type (CD45.1) BM cells respectively ( $2 \times 10^5$  each) and then transplanted into lethally irradiated recipient mice. The percentage of B cells (45.2<sup>+</sup>) from *Zfyve16*<sup>KO</sup> and *Zfyve16*<sup>WT</sup> mice after BMT has no difference.