Supporting Information

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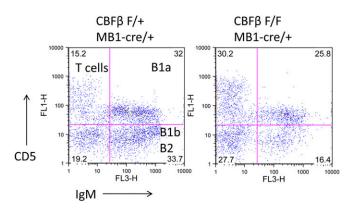


Fig. S1. The number of B-1a cells as well as B-2 cells is reduced in core-binding factor beta ($CBF\beta^{F/F}$:mb1-cre/+ mice. Peritoneal cells were collected from $Cbf\beta^{F/F}$:mb1-cre/+ mice. The percentage of B-1a cell population as well as B-1b and B-2 in $Cbf\beta^{F/F}$:mb1-cre/+ mice was slightly decreased. Total cell numbers of B-cell subsets were reduced to one third of $Cbf\beta^{F/F}$:mb1-cre/+ mice.

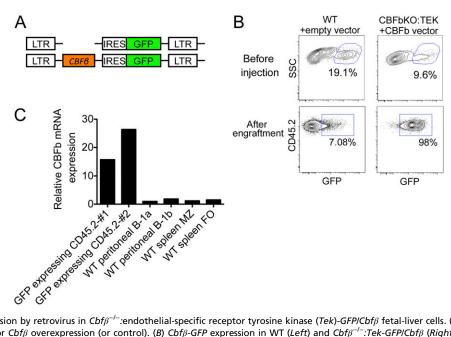


Fig. S2. $Cbf\beta$ overexpression by retrovirus in $Cbf\beta^{-\prime-}$:endothelial-specific receptor tyrosine kinase (Tek)- $GFP/Cbf\beta$ fetal-liver cells. (A) The retrovirus construct [MSCV-IRES-GFP (MIG)] for $Cbf\beta$ overexpression (or control). (B) $Cbf\beta$ -GFP expression in WT (Left) and $Cbf\beta^{-\prime-}$:Tek- $GFP/Cbf\beta$ (Right) fetal-liver cells 24 h after transduction (Upper) and after engraftment in the recipient peritoneal cavity (Lower). (C) Quantitative $Cbf\beta$ expressions in $Cbf\beta$ retrovirus-infected donor-derived cells and WT B-cell subsets. CD45.2+ donor-derived cells were sorted from recipient mice transplanted with $Cbf\beta^{-\prime-}$:Tek- $GFP/Cbf\beta$ fetal-liver cells infected with $Cbf\beta$ retrovirus, and $Cbf\beta$ expressions were examined in donor-derived cells (GFP expressing CD45.2-#1, and CD45.2-#2) and WT B-cell subsets in the peritoneal cavity and spleen.

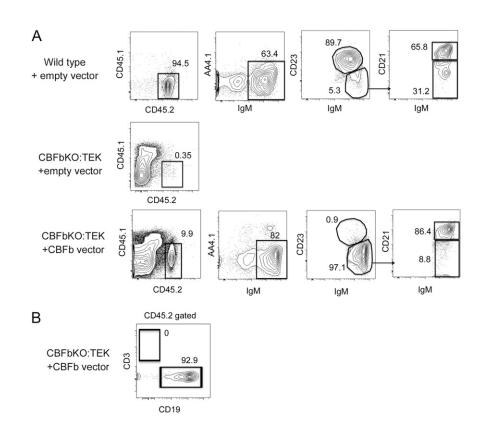


Fig. S3. Overexpression of $Cbf\beta$ rescued $Cbf\beta^{-\prime}$:Tek- $GFP/Cbf\beta$ fetal liver cell-derived MZ cell engraftment in the recipient spleen. (A) Spleen cells of recipient mice transplanted with fetal-liver cells from WT with empty vector (Top), $Cbf\beta^{-\prime}$:Tek- $GFP/Cbf\beta$ fetal-liver cells expressing empty vector control (Middle), and $Cbf\beta$ vector (Bottom). (B) Spleen cells of recipient mice transplanted with $Cbf\beta^{-\prime}$:Tek- $GFP/Cbf\beta$ fetal-liver cells expressing $Cbf\beta$ vector. Donor CD45.2 gated. Representative FACS dot plots were depicted from two sets of experiments.