



**Supplementary Figure 4.** Severely impaired early B cell development and late maturation in  $PLC\gamma1^{+/-}PLC\gamma2^{-/-}$  mice are B-cell autonomous. Bone marrow from mice of the indicated genotypes were transplanted into sub-lethally irradiated JAK3-deficient ( $JAK3^{-/-}$ ) mice. Eight weeks after transplantation, bone marrow cells from recipient mice were stained with a combination of antibodies to B200, CD43, and IgM or CD19 and CD2 (A-C), whereas splenocytes from recipient mice were stained with a combination of antibodies to B220, IgM, and IgD (D-E). (A) FACS analysis with CD43 and IgM staining of B220<sup>+</sup> gated bone marrow cells. Percentages indicate cells in the gated lymphoid populations. (B) FACS analysis with B220 and CD43 staining of bone marrow cells. Percentages indicate cells in B220<sup>+</sup> gated cells. (C) FACS analysis with CD19 and CD2 staining bone marrow cells. Percentages indicate cells in CD19<sup>+</sup> gated cells. (D) Further reduction of total B cells in the spleens of  $JAK3^{-/-}$  recipients that received  $PLC\gamma1^{+/-}PLC\gamma2^{-/-}$  relative to  $PLC\gamma2^{-/-}$  bone marrows. Histograms show the percentage of B220<sup>+</sup> cells within the lymphoid cell gate. (E) FACS analysis with IgM and IgD staining of B220<sup>+</sup> gated splenocytes. The percentages of cells in gated lymphoid population are indicated. The data shown are representative of 4 mice in each type of transplantation.