Additional file 3 – *In vivo* BrdU labeling suggests similar expansion of E2A<sup>ER/ER</sup> pre-proB cells compared to E2A<sup>+/+</sup> pre-proB cells. Two mice from each genotype, E2A<sup>ER/ER</sup> and E2A<sup>+/+</sup> control, were IP injected with 1mg BrdU and analyzed 4hrs post injection. Bone marrow was stained for B220, CD43, and CD19 surface expression, then processed to analyze BrdU labeling with a FITC BrdU Flow Kit as per manufacturer’s instructions (BD Pharmingen). All plots are pre-gated on lymphocytes. Graphs display percent BrdU<sup>+</sup> cells within the pre-proB population (B220<sup>+</sup>CD43<sup>+</sup>CD19<sup>-</sup>) as labeled. An E2A<sup>ER/ER</sup> mouse receiving no BrdU injection was used as a negative control (plot displays pre-proB cells). The proB population (B220<sup>+</sup>CD43<sup>+</sup>CD19<sup>+</sup>) from BrdU injected E2A<sup>+/+</sup> #2 is shown as a positive control for BrdU incorporation.