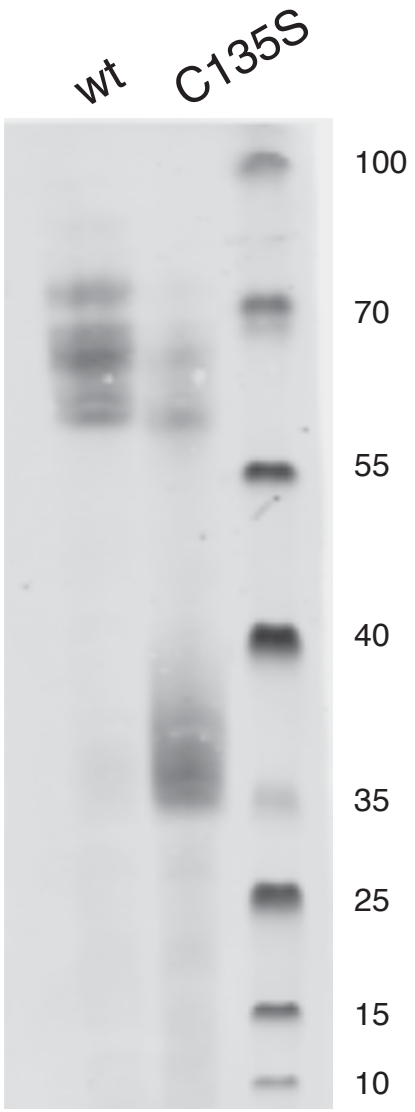

Fig. S1. Cysteine 135 is responsiblefor Igβ homodimer formation. Western blot analysis for Igβ/Igβ homodimer formation of S2 cells expressing the Igβ wt or Igβ-C135S mutant. Proteins are seperated by non-reducing SDS-PAGE and blotted against anti-HA antibody.

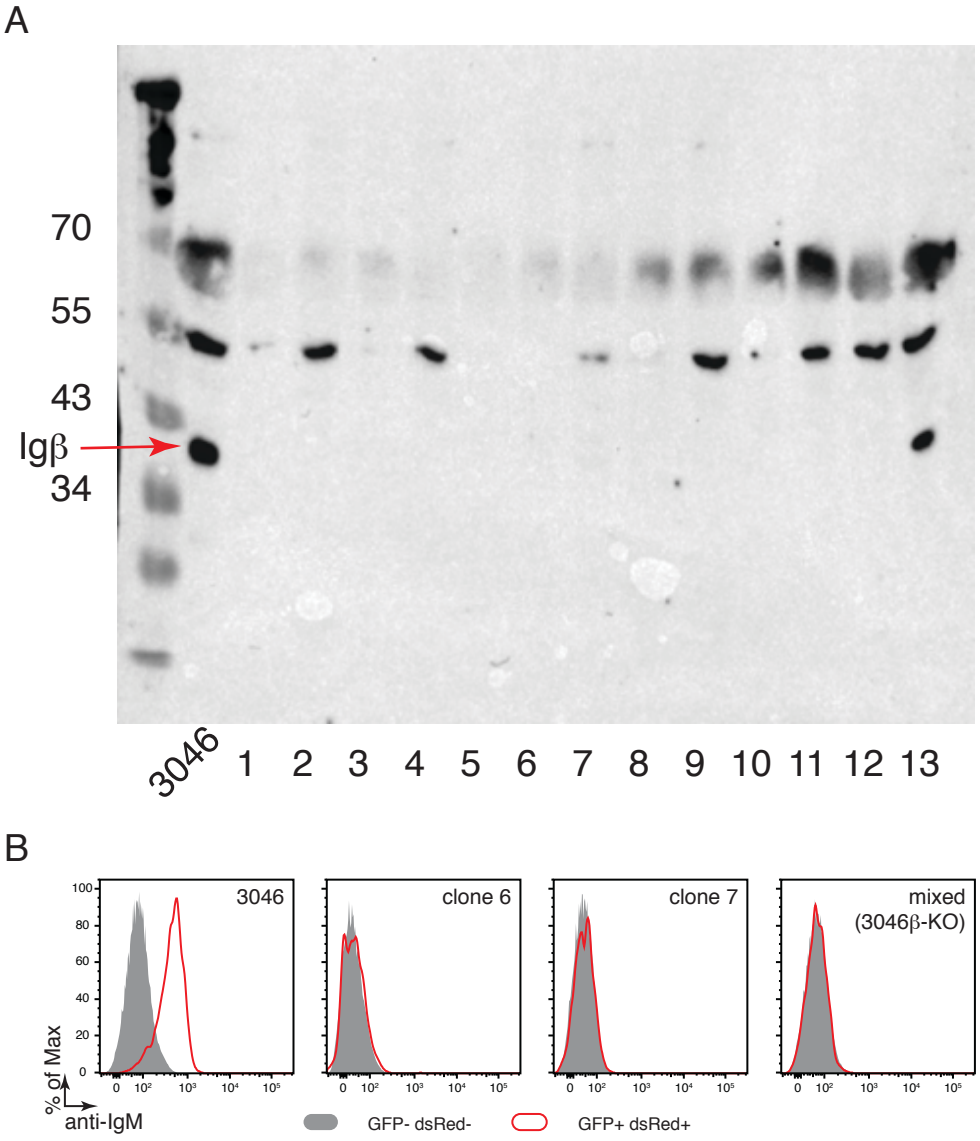

Fig. S2. Knock out Igβ in 3046 pro-B cells by CRISPR/Cas9. (A) Western blot analysis for Igβ expression of the indicated 3046 cells clones after CRISPR/Cas9. Proteins are seperqted by SDS-PAGE and blotted against anti-Igβ. (B) Flow cytometry analysis for BCR surface expression in the indictaed 3046 pro-B cells expressing HC, LC and Igα. cells were stained by anti-IgM. Gray, untrasfectedc cells; red. transfceted cells.

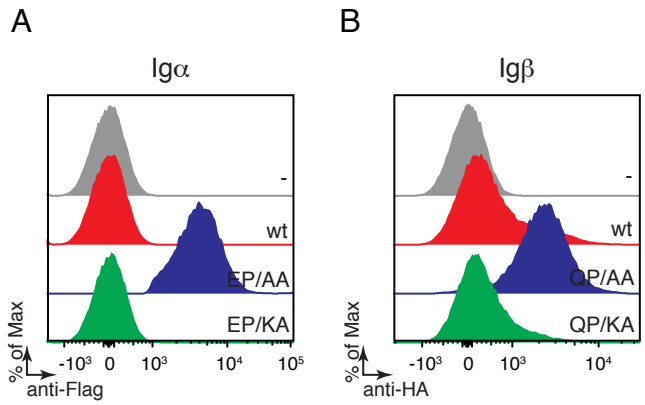

Fig. S3. The E/Q-X10-P motif is responsible for the ER retention of both Igα and Igβ in 3046β-KO cells. (A) Flow cytometry analysis of the expression of Flag-tagged Igα on the surface of 3046β-KO cells transfected with plasmids encoding the indicated wt and mutant forms of Igα. (B) Flow cytometry analysis of the expression of HA-tagged Igβ on the surface of 3046β-KO cells transfected with plasmids encoding the indicated wt and mutant forms of Igβ. Data are representative of three independent experiments.