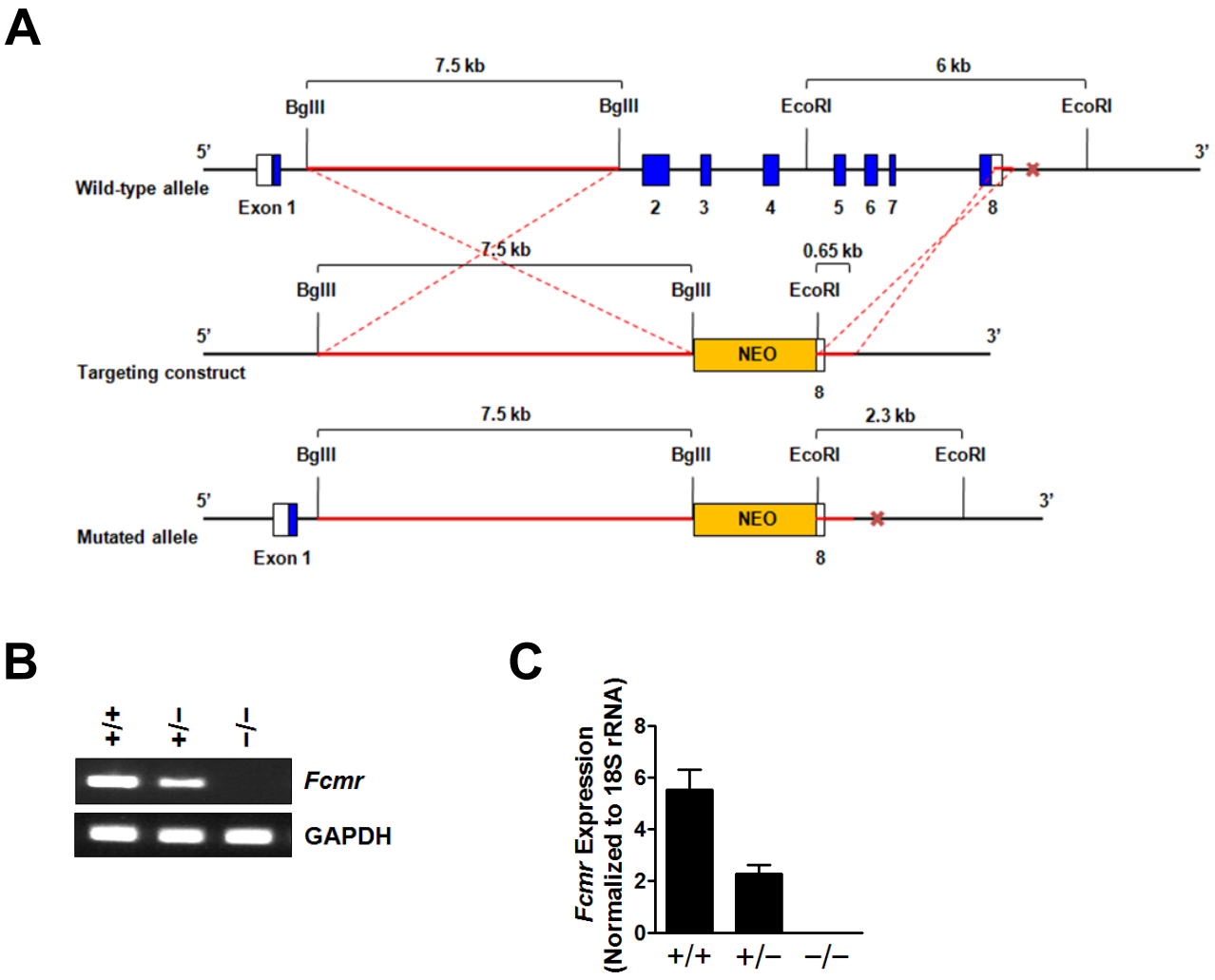
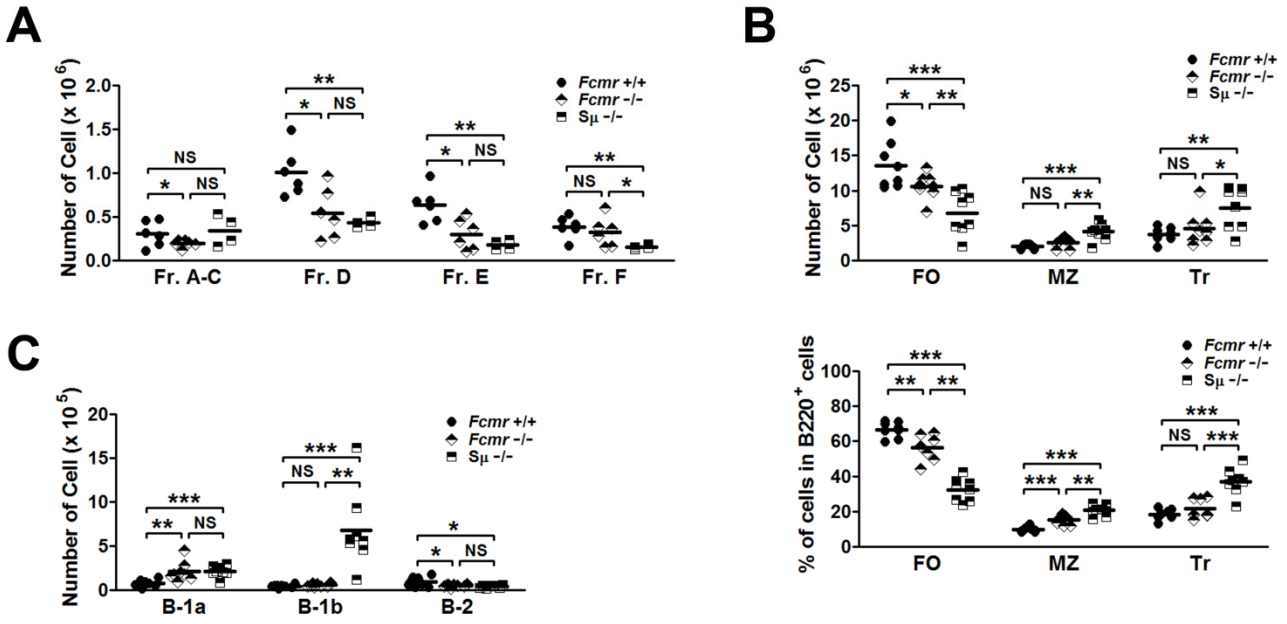
Supplementary Figure 1



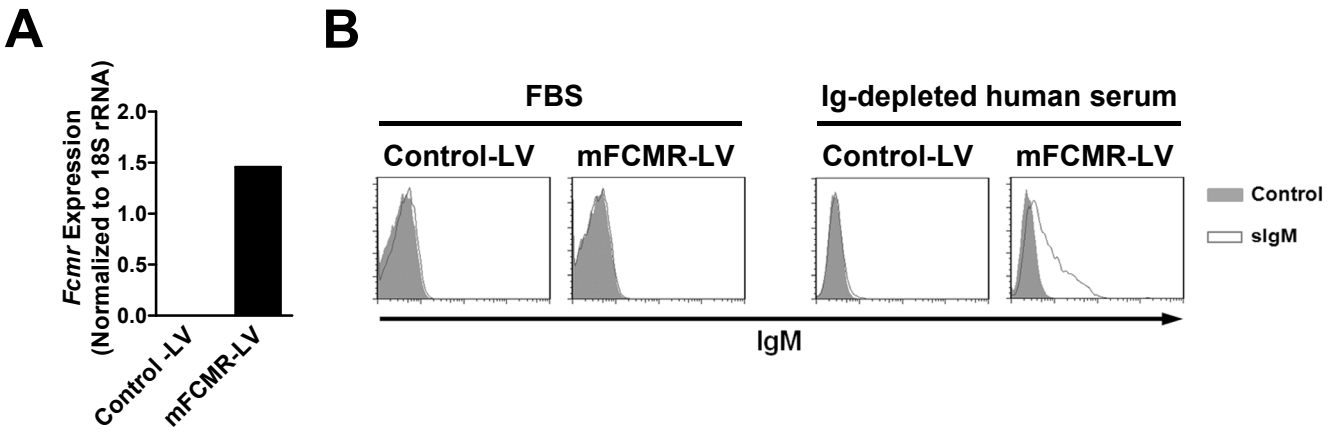
Supplementary Figure 1. Establishment of *Fcmr*$^{-/-}$ mice. (A) A schematic diagram of the wild-type allele, the targeting construct, and the mutated allele. (B-C) PCR (B) and real-time PCR (C) analyses show the knock-out of *Fcmr* gene using spleen cells from *Fcmr* homozygous mutant mice and heterozygous or wild-type littermate mice. Real-time PCR data represent mean ± SD from three experiments.

Supplementary Figure 2



Supplementary Figure 2. *Fcmr*$^{-/-}$ and Sμ$^{-/-}$ mice exhibit similar B cell deficiencies. BM (A), spleen (B) and peritoneal cells (C) from 3 month-old mice of each strain were analyzed by flow cytometry. Data are absolute cell numbers of multiple mice. Each symbol represents a mouse. *p< 0.05, **p< 0.01, ***p< 0.005.

Supplementary Figure 3



Supplementary Figure 3. IgM binds to FCMR. (A) The expression levels of *Fcmr* mRNA in YTS cells transfected with control lentivirus (Control-LV) or lentivirus containing the full-length mouse *Fcmr* DNA (mFCMR-LV). (B) Transfected YTS cells were cultured in RPMI1640 containing FBS or Ig-depleted human serum. The cells were incubated with mouse IgM (mIgM), followed by staining with PE-labeled anti-IgM mAb, and were analyzed by FACS. Note that normal FBS in culture medium contains bovine IgM that blocks binding of mouse IgM to the FCMR (left side).