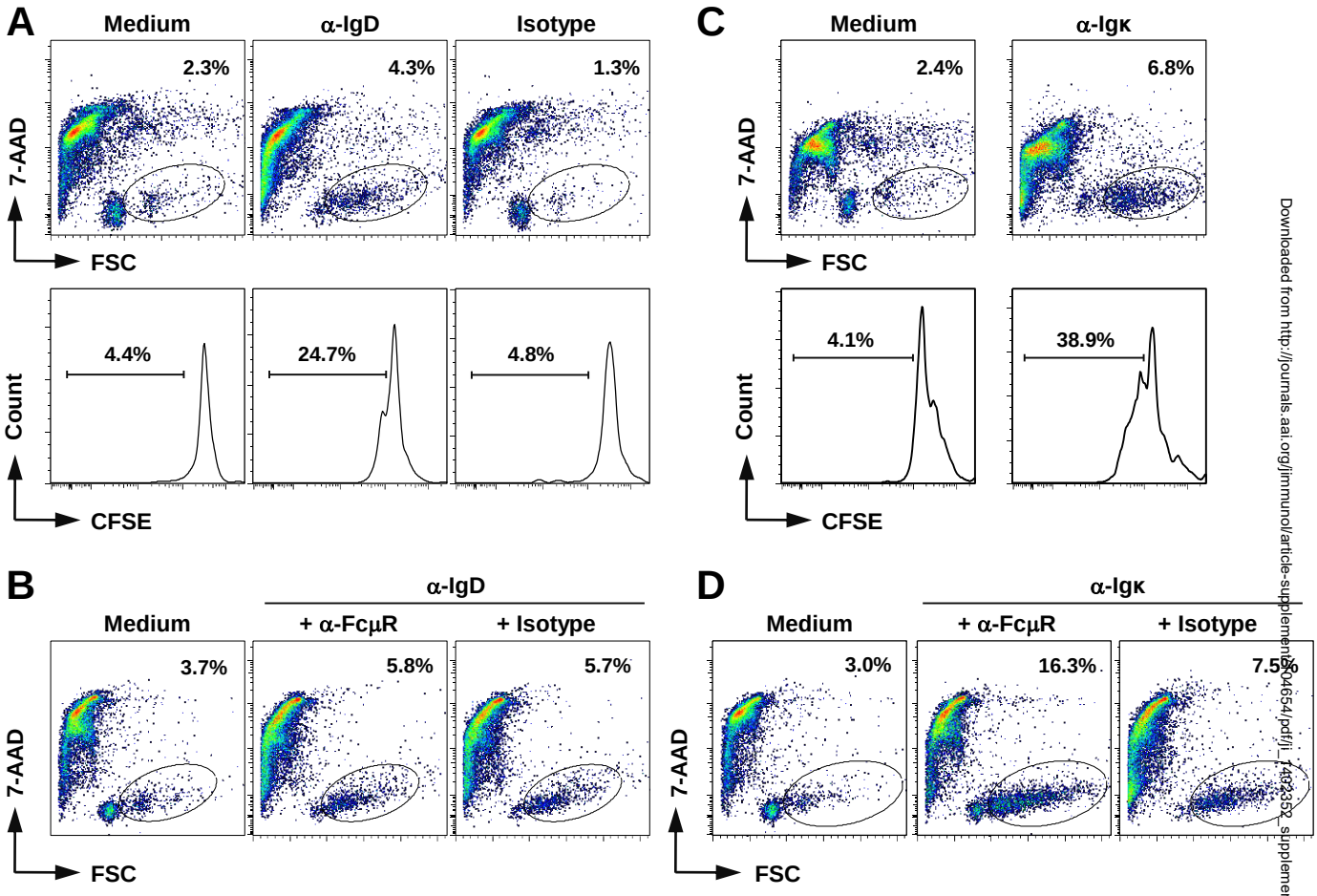
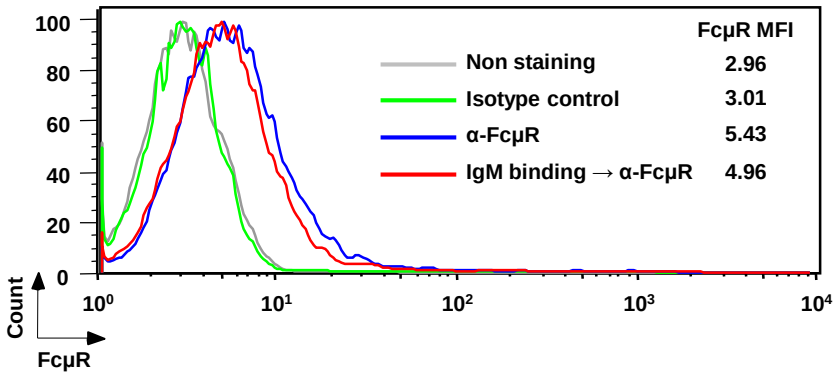
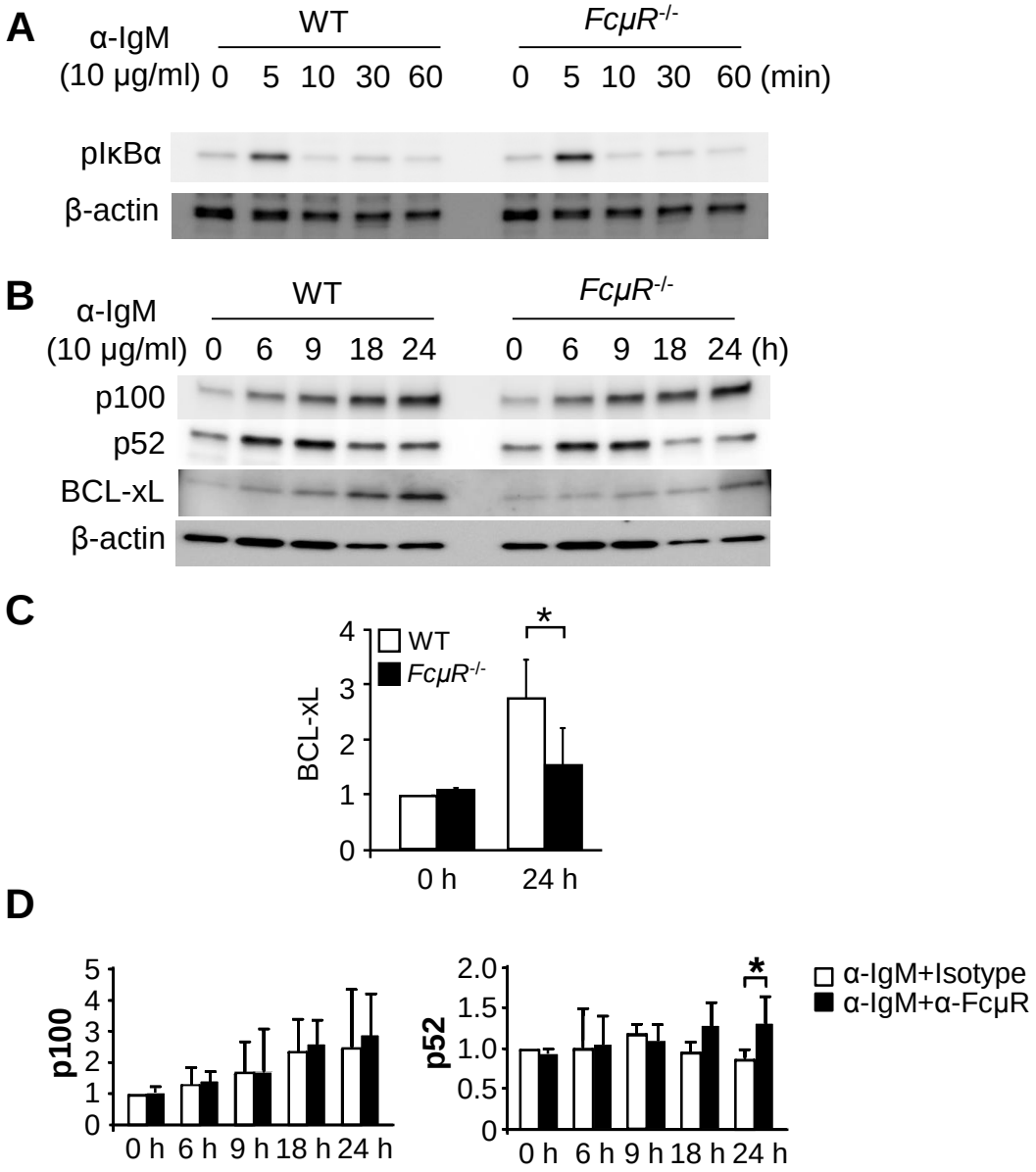


Supplemental Fig. 1. Crosslinking FcμR enhanced anti-Igκ- but not anti-IgD-induced B cell activation. (**A**) Purified B cells were cultured for 3 days in medium alone or in the presence of 10 μg/ml of the anti-IgD antibody AMS-9.1 or an isotype control of AMS-9.1, and analyzed for cell sizes (FSC, upper panels) and CFSE dilution (lower panels). (**B**) Purified B cells were cultured for 3 days in medium alone or in the presence of 10 μg/ml of AMS-9.1 + 30 μg/ml of either the 4B5 anti-FcμR antibody or an isotype control of 4B5, and then analyzed for cell sizes. (**C**) Purified B cells were cultured in medium alone or in the presence of 10 μg/ml of $F(ab')_2$-anti-mouse κ antibodies for 3 days, and analyzed for cell sizes (upper panels) and CFSE dilution (lower panels). (**D**) Purified B cells were cultured for 3 days in medium alone or in the presence of 10 μg/ml of $F(ab')_2$-anti-mouse κ antibodies + 30 μg/ml of either the 4B5 anti-FcμR antibody or an isotype control of 4B5, and then analyzed for cell sizes.



Supplemental Fig. 2. The 4B5 anti-FcμR antibody (rat IgG_{2a}) binds to FcμR even after IgM binding. WEHI279 B cells were first stained with anti-mouse CD16/CD32 antibody (clone 2.4G2, rat IgG_{2b}) to block FcγR and then left unstained (grey), or stained with an isotype control (rat IgG_{2a}) antibody (green), the 4B5 anti-FcμR antibody or mouse IgM first followed by anti-FcμR antibody. The cells were then stained with FITC-anti-rat IgG_{2a}.



Supplemental Fig. 3. FcμR is involved in the activation of the noncanonical NF-κB pathway. WT and *FcμR*$^{-/-}$ B cells were stimulated with α-IgM (10 μg/ml) for the indicated durations and analyzed for IκBα phosphorylation (**A**) and p100, p52 and BCL-xL protein expression (**B**). (**C**) Quantification of BCL-xL protein expression relative to β-actin. The expression at time 0 in WT B cells was set as 1. Mean ± SD of three independent experiments are shown. *$p < 0.05$. (**D**) Crosslinking FcμR enhances p52 induction at a later time point after BCR stimulation. WT B cells were stimulated for the indicated times with F(ab)$_2$-α-IgM (10 μg/ml) in the presence of α-FcμR (30 μg/ml) or an isotype control Ab, and analyzed for p100 and p52 protein expression relative to β-actin. Mean ± SD of three independent experiments are shown. *$p < 0.05$.