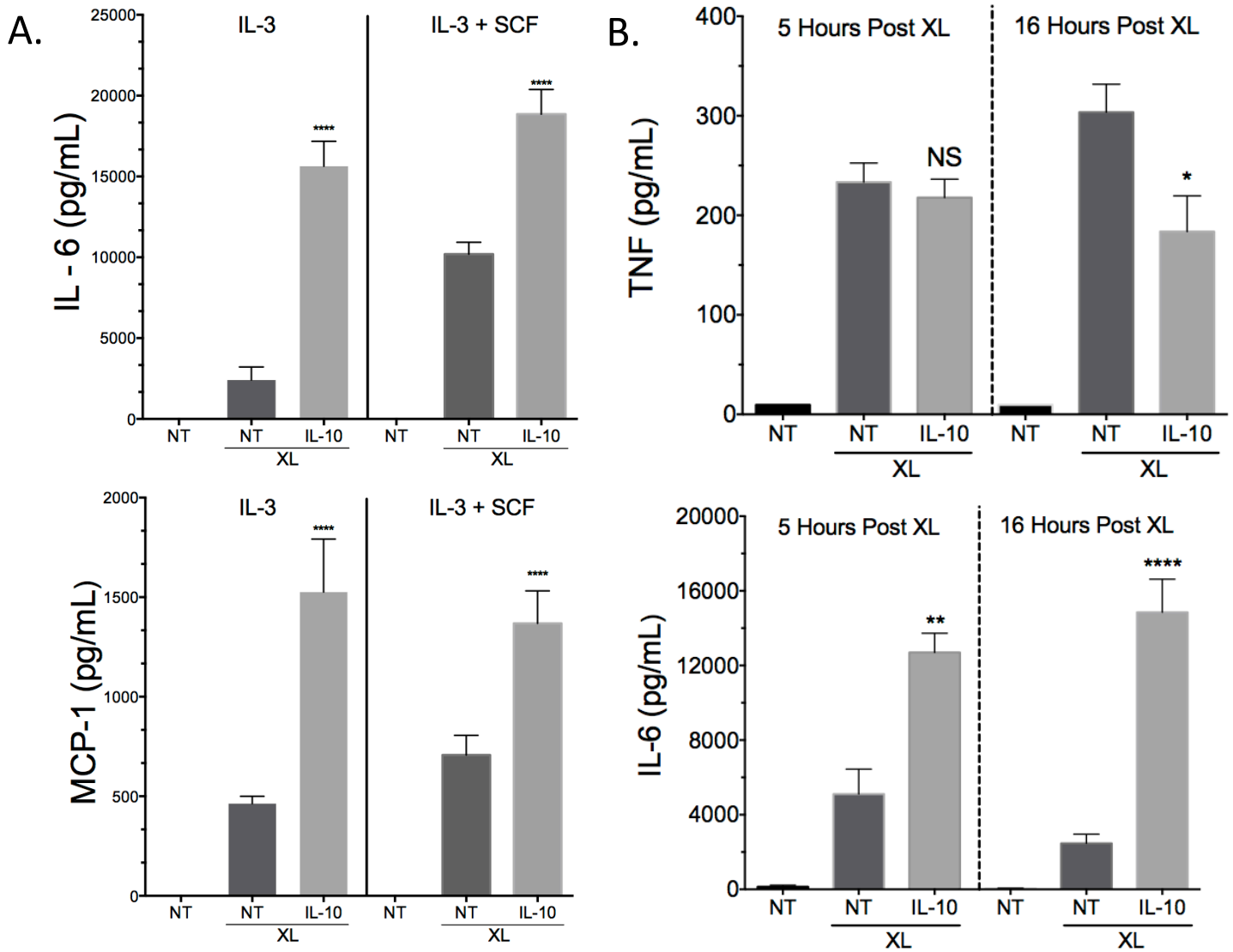
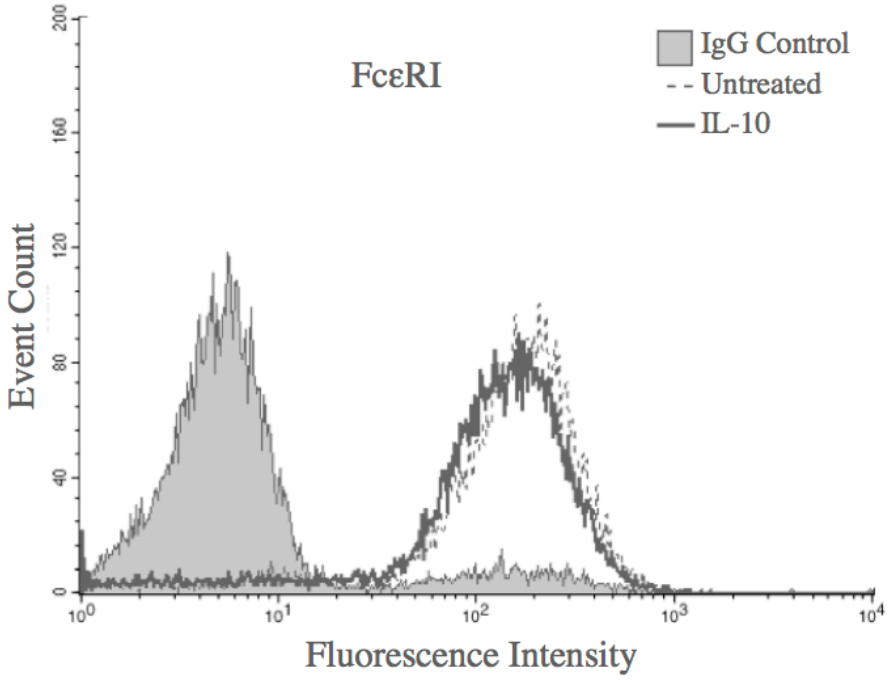
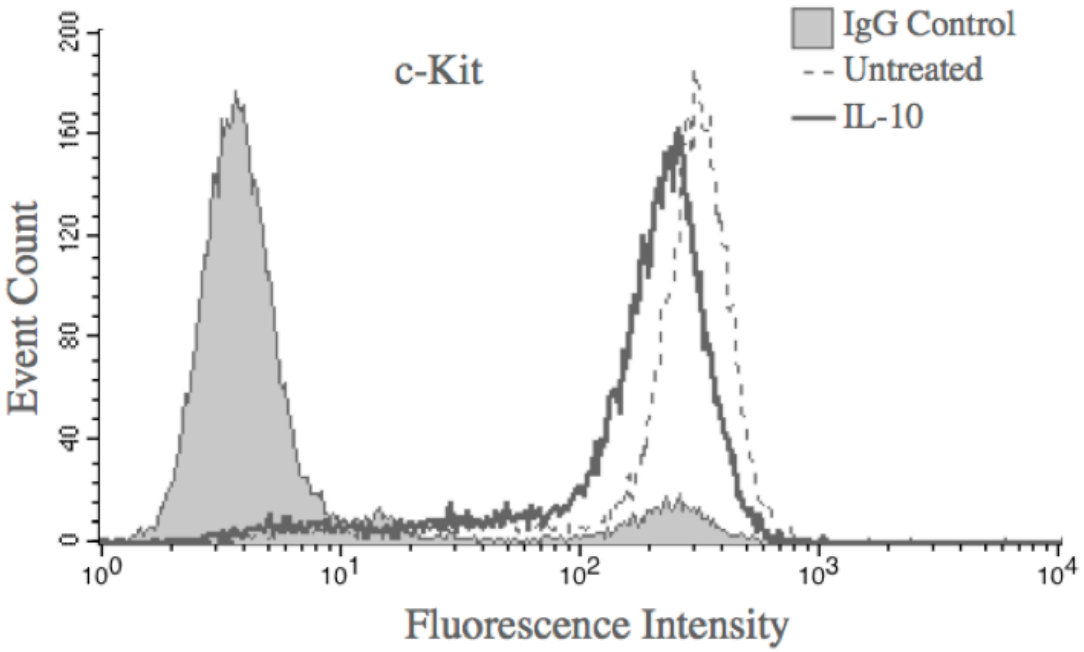


Figure S1: (A) BMMC were cultured as described previously with slight alternations. Briefly, bone marrow cells were collected from femurs of C57BL/6J mice and expanded in WEHI-IL-3 (1.5ng/ml) ± BHK-SCF (15ng/mL) for 21 days. Cells were then treated with 50ng/ml of IL-10 for 24 hours in the presence of 10ng/ml IL-3 prior to IgE XL for 16 hours. Data are means ± SEM of two independent experiments done in triplicate. p-value based on Student t test, between Ag-XL and Ag-XL with IL-10. (B) BMMC from C57BL/6J background mice were incubated with IgE and IL-10 (50ng/ml) for 24 hours prior to antigen-induced IgE crosslinking (XL) for 5 or 16 hours. Cytokines were measured via ELISA. Data are mean ± SEM of 3 populations tested in triplicates.





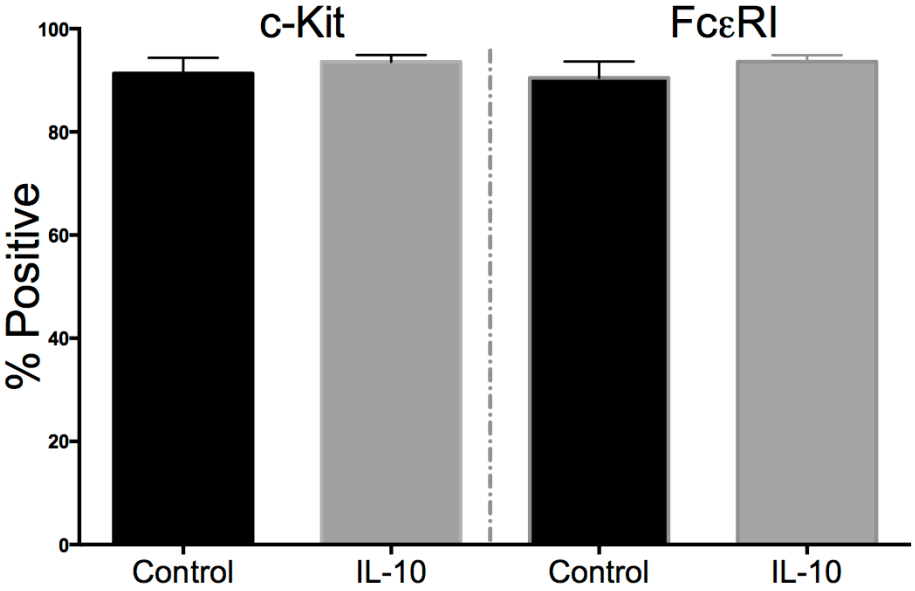


Figure S2: Mast cells were treated with 50ng/ml IL-10 for 24 hours prior to surface staining and flow cytometry. Data are means ± SEM of two independent experiments done in triplicate.

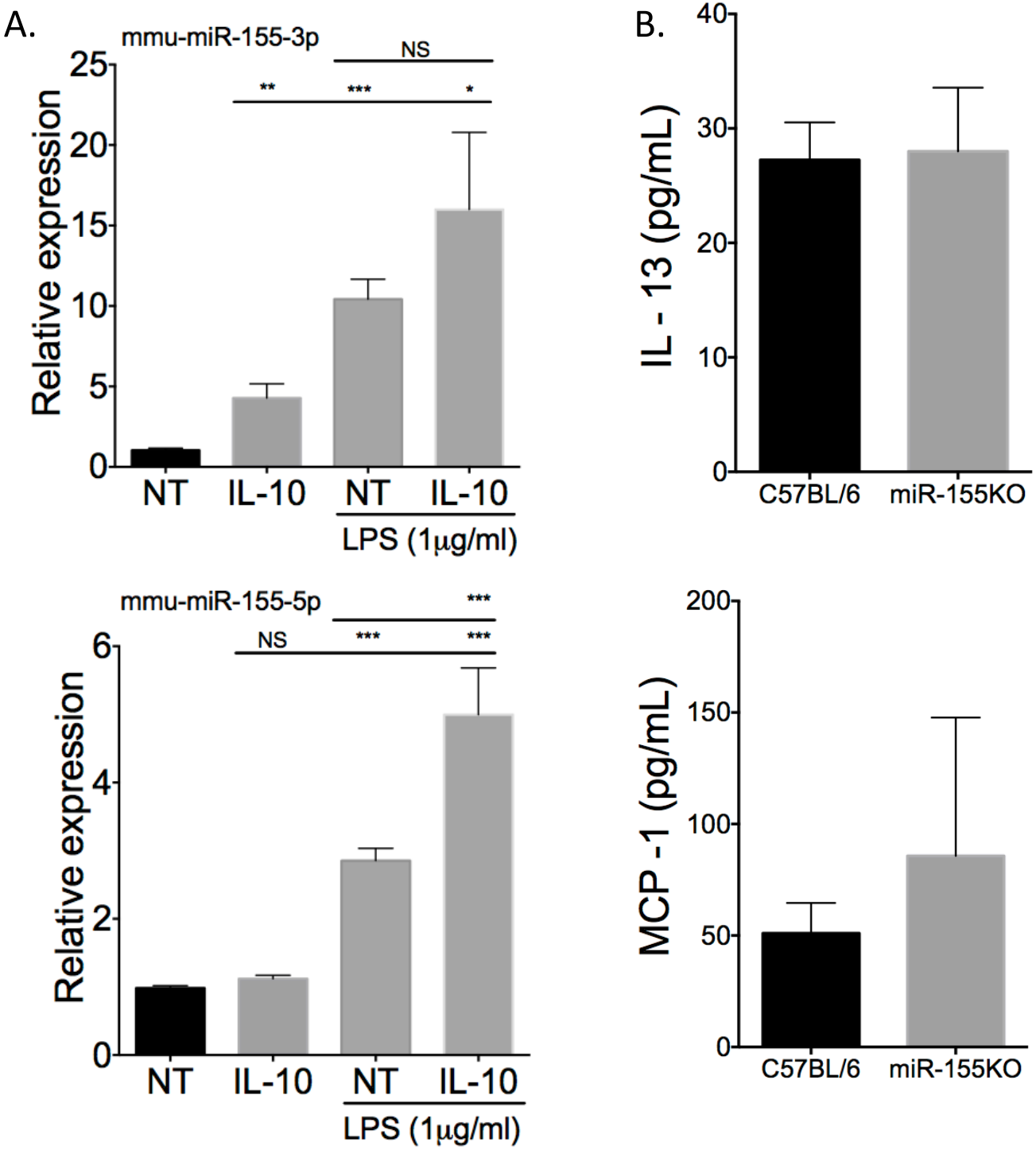


Figure S3: (A) BMMC were treated with 1μg/ml LPS and/or 50ng/ml IL-10 for 4 hours. qPCR was used to measure miR-155-5p and miR-155-3p expression relative to Snord47. Fold change relative to untreated cells is shown. Data is mean ± SEM of three populations analyzed in triplicates. **(B)** Plasma was collected from 4 C57BL/6 and 4 miR-155KO mice via cardiac puncture. Cytokines were measured via ELISA. Data are mean ± SEM of triplicate samples from each of 4 mice.

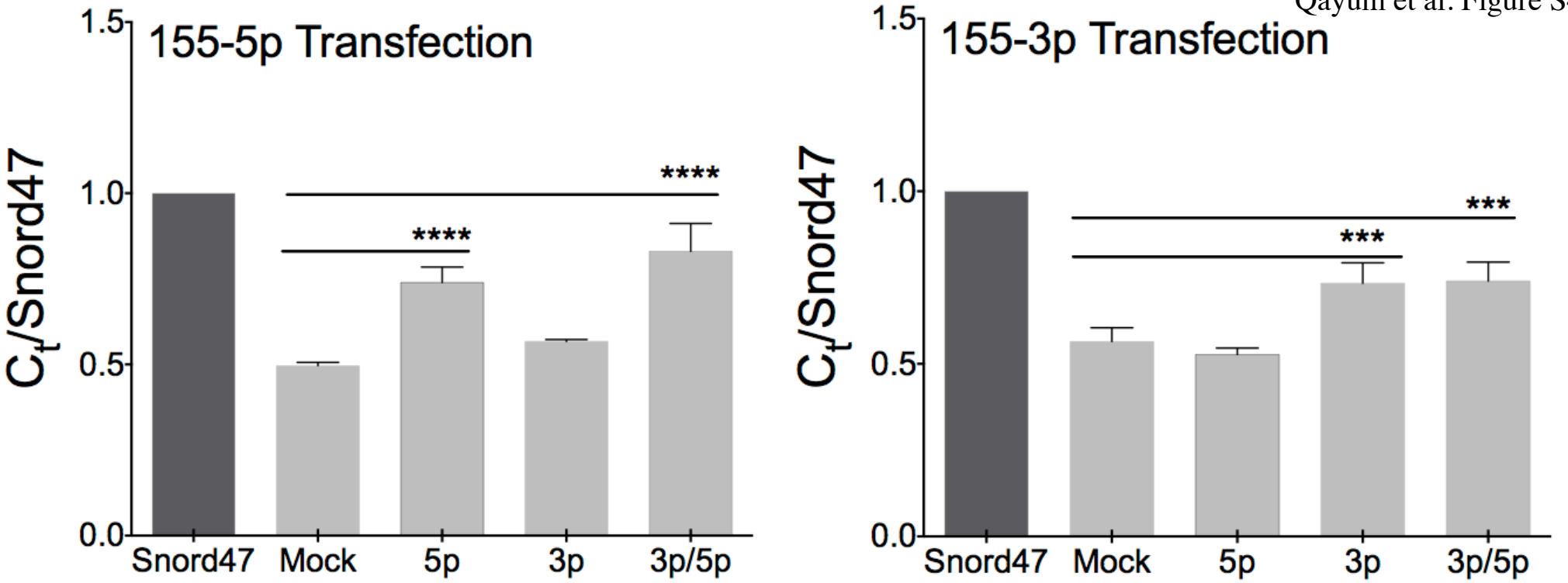


Figure S4: BMMC from miR-155 KO mice were transfected with Mock (control), miR-155-5p, miR-155-3p and miR-155-5p/3p mimics. miR transfection was validated 48 hours post transfection via qRT-PCR. Data are means ± SEM of two independent experiments done in triplicate with representative of one experiment shown.