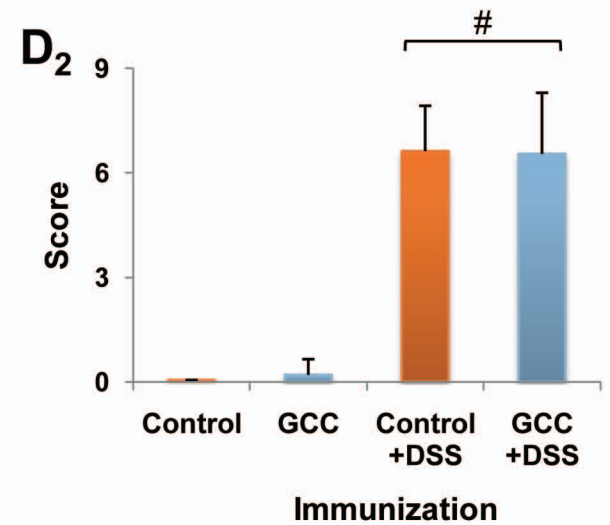
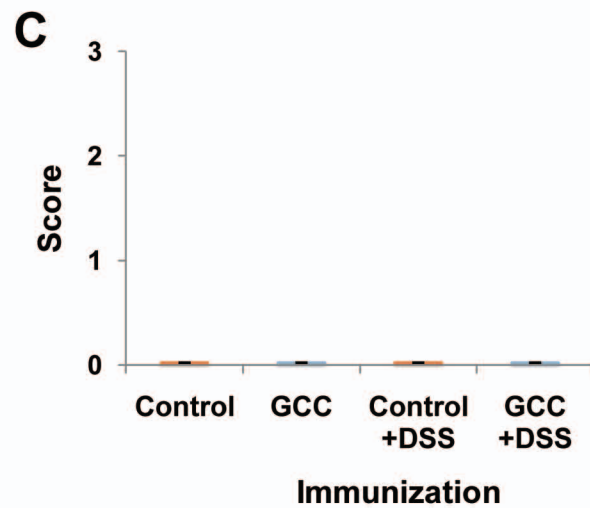
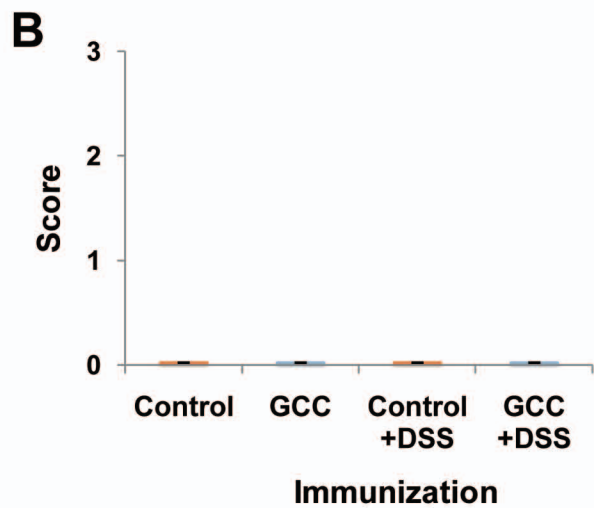
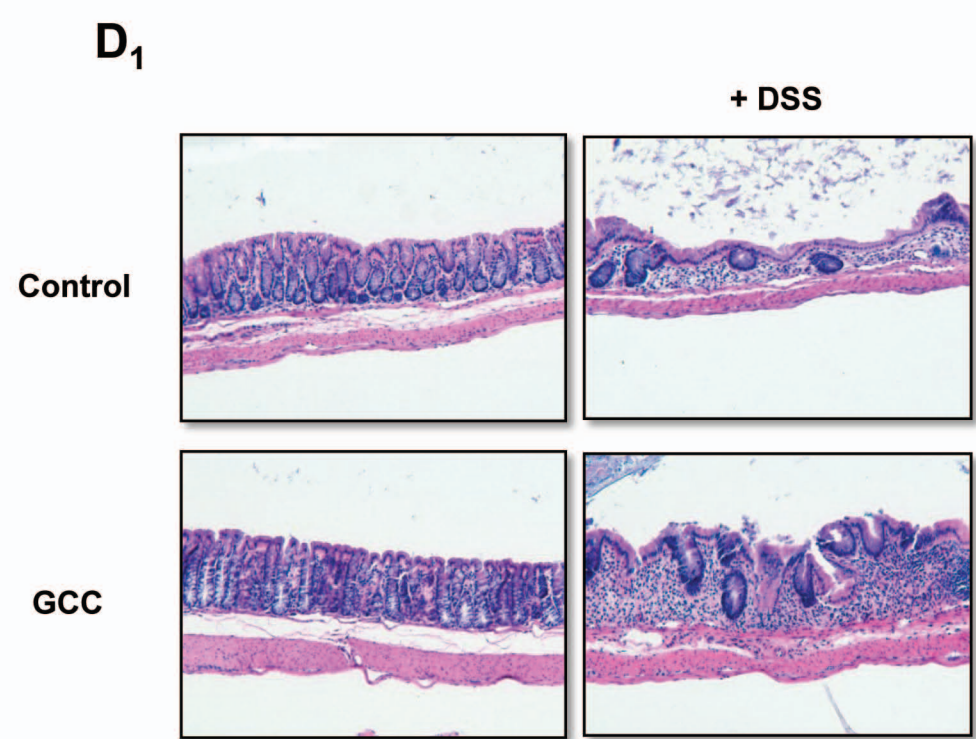
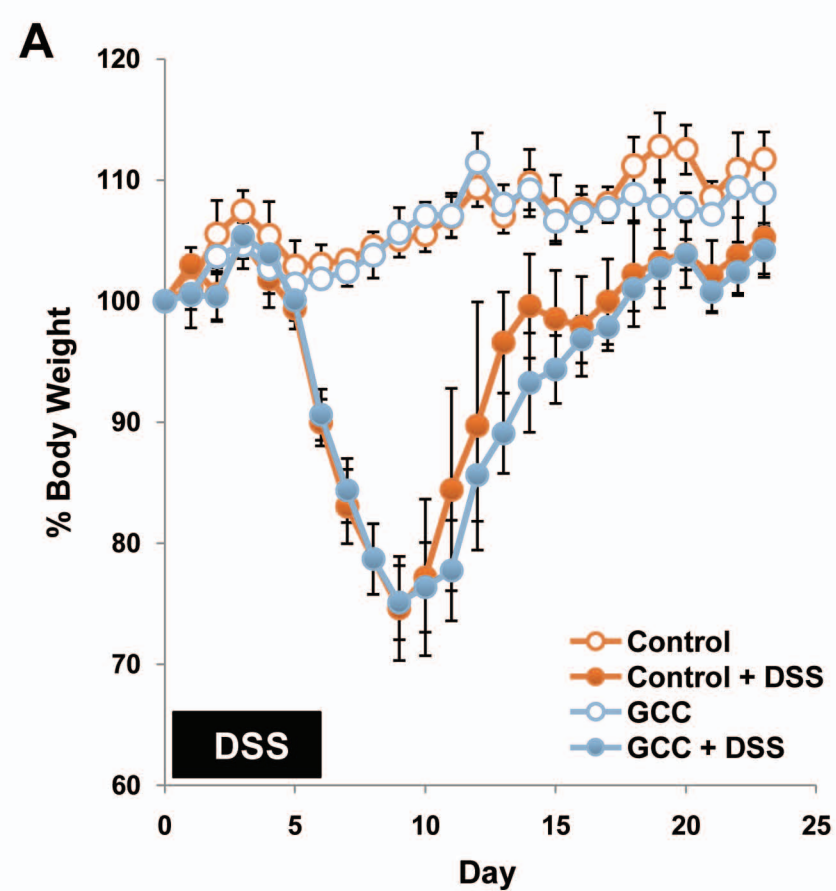


Supplementary Figure 1. GCC immunization does not intensify mucosal autoimmunity during active experimental colitis. A, female C57BL/6 mice were treated with a 7 day course of DSS *ad libitum* in the drinking water, followed by normal water. Mice were immunized with Control-AV or GCC-AV on day 5 and boosted sequentially with RV and VV at 7 day intervals. Mouse weights were monitored daily. Data indicate means and error bars indicate 95% confidence intervals ($P > 0.05$ Bonferroni's multiple comparison's test on area under the curve (AUC) values, Control vs. GCC -immunized DSS treatment groups, Supplementary Fig. 2). B-D, mice were euthanized on day 23 for examination of disease markers including diarrhea (B), fecal blood (C) and histology (D). Images in D_1 are representative sections from treated mice and D_2 indicates histological scores from treated mice. Data in B-D indicate means of N=5-11 mice per group and error bars indicate standard deviation (# $P > 0.05$ Bonferroni's multiple comparison test).

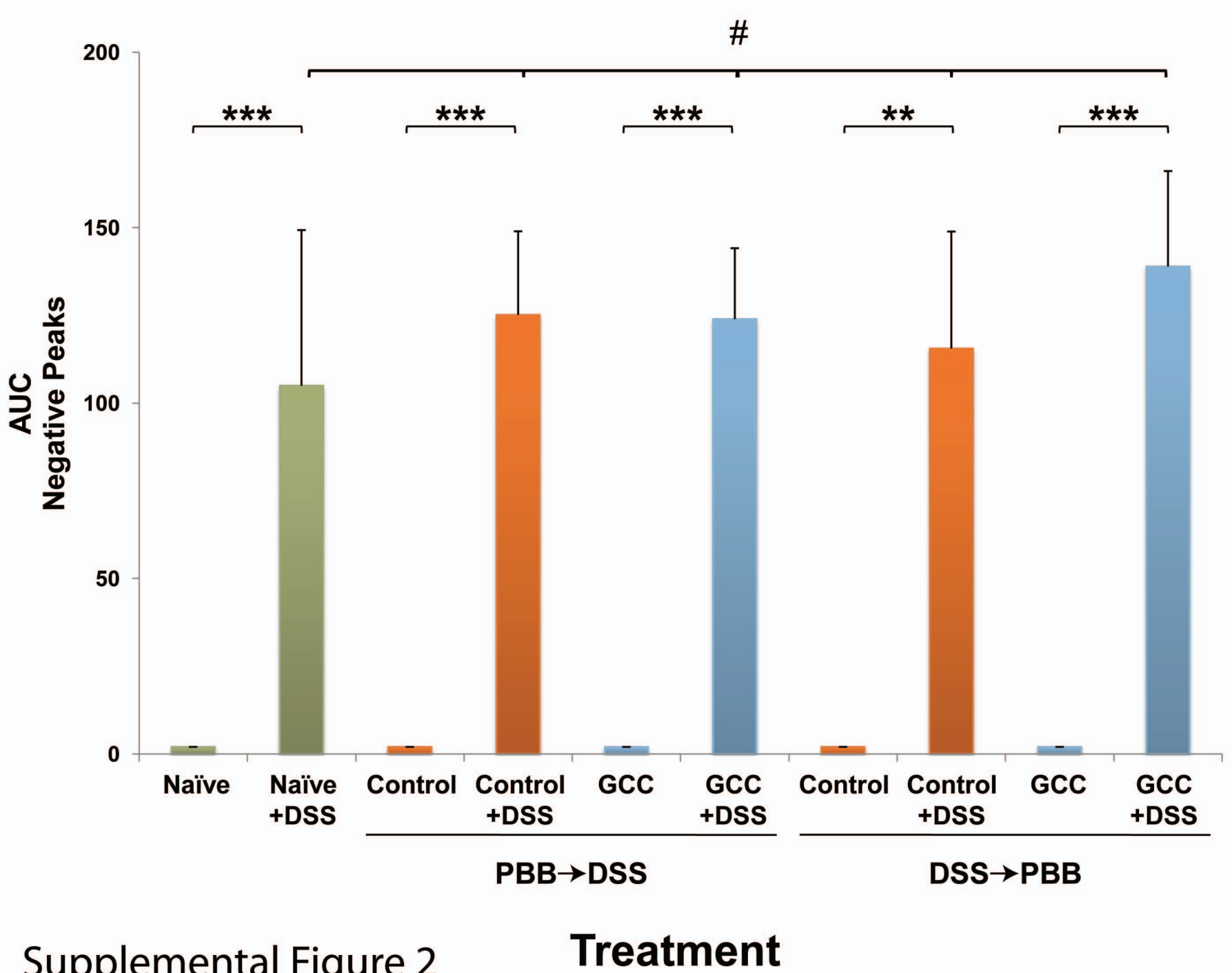
Supplementary Figure 2. Area under the curve (AUC) analysis of DSS-induced colitis. Negative area-under-the-curve (AUC) peaks were calculated on weight curves from untreated naïve, control-immunized and GCC-immunized mice and those treated with DSS *ad libitum*. Mice were immunized by heterologous prime boost prior to DSS administration (PBB→DSS; Figure 3) or beginning on day 5 after DSS initiation (DSS→PBB; Supplementary Figure 1). ** $P < 0.01$, *** $P < 0.001$, # $P > 0.05$ Bonferroni's multiple comparison test.

Supplementaary Figure 3. Histological scores of selected treatment regimens. Colons of mice from treatment regimens including acute, intermediate and chronic immunization as well as immunization prior to, or during, DSS-induced IBD were scored

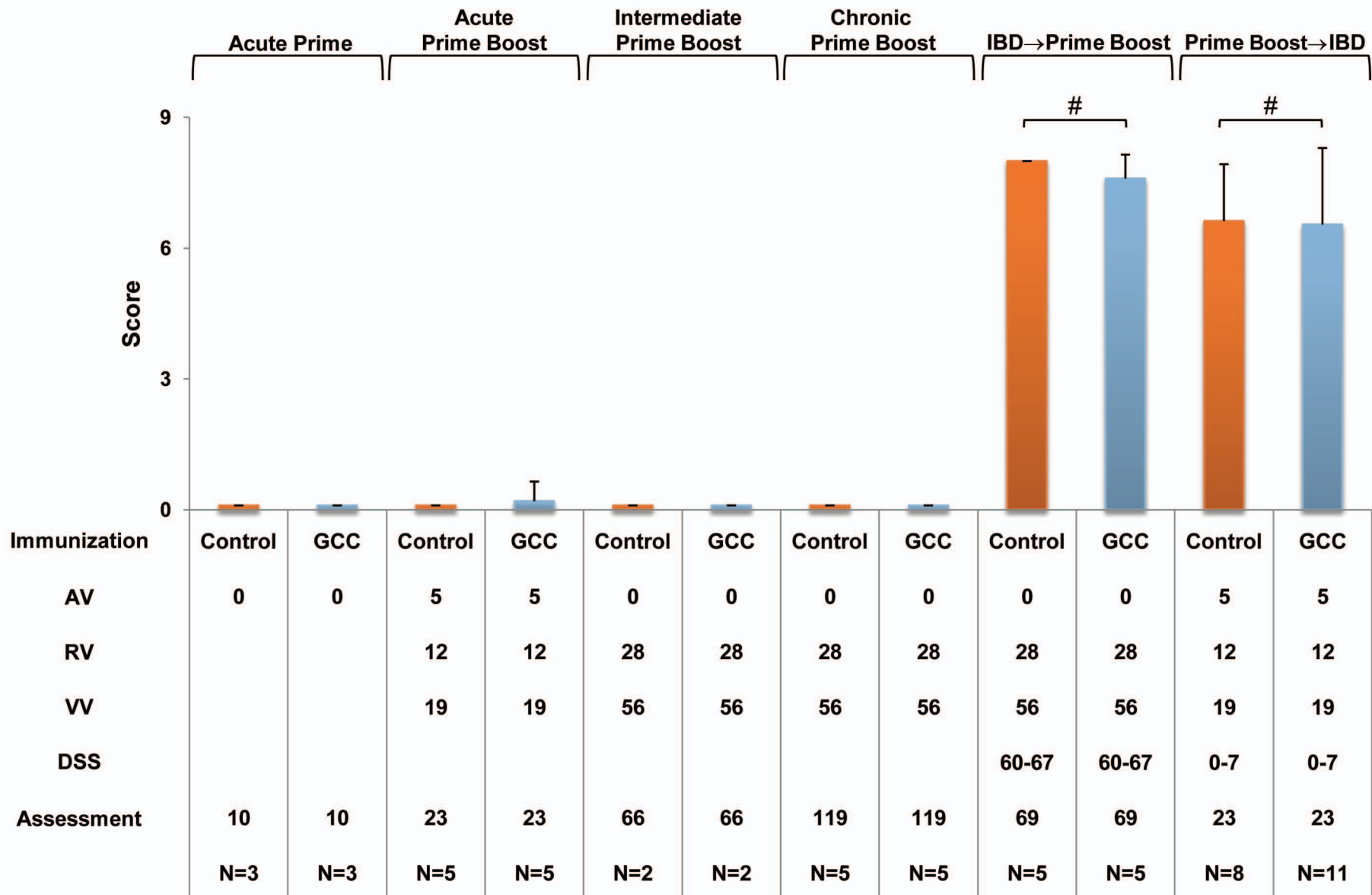
water between each cycle. *D*, colons were collected 10 days after the final cycle and examined. Tumor number (*E*) and size (*F*) were determined under a dissecting microscope. Error bars indicate 95% confidence intervals (# $P > 0.05$ two-sided Welch's *t* test).



Supplemental Figure 1



Supplemental Figure 2



Supplemental Figure 3

Numbers indicate day of treatment beginning on day 0