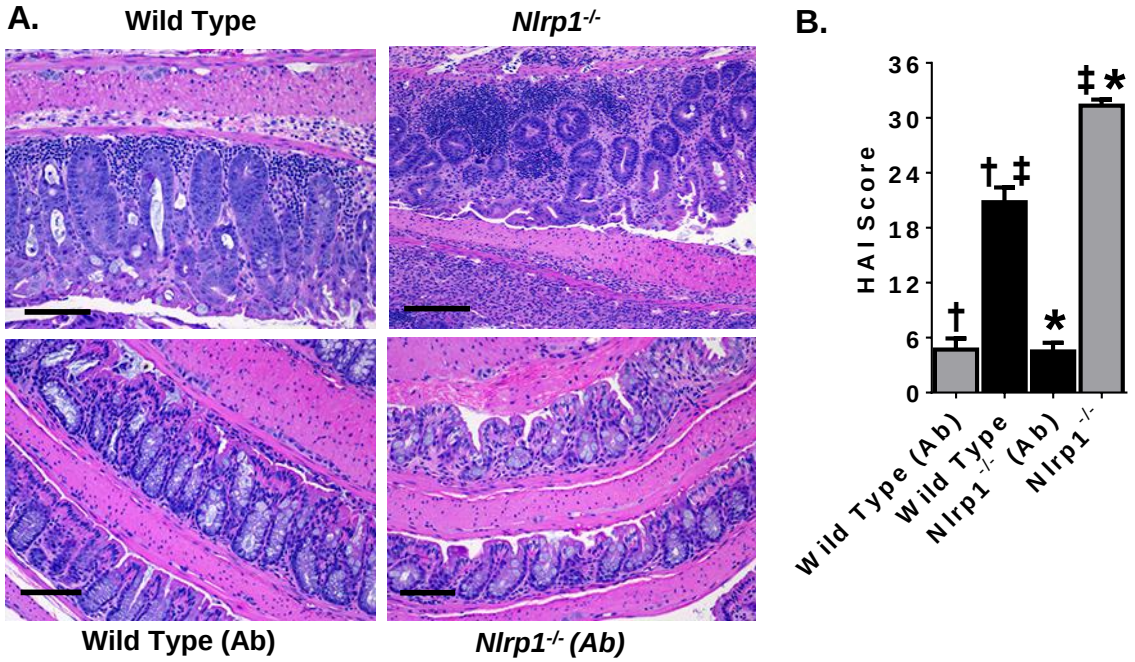
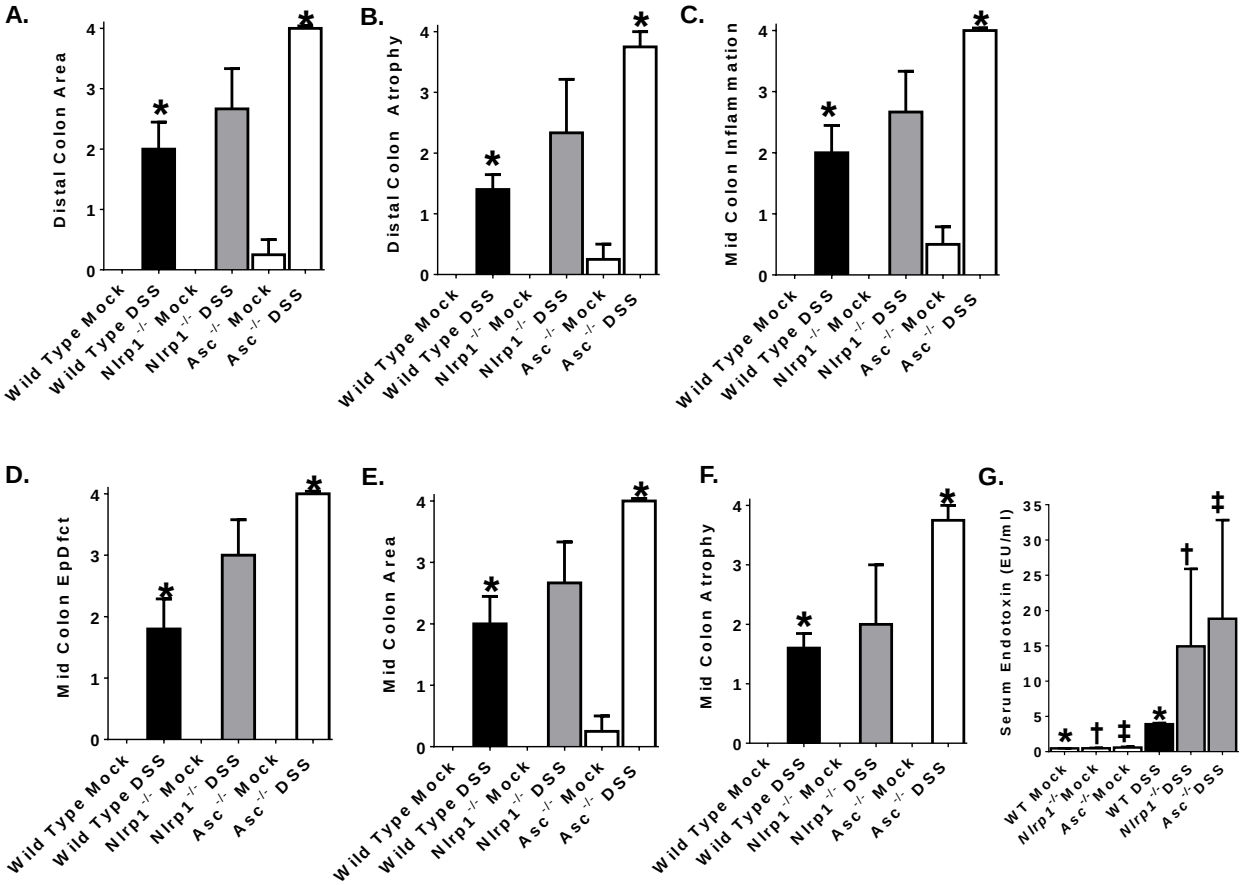
SUPPLEMENTAL FIGURES

Supplemental Figure 1.



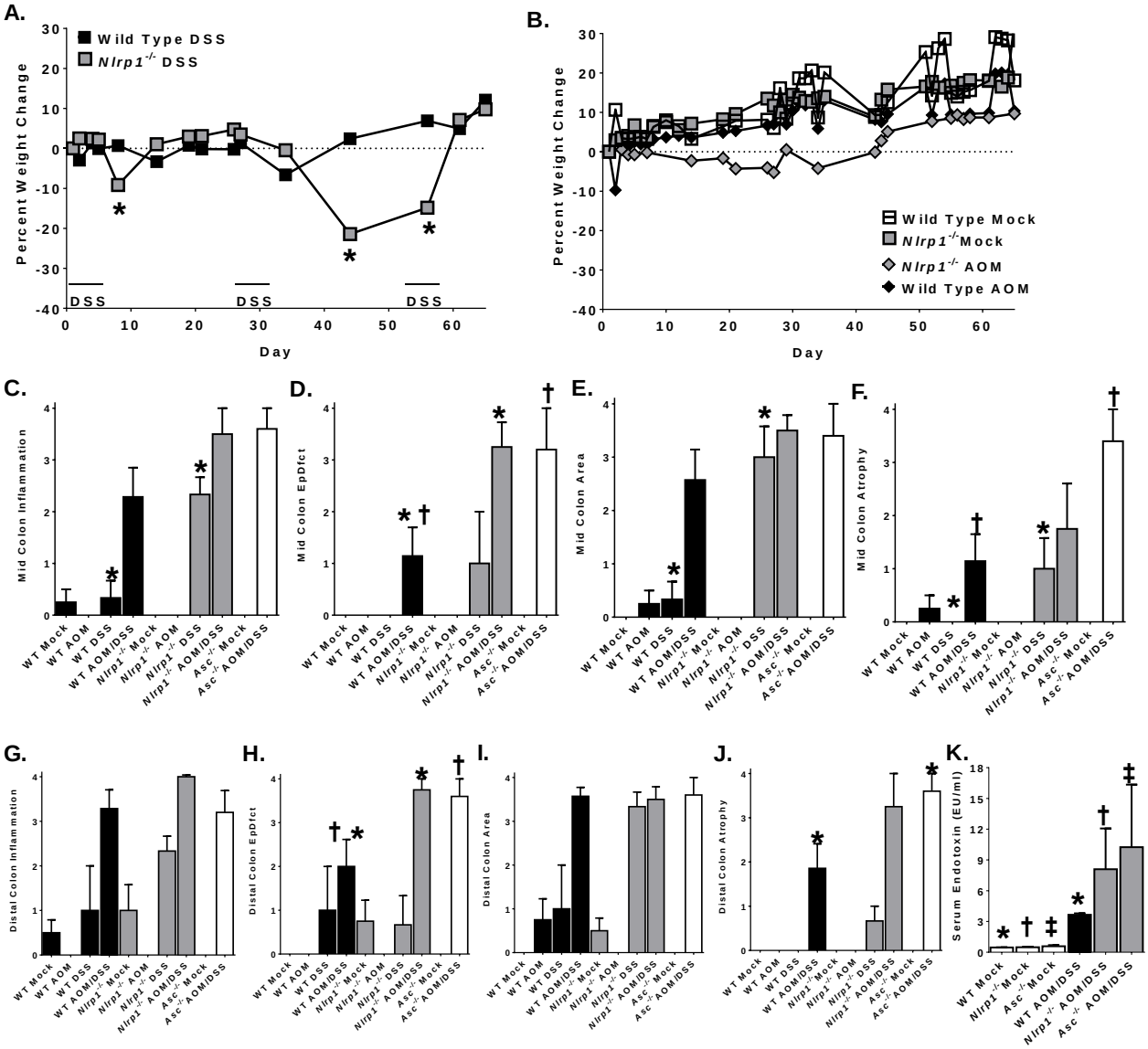
Supplemental Figure 1. Antibiotic significantly altered the sensitivity of the *Nlrp1b*$^{-/-}$ mice to experimental colitis progression. A. Representative images showing increased inflammation and epithelial cell damage observed in the colons from the DSS treated animals without antibiotic treatment (Ab). The increased histopathology observed in the *Nlrp1b*$^{-/-}$ mice was completely ameliorated by Ab treatment. Scale bar: 250µm**. B.** HAI scoring indicated that *Nlrp1b*$^{-/-}$ mice without Ab treatment demonstrated a significant increase in histological parameters associated with disease compared to similarly treated wild type mice and Ab treatment significantly improved disease pathogenesis in the colon. *$p<0.01$; †$p<0.01$; ‡$p<0.05$. Wild Type DSS, n=5; Wild Type DSS+Antibiotic (Ab), n=15; *Nlrp1b*$^{-/-}$ DSS, n=5; *Nlrp1b*$^{-/-}$ DSS+Ab, n=15. Data are representative of more than 3 independent experiments.

Supplemental Figure 2.



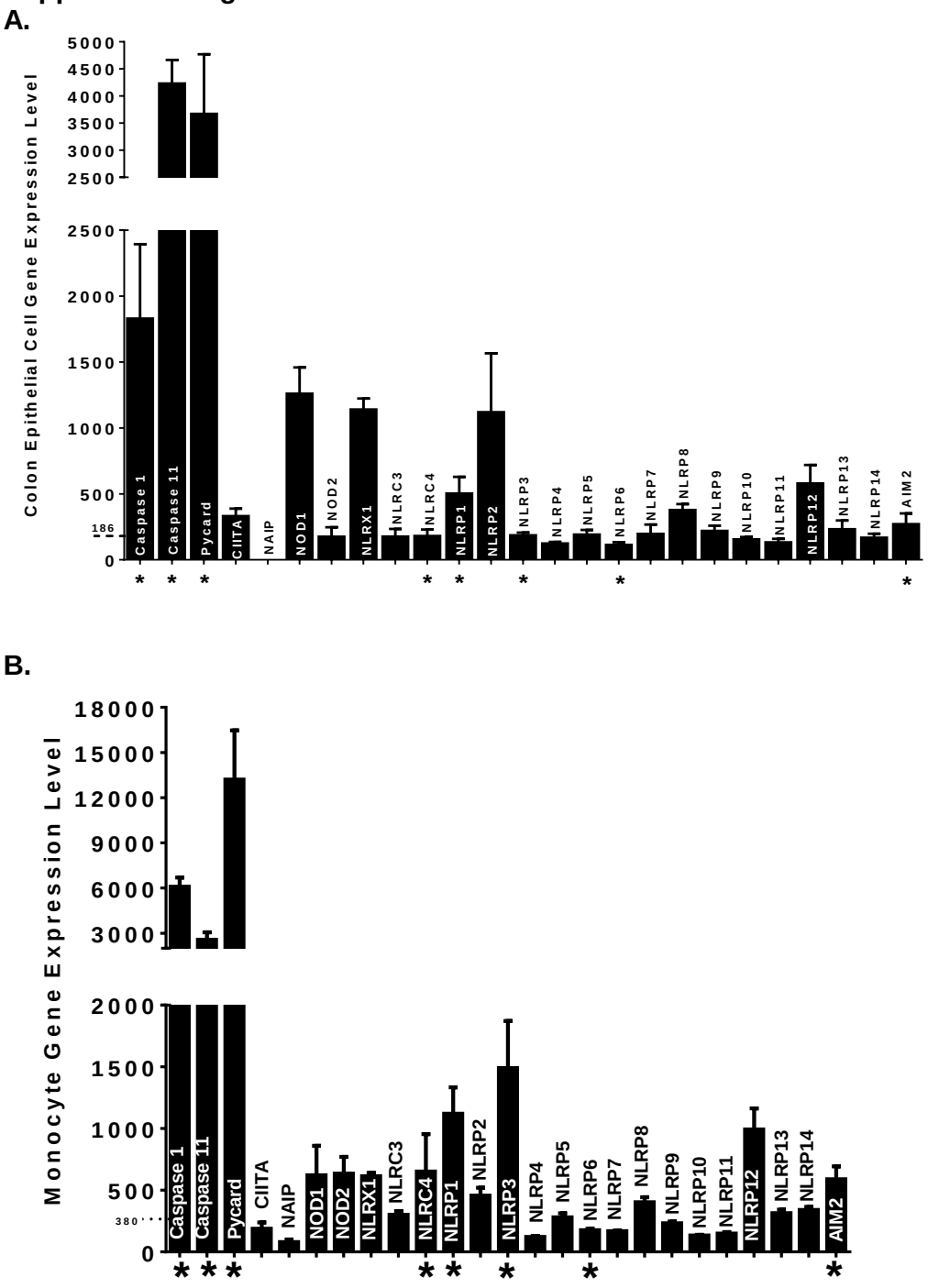
Supplemental Figure 2. NLRP1 inflammasome deficient mice demonstrate increased distal and mid colon histopathology during experimental colitis. A-B. The area involved with disease and atrophy was significantly increased in the distal colons from *Asc*$^{-/-}$ mice, while *Nlrp1b*$^{-/-}$ animals presented with intermediate histopathology compared to the wild type mice. *p<0.05**. C-F.** *Asc*$^{-/-}$ animals demonstrated significant increases in mid-colon inflammation, epithelial defects, area involved with disease and atrophy compared to the wild type mice. The *Nlrp1b*$^{-/-}$ mice demonstrated intermediate disease histopathology in the mid-colon. *p<0.05. **G.** Serum endotoxin levels were evaluated using LAL. *p<0.05; †p<0.05; ‡p<0.05. Wild Type Mock, n=3; Wild Type DSS, n=5; *Nlrp1b*$^{-/-}$ Mock, n=5; *Nlrp1b*$^{-/-}$ DSS, n=6; *Asc*$^{-/-}$ Mock, n=5; *Asc*$^{-/-}$ DSS, n=6. Data are representative of more than 5 independent experiments.

Supplemental Figure 3.



Supplemental Figure 3. ***Nlrp1b*$^{-/-}$ and *Asc*$^{-/-}$ mice develop enhanced colitis associated tumorigenesis. A.** Weight change following DSS administration in the relapsing remitting colitis model. *p<0.05. **B.** Weight change following treatment with AOM only. **C-J.** *Nlrp1b*$^{-/-}$ and *Asc*$^{-/-}$ mice developed increased histopathology in the mid and distal colon compared to the wild type animals during colitis associated tumorigenesis. *p<0.05; †p<0.05. K. Serum endotoxin levels were evaluated using LAL. *p<0.05; †p<0.05; ‡p<0.05. Wild Type Mock, n=3; Wild Type AOM, n=3; Wild Type DSS, n=5; Wild Type AOM/DSS, n=12; *Nlrp1b*$^{-/-}$ Mock, n=3; *Nlrp1b*$^{-/-}$ AOM, n=3; *Nlrp1b*$^{-/-}$ DSS, n=6; *Nlrp1b*$^{-/-}$ AOM/DSS, n=9; *Asc*$^{-/-}$ mock, n=3; *Asc*$^{-/-}$ AOM/DSS, n=8. Data are representative of 3 independent experiments.

Supplemental Figure 4.



Supplemental Figure 4. Expression of NLRs in human colon epithelial cells and monocytes. **A-B.** NLR expression was determined in human colon epithelial cells and monocytes using a publically accessible microarray metadata analysis search engine (http://www.nextbio.com/b/search/ba.nb). * Reflect well characterized inflammasome forming NLR family members.