

# Supplementary Materials

## Dietary Indole-3-carbinol alleviated spleen enlargement, enhanced IgG response in C3H/HeN mice infected with *Citrobacter rodentium*

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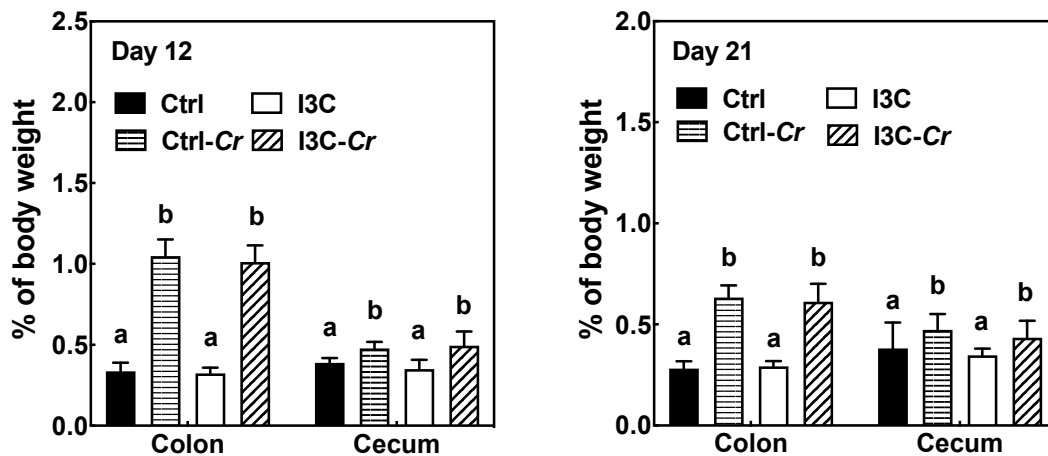
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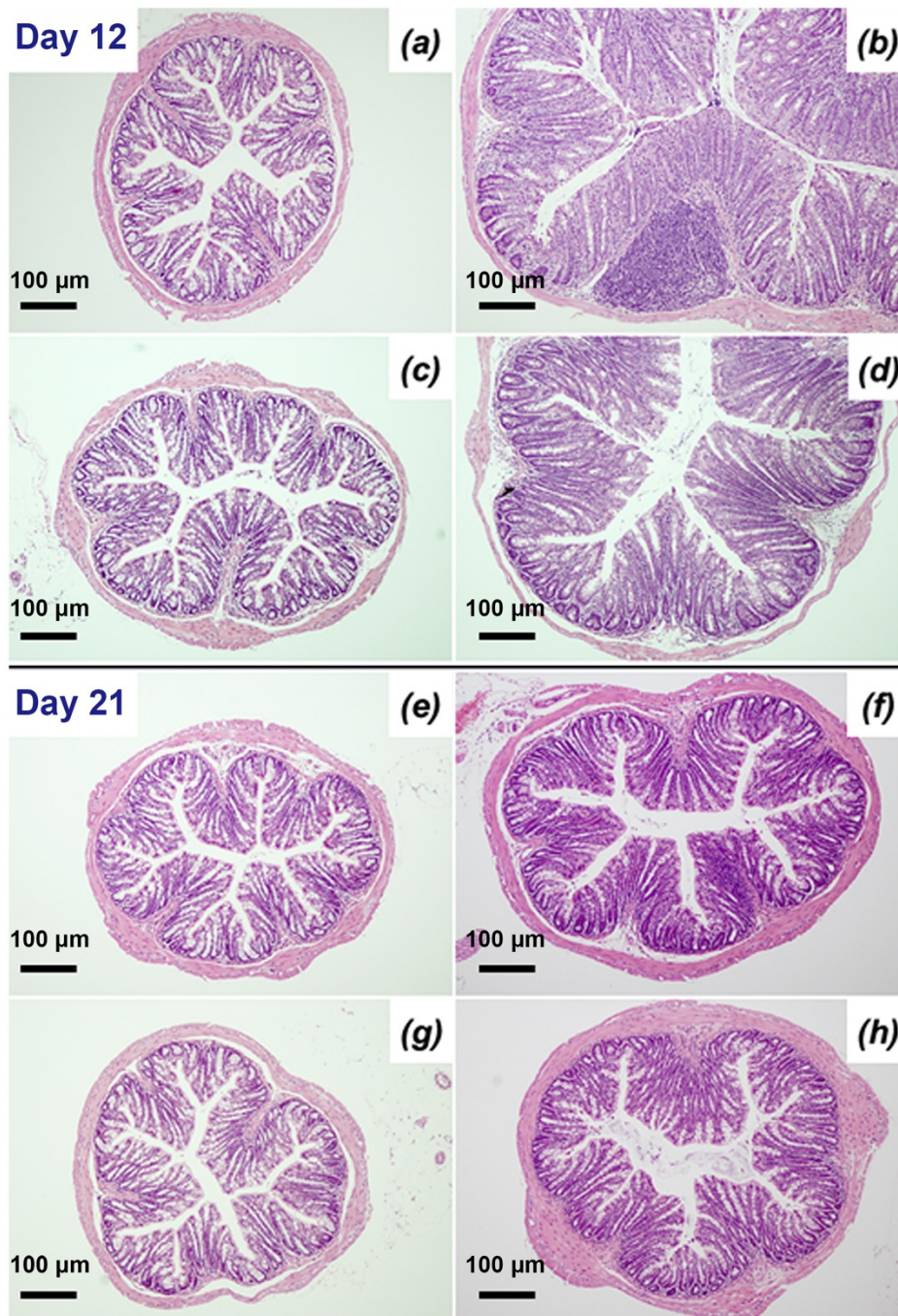
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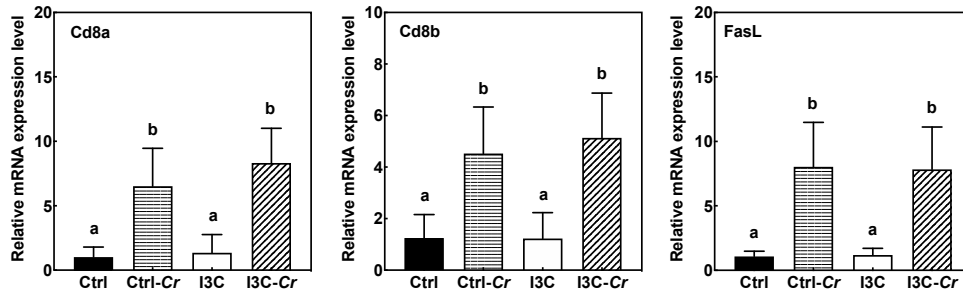
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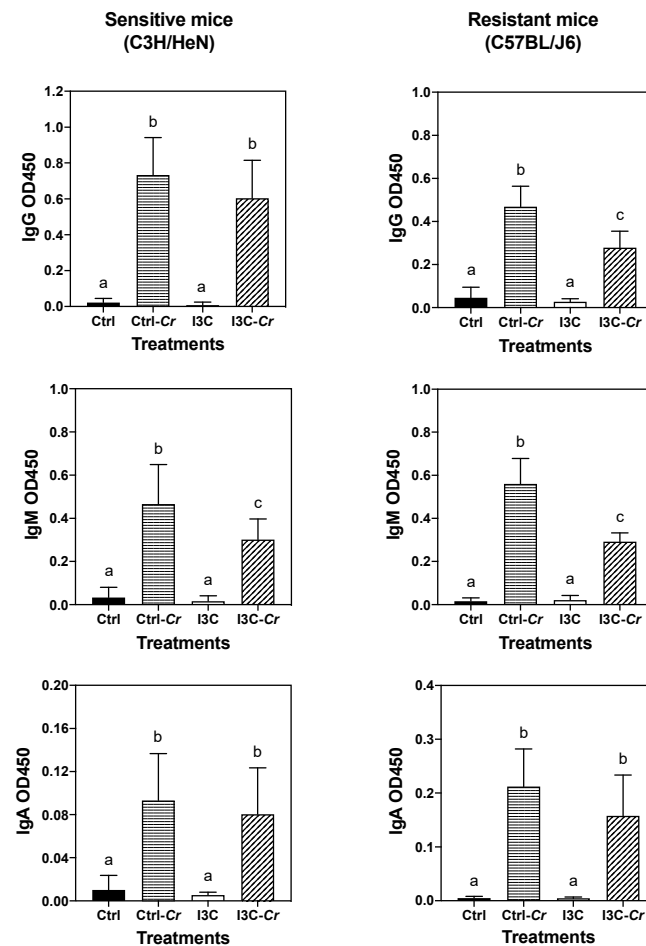
**Figure S1.** I3C has no impact on increased colon and cecum weight of infected mice. The colon and cecum weight of uninfected and Cr-infected mice fed control and I3C diet were measured on day 12 and 21 post-infection. Results were expressed as mean  $\pm$  SD (n=8). Significant differences ( $p < 0.05$ ) between groups are identified by different letters.



**Figure S2.** Representative images of H&E stained colon sections of uninfected and Cr-infected mice fed control or I3C diet. The colon tissues were harvested on day 12 (a, b, c, d) and day 21(e, f, g, h) post-infection. (a, e): uninfected mice fed with control diet; (b, f): infected mice fed with control diet; (c, g): uninfected mice fed with I3C diet; (d, h): infected mice fed with I3C diet. The Cr- infected mice fed control diet had crypt hyperplasia, loss of crypt architecture, crypt abscesses and erosions (panel b). I3C, to a certain extent, could ameliorated the colonic damage caused by the infection on day 12. Original magnification  $\times 10$ , scale bar 100 $\mu\text{m}$ .



**Figure S3.** Cr infection significantly increased mRNA levels of CD8<sup>+</sup> cell markers (Cd8a, Cd8b and FasL), while I3C has no effect on gene expression of these markers in infected mice. RT-PCR was performed on total RNA isolated from colon tissues harvested on day 12 post-infection. Results are expressed as the mean $\pm$ -SD fold-change (n=8). Significant differences ( $p < 0.05$ ) between groups are identified by different letters.



**Figure S4.** Effects of I3C on Cr-triggered IgG response in Sensitive (C3H/HeN mice) and Resistant (C57BL/6 mice). Cr-specific serum antibody levels was determined as described in Materials and Methods and the results expressed as OD 450 mean  $\pm$ -SD (n=8). Ctrl: control diet; Ctrl-Cr: control diet, Cr-infected; I3C: I3C diet; I3C-Cr: I3C diet, Cr-infected. Significant differences ( $p < 0.05$ ) between groups are identified by different letters.