

1 **Supplement data**

2 **Table S1. General observation in the GF and BF mice.**

| General observations | GF | BF |
|---------------------------|---------------|---------------|
| Body weight (g) | 32.97 ± 2.05 | 33.84 ± 2.00 |
| Spleen (g) | 0.064 ± 0.007 | 0.063 ± 0.012 |
| Cecum (g) | 4.31 ± 0.99 | 3.17 ± 0.56* |
| Spleen (% of body weight) | 0.24 ± 0.02 | 0.23 ± 0.04 |
| Cecum (% of body weight) | 15.8 ± 2.6 | 11.4 ± 1.7* |
| Colon length (cm) | 9.8 ± 0.4 | 9.5 ± 0.5 |

3 *p< 0.05 compared with GF

4

5

6

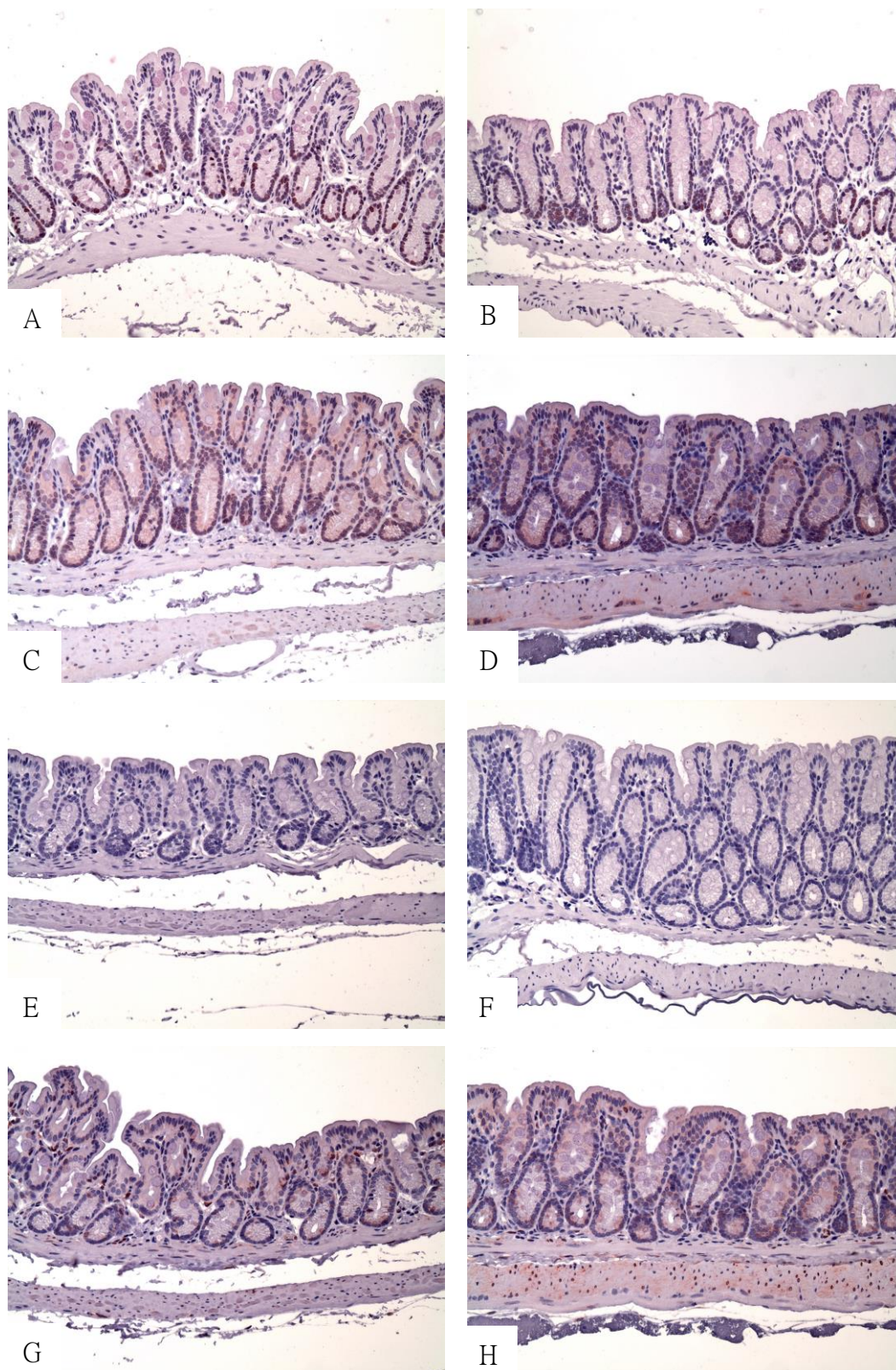


Figure S1. GF and *BF* mice without AOM/DSS in the distal colonic segment. Immunostaining for PCNA, β -catenin, Ly6G and COX2 in colon tissue sections. GF group (A, C, E, G) and *BF* group (B, D, F, H). The numbers of PCNA, Ly6G, COX2 positive cells and relative intensity of β -catenin were counted in the GF and *BF* group. Original magnification $\times 200$.