**Table S1.** Microbial diversity of cecal samples in mice fed with or without in mice.

Diversity Indices	Control	Indol-3-carbinol	P value
Chao1	307±19.27	335.3±18.91	0.95
PDwholetree	15.64±0.61	16.92±0.5703	0.85
Shannon	4.133±0.1206	4.254±0.1332	0.79
Simpson	0.8782±0.01083	0.8869±0.01269	0.66

**Table S2.** The topological properties of microbial co-occurrence networks.

Group	Control (C)	I3C (I)
<sup>a</sup> No. of original OUTs	238	208
Similarity thresholds	0.80	0.79
<sup>b</sup> Network size	156	180
Avg. path	3.821	4.100
Avg. clustering coefficient	0.241	0.246
Modularity (No. of modules)	0.674 (15)	0.667 (15)

<sup>&</sup>lt;sup>a</sup> The number of OTUs was originally used for network construction by the RMT-based network method. <sup>b</sup> The number of OTUs (i.e., nodes) in a network.

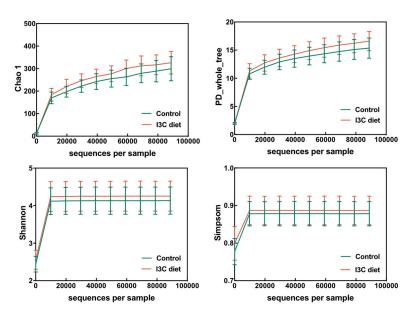


Figure S1. Rarefaction curves of cecal samples in mice fed with or without I3C.