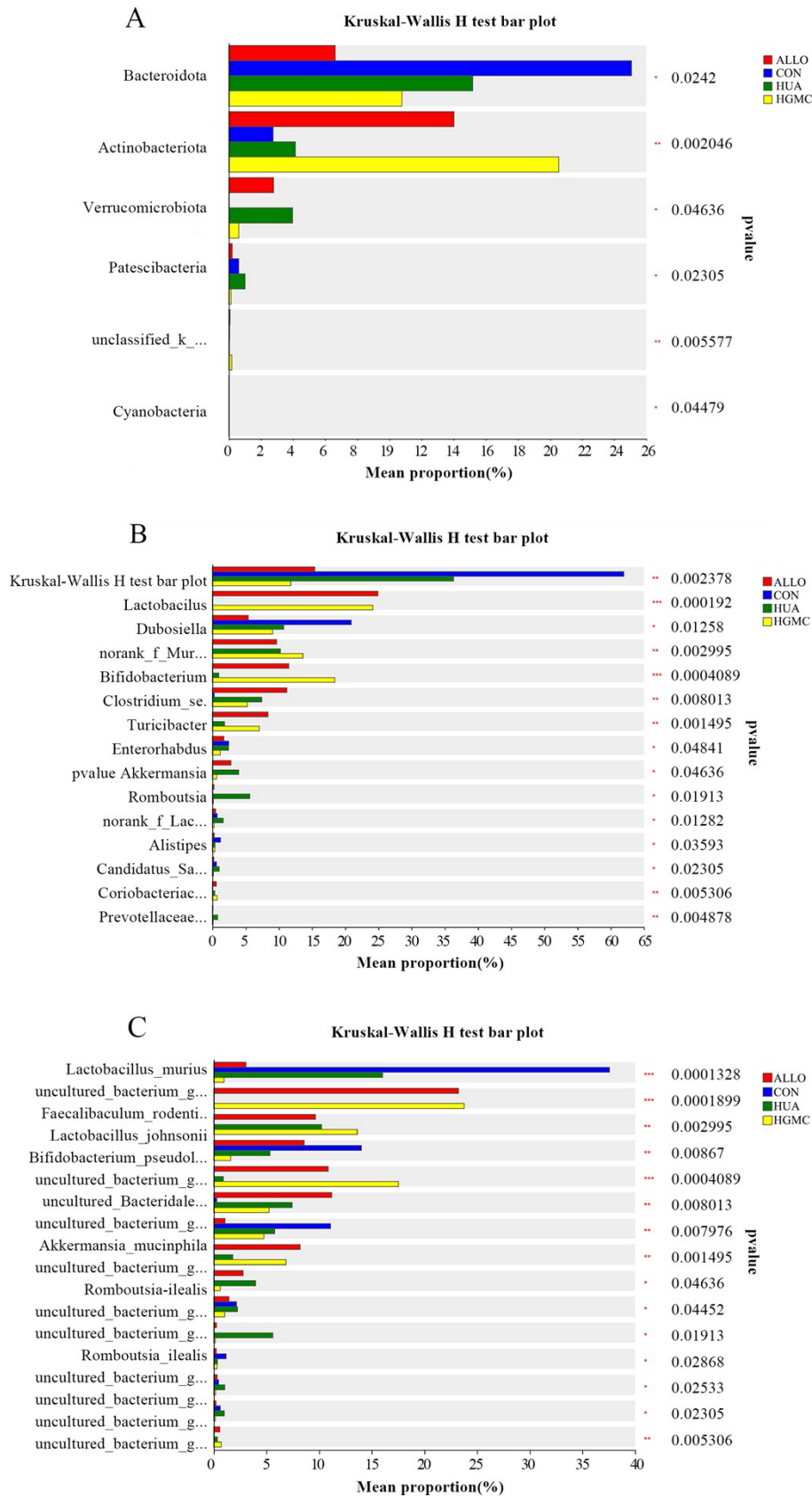


Supplementary Table 1. Antibodies for Western blotting

Protein name	Cat.	Producer
TNF- α	sc-52746	Santa Cruz Biotechnology, USA
IL-1 β	ab254360	Abcam, UK
IL-6	sc-130326	Santa Cruz Biotechnology, USA
IL-10	sc-365858	Santa Cruz Biotechnology, USA
NLRP3	19771-1-AP	Proteintech, USA
Caspase-1	22915-1-AP	Proteintech, USA
TLR-2	17236-1-AP	Proteintech, USA
TGF- β	D362976-0025	Sangon Biotech, China
GAPDH	60004-1-Ig	Proteintech, USA
HRP-Goat Anti-Rabbit IgG	D110058-0001	Sangon Biotech, China
HRP-Goat Anti-Mouse IgG	D110087	Sangon Biotech, China

Supplementary Table 2. Primer sequences used in RT-qPCR

Gene	Sequences of primers (5' to 3')
<i>XOD</i>	F: ATGACGAGGACAACGGTAGAT R: TCATACTTGGAGATCATCACGGT
<i>URAT1</i>	F: CGTGGGACCTGGTATGTA ACT R: CCAAACCTATCTGAGGCATGG
<i>GLUT9</i>	F: TTGCTTTAGCTTCCCTGATGTG R: GAGAGGTTGTACCCGTAGAGG
<i>Caspase1</i>	F: AGAGGATTTCTTAACGGATGCA R: TCACAAGACCAGGCATATTCTT
<i>NLRP3</i>	F: ATTACCCGCCCGAGAAAGG R: TCGCAGCAAAGATCCACACAG
<i>IL-4</i>	F: AACGAGGTCACAGGAGAA R: CCAAGGTGGAAGTAGCAG
<i>IL-10</i>	F: TAAGGTAAGTGCCAAAGG R: AAATGTA ACTGAGGTGGTG
<i>IL-6</i>	F: GCTGATGCTGCCTGTTGT R: AAGTGGGAGTTGGTGGGT
<i>IL-1β</i>	F: GATATGGGACTGCCTTGC R: GTGGCTGTGGTAAATGAAAC
<i>IL-18</i>	F: GATATGGGACTGCCTTCC R: GTGGCTGTGGTAAATGAAAC
<i>ASC</i>	F: TCGCAGCAAAGATCCACACAG R: ACAATGACTGTGCTTAGAGACA
<i>β-actin</i>	F: GGCTGTATTCCCCTCCATCG R: CCAGTTGGTAACAATGCCATGT



Supplemental Figure 1. Kruskal Wallis h-test of the relative abundance of the gut bacteria. Panel A illustrates significant variations in microbial abundance across different groups at the phylum level. Panel B depicts significant differences at the genus level, and Panel C shows significant changes at the species level.

