Supporting Information

Tibetan kefir grain-fermented milk attenuates DSS-induced colitis through coordinated regulation of intestinal barrier function, inflammation, and gut microbiota

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Table S1. Primer sequences of macrophage-related genes.

Genes	Primer sequences
TNF-α	**F: 5'-CATCTTCTCAAAATTCGAGTGACAA-3'**
	R: 5'-TGGGAGTAGACAAGGTACAACCC-3'
IL-6	**F: 5'-TCTATACCACTTCACAAGTCGGA-3'**
	R: 5'-GAATTGCCATTGCACAACTCTTT-3'
TGF-β	**F: 5'-CTTCGACGTGACAGACGCT-3'**
	R: 5'-GCAGGGGCAGTGTAAACTTATT-3'

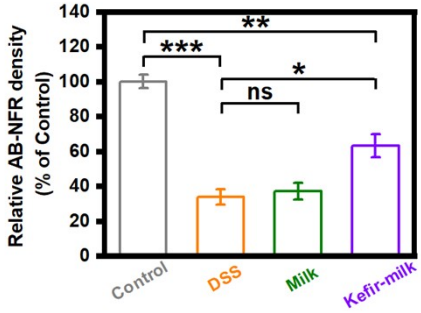

Figure S1. Statistical analysis of the AB-NFR density.

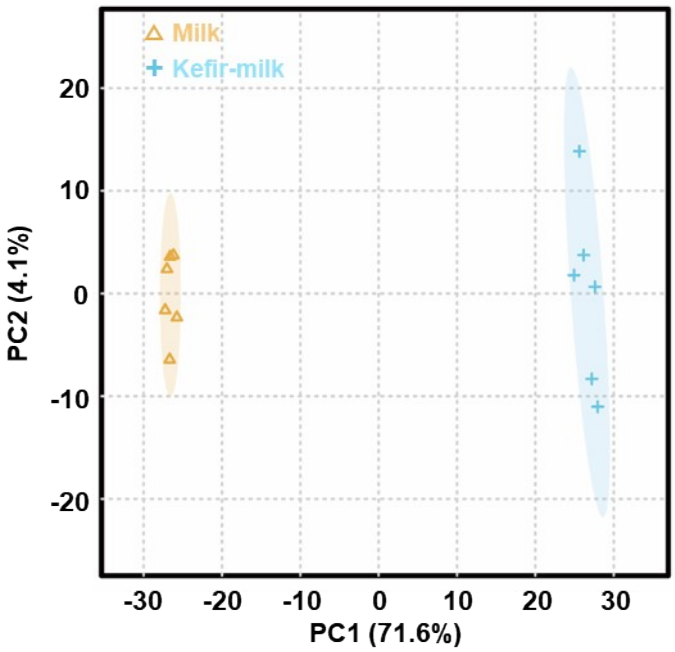

Figure S2. Principal Component Analysis (PCA) of positive-ion metabolites between milk and Kefir-milk.

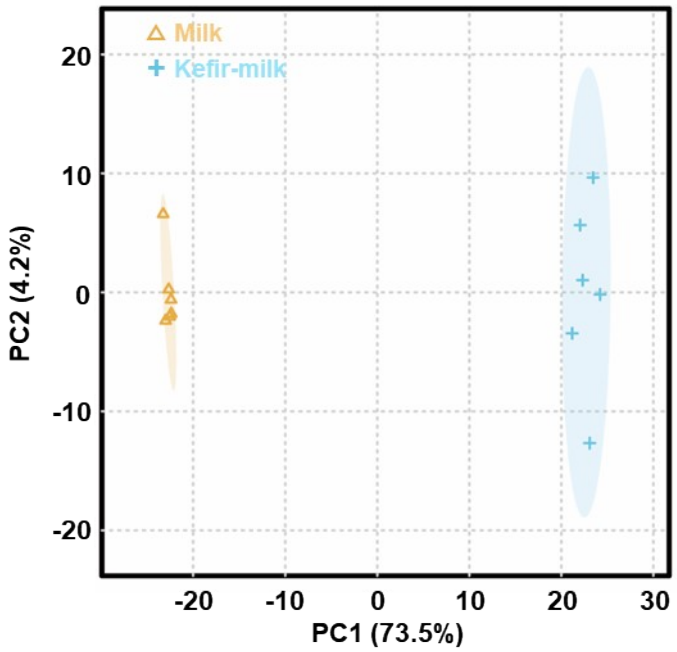

Figure S3. PCA of negative-ion metabolites between milk and Kefir-milk.

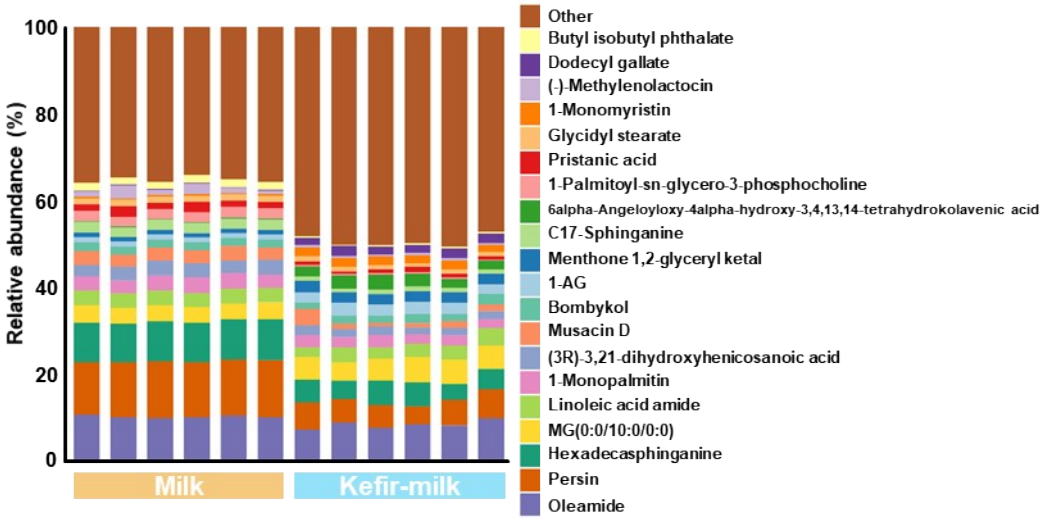

Figure S4. Percentage-stacked bar chart of relative abundance positive-ion metabolites at top 20.

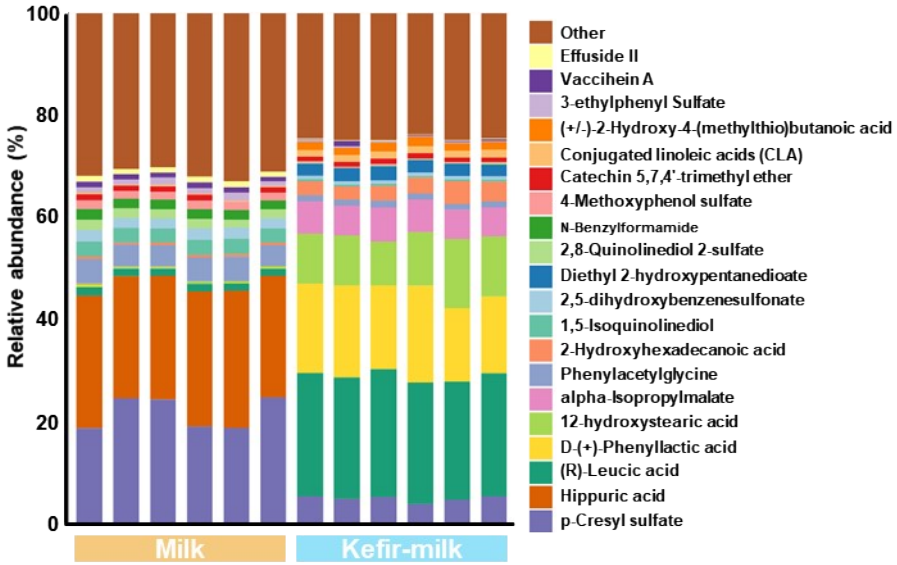

Figure S5. Percentage-stacked bar chart of relative abundance negative-ion metabolites at top 20.

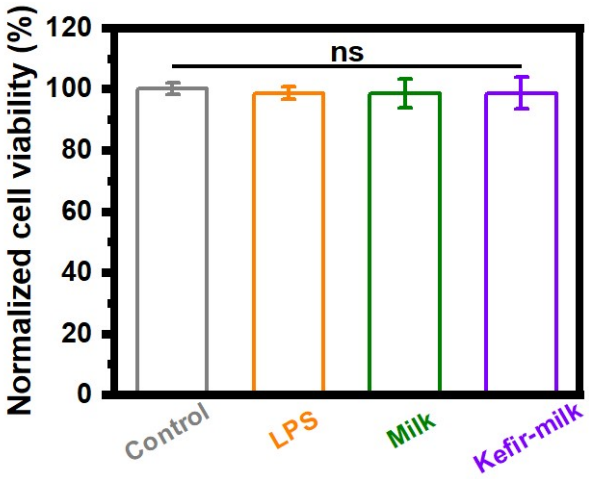

Figure S6. Normalized cell viability of LPS-stimulated RAW264.7 macrophages in each group based on CCK-8 assay.

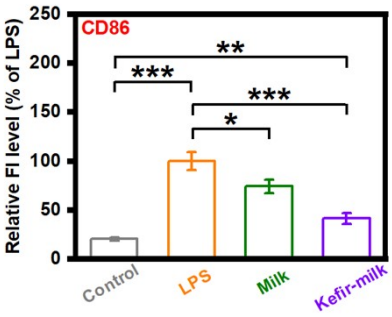

Figure S7. Quantitative analysis of CD86 fluorescence intensity in RAW264.7 macrophages under different treatments.

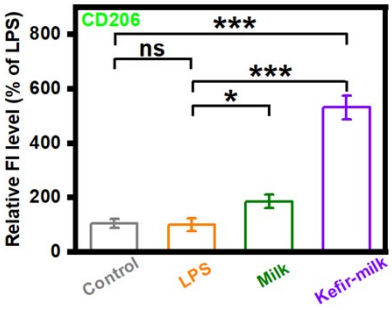

Figure S8. Quantitative analysis of CD206 fluorescence intensity in RAW264.7 macrophages under different treatments.

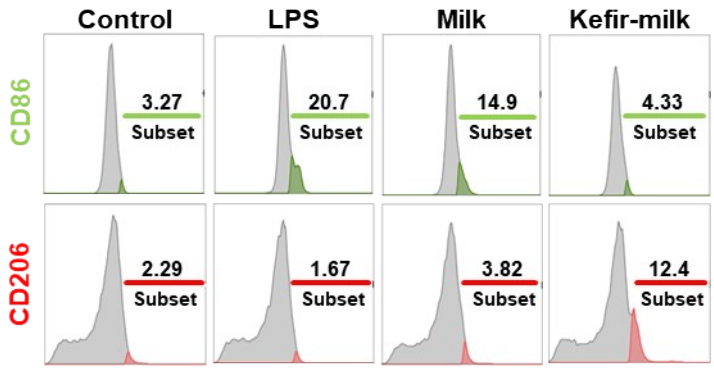

Figure S9. Flow cytometry analysis of CD86- and CD206-positive macrophage subsets.