Supplementary data for

Bifidobacterium animalis subsp. *lactis* Boosts Neonatal Immunity: Unravelling Systemic Defences against *Salmonella*

Table S1 Information on *Bifidobacterium* strains used in the study

| Strain number	Scientific name	Sample	Regional Origin	Age (years)	Gender
BJHD3M6 CDS	*B. animalis* subsp. *lactis*	Human feces	Haidian, Beijing	43	Female
S10（SDJN2M②1032）	*B. animalis* subsp. *lactis*	Human feces	Jinan, Shandong	2	Female
SC-YA-1-M1 CDS	*B. animalis* subsp. *lactis*	Human feces	Ya'an, Sichuan	1	Male
HuNan2016 222 T71 CDS	*B. animalis* subsp. *lactis*	Human feces	Jiaozuo, Henan	73	Male
FNMGHHHT2M2 CDS	*B. animalis* subsp. *lactis*	Human feces	Hohhot, Inner Mongolia	2	Male
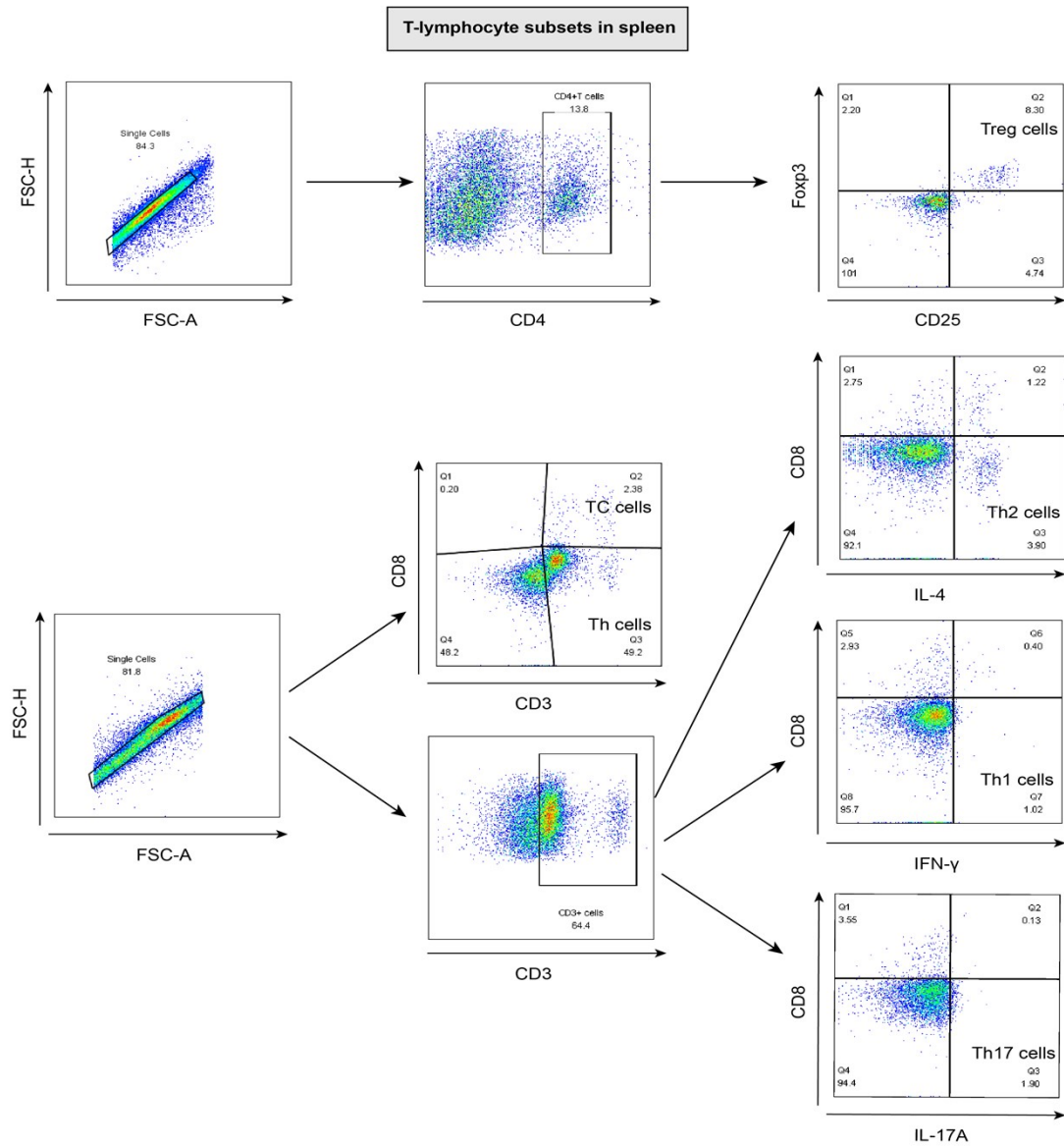
Figure S1. Representative flow cytometry dot plots of splenic T lymphocyte subpopulations. Percentages of various T cell subsets, including Treg, Th, Tc, Th1, Th2, and Th17 cells, were analyzed using flow cytometry. The representative flow cytometry plots illustrate the gating strategy and staining patterns for different T cell subsets. The numbers shown indicate the respective percentages for each subset.
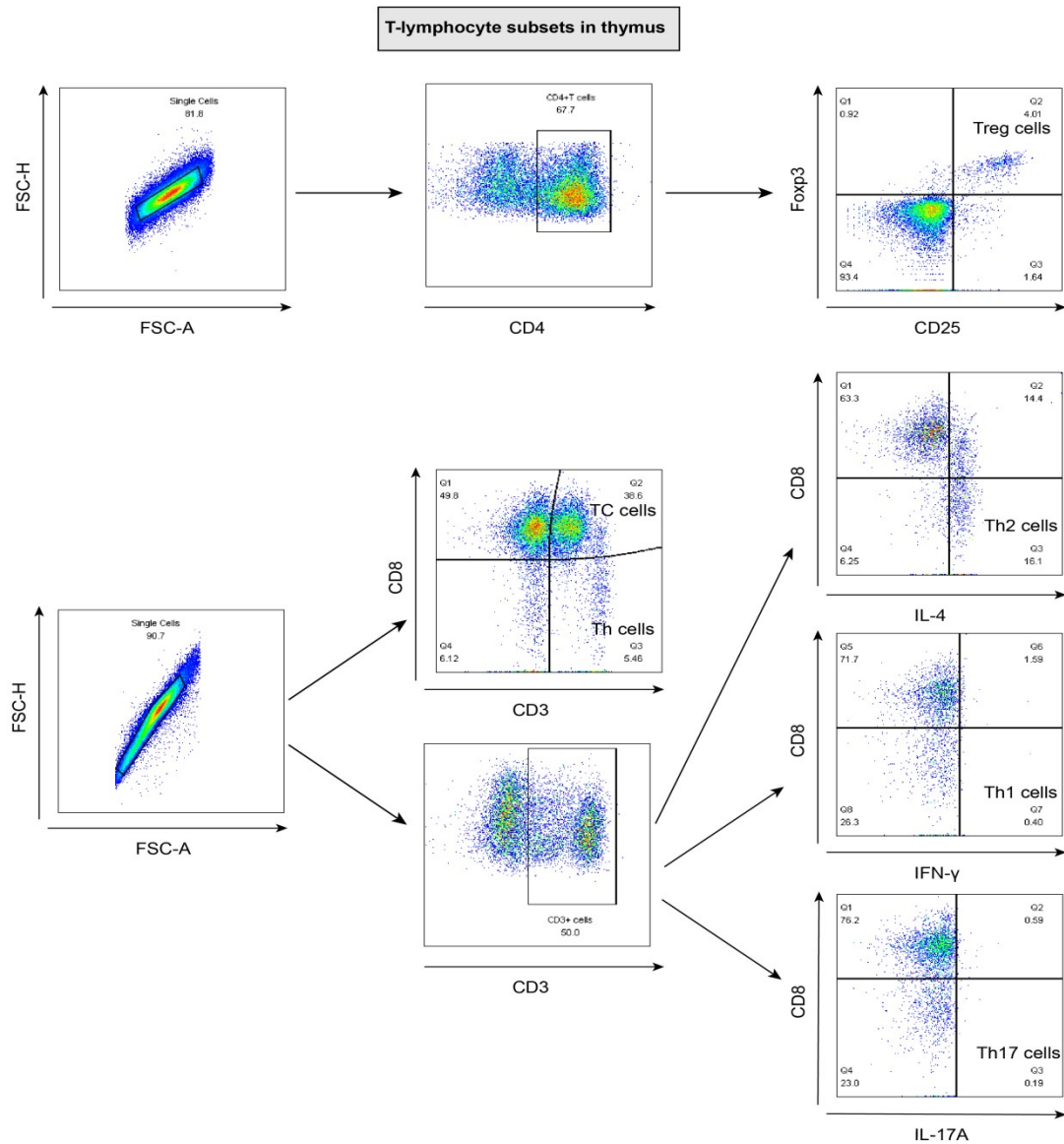
Figure S2. Representative flow cytometry dot plots of thymic T lymphocyte subpopulations. Percentages of different T cell subsets, including Treg, Th, Tc, Th1, Th2, and Th17 cells, were determined using flow cytometry. The provided flow cytometry plots demonstrate the gating strategy and staining patterns for distinct T cell subpopulations. The accompanying numbers indicate the respective percentages for each subpopulation.
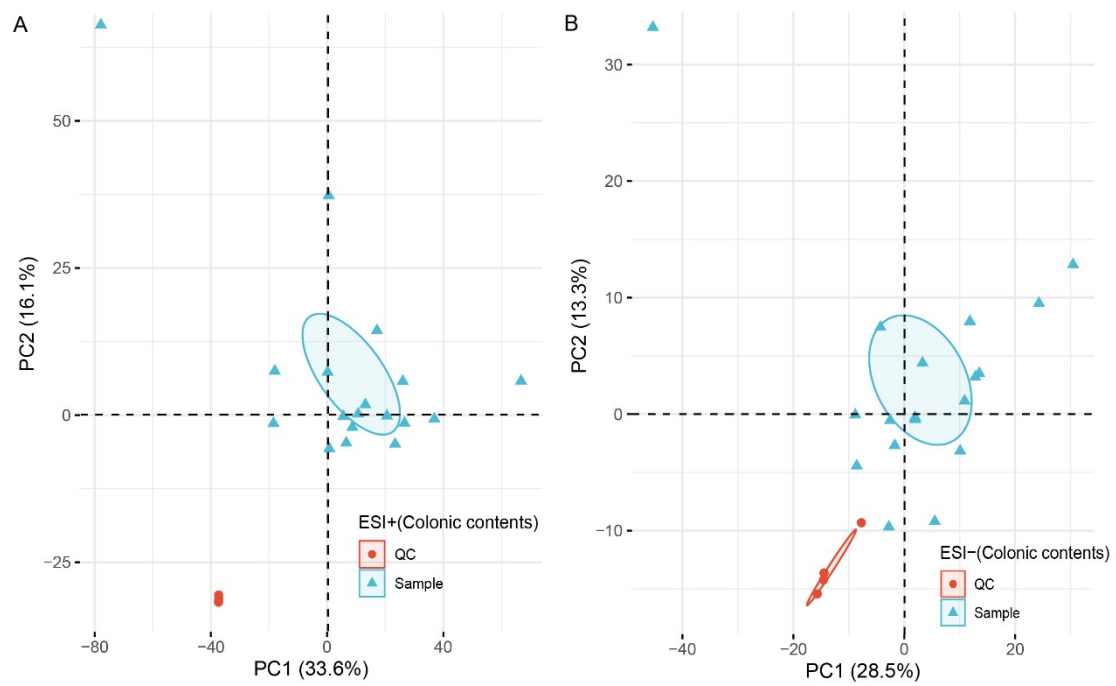
Figure S3. Evaluation of metabolomic modeling of colon contents. Plots of PCA scores for all colon content samples and QC samples in ESI+ (A) and ESI- (B) modes.
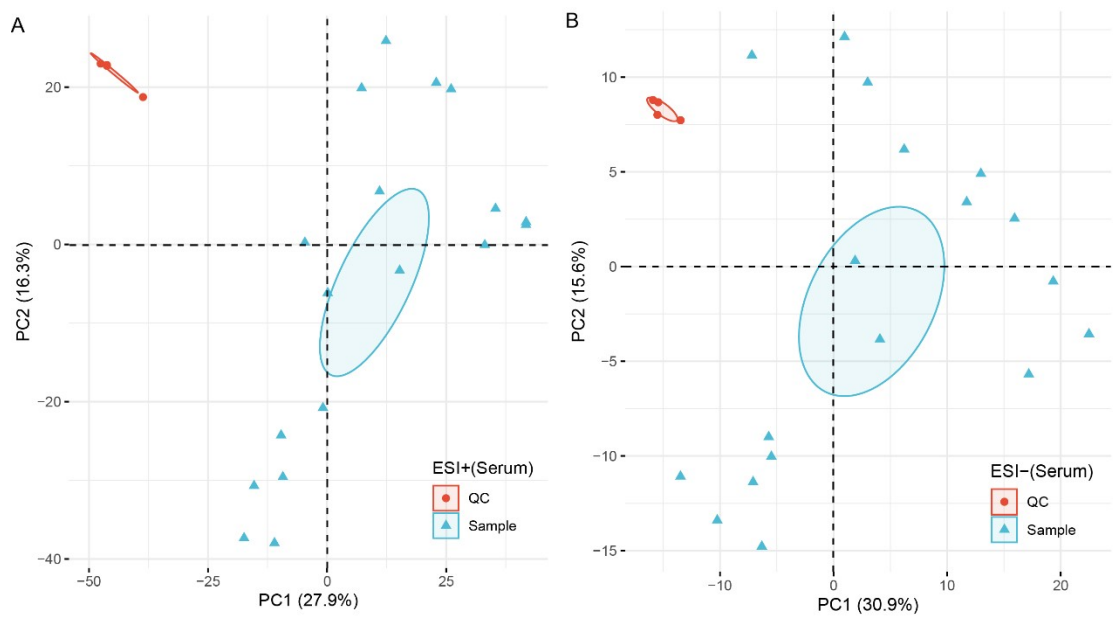
Figure S4. Evaluation of metabolomic modeling of serum. Plots of PCA scores for all serum samples and QC samples in ESI+ (A) and ESI- (B) modes.