

Oral administration of *Lactobacillus delbrueckii* enhances intestinal immunity through inducing dendritic cell activation in suckling piglets

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Supplementary Table 1 ELISA kit's information

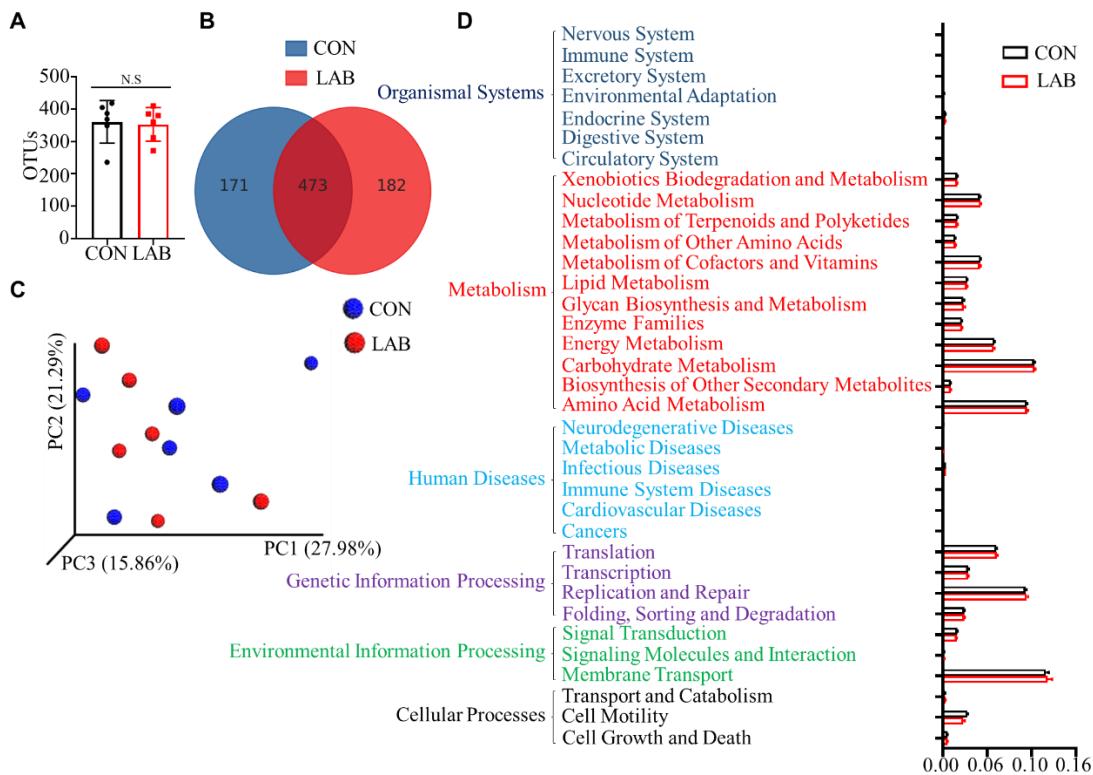
ELISA kit	货号 Item No.
CCL20	SEA095Po
CX3CL1	ab192145
IL-2	SEA073Po
IL-4	CSB-E06785p
IL-10	CSB-E06779p
IL-12	CSB-E11341p
TNF- α	CSB-E04741m
IFN- γ	CSB-E06794p

Supplemental Table 2 Primers used for quantitative real-time PCR

Gene	Primer sequence (5'-3')
<i>Cx3cr1</i> -F	CAACCCCTTATCTACGCCTT
<i>Cx3cr1</i> -R	GACCCATCTCCCTCGCTTG
<i>Ccr6</i> -F	CGTGTGTATGCGTTATTGGA
<i>Ccr6</i> -R	CGACGGTCTCACTGGTCTGC
<i>β-actin</i> -F	CATCCTGCGTCTGGACCTGG
<i>β-actin</i> -R	TAATGTCACGCACGATTCC
<i>Cx3cl1</i> -F	ATCGAGCTATCTTATAACAGGG
<i>Cx3cl1</i> -R	GGAAGTACTCCTTGCCAT
<i>Ccl20</i> -F	GCAGCTCTCATTTCCATACAGT
<i>Ccl20</i> -R	TTCCCGAGTAGCAGATGACCA
<i>Cd80</i> -F	AGGTGTGGCCCAAGTATGAG
<i>Cd80</i> -R	CTCTCCGCTTCTGAACAAAC
<i>Cd86</i> -F	TCAGGGTGTCTTCCCATC
<i>Cd86</i> -R	CACAGGTGGCTTGCATCTA
<i>MHC-II</i> -F	TGACACTCCAAGCAAGCATC
<i>MHC-II</i> -R	CTGAACCAGGAGCAAAGGAG
<i>Tlr2</i> -F	ATATTGAACTTATCCAGCACGAG
<i>Tlr2</i> -R	GGCAGACTCAAAGAAAACGA
<i>Tlr4</i> -F	TAGAGGACTTCCCCATTGGAC
<i>Tlr4</i> -R	ATGTAGAACCTGCAAGTGT
<i>MyD88</i> -F	ATGTCAGGCATCACCATTGAG
<i>MyD88</i> -R	ACTTCAGCCGATAGTTGGTCT
<i>Trif</i> -F	TGCAGGACGCCATAGACCAC
<i>Trif</i> -R	CTCATCATGGCTTGGTTCACCT
<i>Rela</i> -F	CTCACCCCCATTTGACAACCG
<i>Rela</i> -R	GGCCCGTGAATACACCTCGAT
<i>AP-1</i> -F	CGTCCACCGCCAACATGC
<i>AP-1</i> -R	ACGTTGCAACTGCTGCGTTA
<i>Irf-3</i> -F	GACTTCCCTGAGCCAGACACCT
<i>Irf-3</i> -R	CGAGGCCAAGTCCATGCCAC

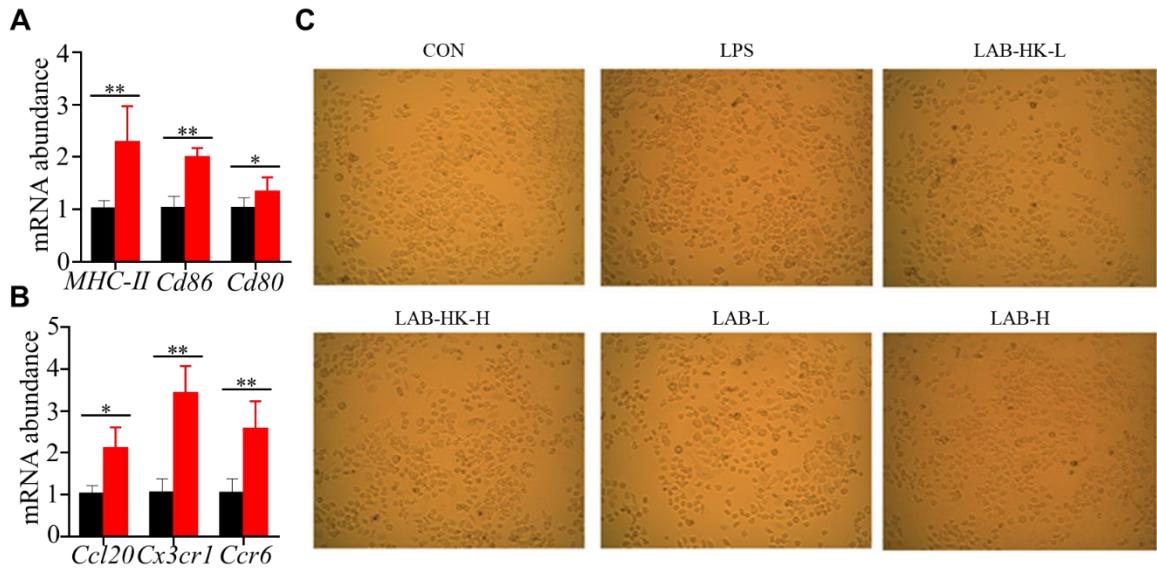
Supplemental Table 3 Antibodies used for immunoblot

Antibodies	Catalog number
TLR2	17236-1-AP
TLR4	ab8376
MYD88	ab2068
TRIF	ab205363
ERK	16443-1-AP
p-ERK	ab201015
JNK	51151-1-AP
p-JNK	ab124956
p38	14064-1-AP
p-p38	ab47363
I κ B- α	10268-1-AP
p-I κ B- α	ab133462
IRF3	ab68481
p-IRF-3	#29047
p65	10745-1-AP
p-p65	ab86299
AP-1	10024-2-AP
β -actin	60008-1-Ig



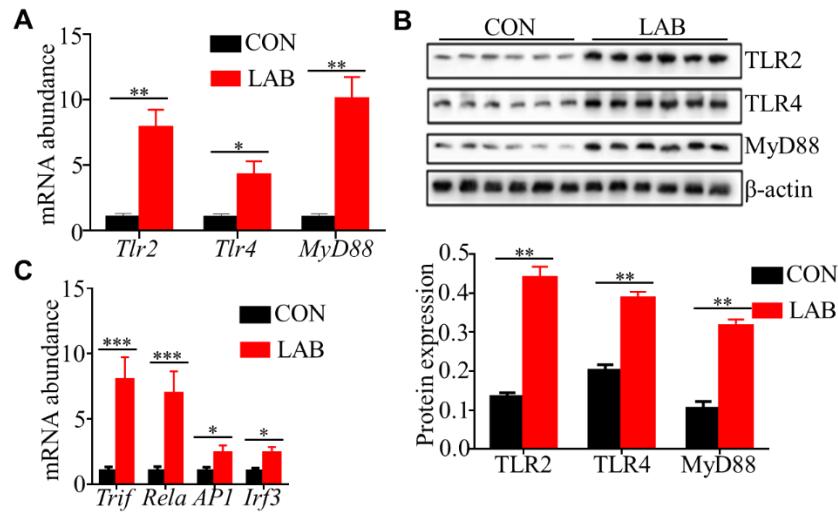
Supplemental Figure 1 Related to Figure 2

(A) OTUs of microbiota in colon of piglets from CON and LAB group. (B) Venn diagram of bacterial communities in colon of piglets. (C) Three-dimensional (3D) PCA analysis from each sample in colon of piglets. (D) PICRUSt analysis evaluates the predictive functional profiling of microbial communities in colon of piglets from CON and LAB group. Bar graphs show mean \pm SEM. N.S P>0.05, * P<0.05, ** P<0.01.



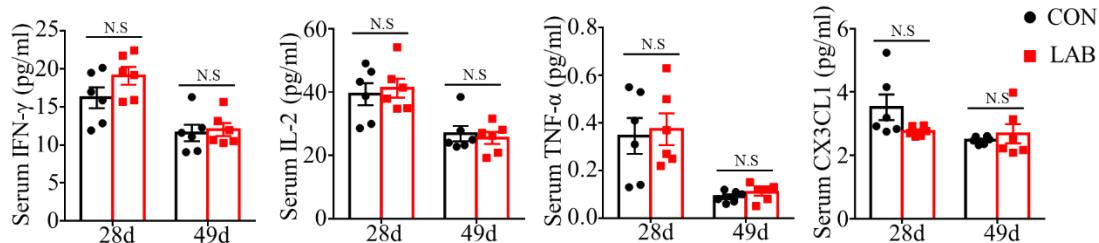
Supplemental Figure 2 Related to Figure 3

(A and B) The mRNA abundance of *CD80*, *CD86*, *MHC-II* (A) and *Ccl20*, *Ccr6*, *Cx3cr1* (B) in jejunum of piglets from CON and LAB group. (C) The growth and morphology of DC2.4 cell LPS, low dose of heat-killed (LAB-HK-L) and live LAB (LAB-L) (MOI=1), and high dose of heat-killed (LAB-HK-H) and live LAB (LAB-H) (MOI=10). Bar graphs show mean \pm SEM. N.S P>0.05, * P<0.05, ** P<0.01.



Supplemental Figure 3 Related to Figure 4

(A and B) The expression of TLR2, TLR4, and MyD88 at mRNA (A) and protein (B) levels in jejunum of piglets from CON and LAB group. (C) The mRNA abundance of *Trif*, *Rela*, *API*, and *Irf3* in ileum of piglets from CON and LAB group. Bar graphs show mean \pm SEM. N.S P>0.05, * P<0.05, ** P<0.01.



Supplemental Figure 4 Related to Figure 5

Serum IFN- γ , IL-2, TNF- α and CX3CL1 levels in piglets from CON and LAB group.