

Supplementary material

Supplementary Table S1 *Primer used for real-time quantitative PCR analysis of*

ZO-1, occludin and β -actin

Gene ¹	primer sequence (5'-3')	accession number
<i>ZO-1</i>	Forward: GAGGATGGTCACACCGTGGT	XM_021098896.1
	Reverse: GGAGGATGCTGTTGTCTCGG	
<i>occludin</i>	Forward: ATGCTTTCTCAGCCAGCGTA	NM_001163647.2
	Reverse: AAGGTTCCATAGCCTCGGTC	
<i>β-actin</i>	Forward: ATGCTTCTAGACGGACTGCG	XM_003357928.4
	Reverse: GTTTCAGGAGGCTGGCATGA	

¹ZO-1, zonula occludens-1

Supplementary Table S2 Effects of the early lactoferrin intervention on the diversity and richness of jejunal and ileal bacterial community of suckling piglets at the 0.03 dissimilarity level¹

Items ²	Day 8				Day 21			
	CON	LF	SEM ³	P-value	CON	LF	SEM	P-value
Jejunum								
Ace	200.88	176.69	21.45	0.297	385.55	416.59	41.25	0.714
Chao 1	188.61	180.86	23.66	0.743	372.91	393.82	45.33	0.374
Shannon	1.39	0.911	0.28	0.086	2.11	2.26	0.35	0.787
Simpson	0.54	0.71	0.09	0.121	0.35	0.32	0.15	0.846
Ileum								
Ace	217.95	188.58	15.41	0.265	339.84	289.98	18.66	0.214
Chao 1	218.32	178.89	14.22	0.068	215.06	296.47	18.56	0.364
Shannon	2.17	1.59	0.45	0.202	2.86	2.64	0.18	0.364
Simpson	0.32	0.51	0.11	0.127	0.14	0.17	0.06	0.514

¹ Values are means of 6 replicates per treatment.

² CON, Control; LF, Lactoferrin; ACE and Chao 1 represented the species richness; Simpson index and Shannon index represented species diversity. Higher values (Ace, Chao 1 and Shannon index) represented the higher richness and diversity, while higher values (Simpson index) represented the lower diversity.

³ SEM, standard error of mean.