Supplementary File 1. Mean daily weight gain of lambs at the end of the study (25 days) and serum immunoglobulins concentration in lambs. Differences were considered significant when p value < 0.05. SD = standard deviation.

	Mean	SD	Mean	SD	p value
	Control-diet		**Additive-diet**		
Mean daily weight gain	239	38.5	301	62	0.001
Day 2					
IgG (mg/ml)	7.8	3.55	7.87	3.968	0.991
IgA (mg/ml)	6.83	6.334	7.51	5.861	0.775
IgM (mg/ml)	1.87	0.958	2.21	0.633	0.22
Day 16					
IgG (mg/ml)	5.02	1.738	4.9	1.415	0.991
IgA (mg/ml)	23.76	10.591	20.59	8.909	0.283
IgM (mg/ml)	2.96	1.545	3.21	0.921	0.641

Supplementary File 2. Sequences per sample, alpha diversity indices and Good's estimated sample coverage for 16S rRNA gene amplicons analyzed in this study.

Description	Sequences per sample	Chao1	Shannon	Simpson	Observed ASVs	Good's coverage
Additive-diet lamb	112,749	153.56	4.46	0.91	153.56	1.00
Control-diet lamb	92,638	202.14	5.38	0.95	202.14	1.00

Supplementary File 3 LEfSe analysis of the 100 most abundant ASVs found in lamb feces. Differences in relative abundances of ASVs between additive- and control-diet lamb groups were considered when p value < 0.05. Taxonomy assignation was performed according to SILVA database.

LDA = Linear Discriminant Analysis

Attached document: Supplementary_File_3.Lamb-ASV-LEfSe.xlsx