

Table S1. Primers used in this study.

Primer	Sequence (5'-3')	Source
tufA_F	GAA GAA GTT GAA ATC GTT GG	(1)
tufA_R	GAA GAA GTT GAA ATC GTT GG	
recA_F	CTG GTA AAA CAA CAG TGG CTT T	(2)
recA_R	AGC TTG TTC TCC TGT ATC TGG T	
faeG_F	ACG TCG CAG GTT CTT ACA GG	(3)
faeG_R	CT CCA CTG AGT GCT GGT AG	

Table S2. Results overview of the statistical analyses of first trial.

Variable	Gender	2x test dose				0.5X test dose			
		RR*	Odd ratio**	P-value	P-value adj.	RR*	Odd ratio**	P-value	P-value adj.
P[H(5,5) = 1]	All	4.33	6.9	0.020	0.060	1.10	1.4	0.566	0.918
	Barrows	2.67	3.5	0.196	0.962	1.00	1.0	0.985	1
	Gilts	7.47	14.9	0.024	0.307	1.18	2.4	0.452	1
P[H(1,14) = 1]	All	1.28	2.2	0.177	0.443	1.44	1.8	0.376	0.757
	Barrows	0.82	0.5	0.356	0.999	1.67	2.0	0.443	1
	Gilts	2.43	11.7	0.010	0.143	1.33	1.7	0.556	1

The PROC GLIMMIX procedure of SAS® was used to determine the risk that the piglets get sick (i.e., get diarrhea) depending on whether they received the test article or the placebo (i.e., exposed or not). *Relative risk: Probability of being sick with the control divided by the probability of being sick with the article. **Odd ratio of being sick: placebo relative to test dose.

Table S3. Results overview of the statistical analyses of second trial.

Variable	Gender	2x test dose				1x test dose			
		RR*	Odd ratio**	P-value	P-value adj.	RR*	Odd ratio**	P-value	P-value adj.
P[H(1,12) = 1]	All	3.38	8.9	0.046	0.132	1.24	1.8	0.570	0.921
	Barrows	2.33	5.0	0.153	0.917	1.00	1.0	0.929	1
	Gilts	5.50	17.9	0.019	0.245	1.57	3.1	0.286	0.994
P[H(1,14) = 1]	All	2.78	8.6	0.027	0.080	1.21	1.9	0.431	0.816
	Barrows	2.24	7.2	0.028	0.347	1.00	1.0	0.914	1
	Gilts	3.67	11.0	0.011	0.148	1.57	3.1	0.161	0.928

The PROC GLIMMIX procedure of SAS® was used to determine the risk that the piglets get sick (i.e., get diarrhea) depending on whether they received the test article or the placebo (i.e., exposed or not). *Relative risk: Probability of being sick with the control divided by the probability of being sick with the article. **Odd ratio of being sick: placebo relative to test dose.

Table S4. Summary of the statistical analyses for third trial.

Variable	Gender	2x test dose (combined (B) and (F))		
		RR*	Odd ratio**	P-value***
P[H(1,12) = 1]	All	0.82	0.62	0.48
	Barrows	0.82	0.67	0.61
	Gilts	0.82	0.55	0.48
P[H(1,14) = 1]	All	0.85	0.65	0.56
	Barrows	0.89	0.76	0.73
	Gilts	0.82	0.55	0.50

*Relative risk: Probability of being sick with the placebo on the probability of being sick with the test dose. **Odd ratio of being sick (placebo/test dose). ***P-value calculated on the contrast (50% (B)+ (F) – Placebo). Small p-values suggest a statistically significant difference between the test dose and the placebo.

Table S5. Body weight, weight gain and feed conversion for the 3 trials.

Group	Average body weight (kg)		Average weight gain (kg)		Feed to gain ratio
	PWD0	PWD28	PWD0-14	PWD0-28	PWD0-28
Study #1					
placebo	7.35	21.07	3.29	13.72	1.27
0.5x dose	7.04	19.52	3.61	12.48	1.37
2x dose	7.33	19.82	3.42	12.48	1.39
Study #2					
placebo	7.58	19.68		12.10	1.38
1x dose	7.73	18.83		11.09	1.43
2x dose	7.32	18.70		11.38	1.43
Study#3	PWD0	PWD21		PWD0-21	PWD0-21
placebo	6.45	14.75		8.30	1.11
2x dose (B)	6.65	14.99		8.33	1.05
2x dose (F)	6.35	14.11		7.76	1.08