

Article

# Pigs Overexpressing Porcine $\beta$ -Defensin 2 Display Increased Resilience to *Glaesserella parasuis* Infection

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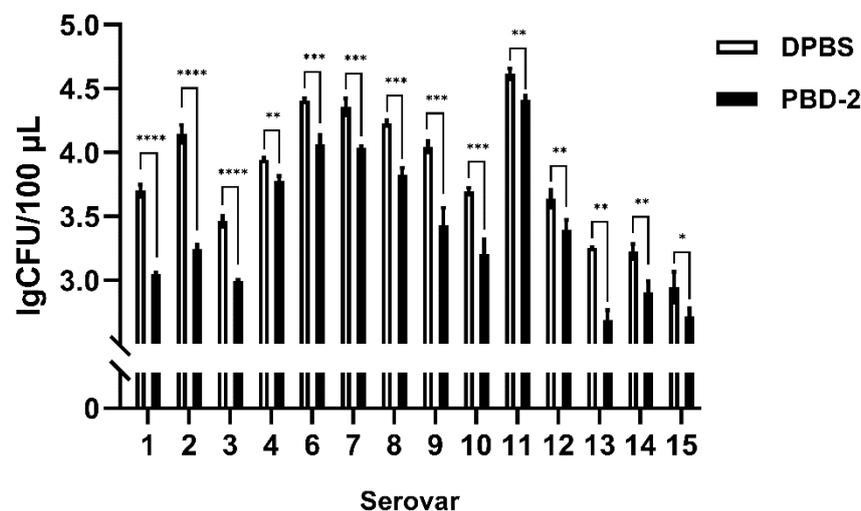
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**Figure S1.** Bactericidal activity of porcine  $\beta$ -defensin 2 (PBD-2) against different *Glaesserella parasuis* serovars. PBD-2 was incubated with different *G. parasuis* serovars for 1 h before plating and counting the surviving bacteria. Bacterial culture with Dulbecco's phosphate-buffered saline (DPBS) was used as a negative control. Data are presented as mean  $\pm$  SD and are plotted from three independent experiments. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , \*\*\*\*  $p < 0.0001$ , unpaired one-tailed Student's  $t$ -test.



Table S1. Score for clinical signs of pigs during cohabitation.

Number	Day 0	Day 1	Day 2	Day 3	Day 4
21 (WT)	0	2	2	1	0
23 (WT)	0	3	3	1	1
201 (WT)	0	2	2	1	0
210 (WT)	0	1	2	2	1
214 (WT)	0	3	3	2	1
217 (WT)	0	3	3	1	1
13 (TG)	0	2	2	1	0
103 (TG)	0	1	1	0	0
105 (TG)	0	3	2	1	1
202 (TG)	0	2	2	0	0
212 (TG)	0	2	2	1	1
28 (Mock)	0	0	0	0	0
86 (Mock)	0	0	0	0	0
20 (Mock)	0	0	0	0	0

Decreased appetite, shortness of breath and walking difficulty representing one point each. Wild-type (WT) and transgenic (TG) pigs were co-housed with other pigs intratracheally infected with *G. parasuis*, while pigs in the mock group were raised separately.



Table S2. Score for macroscopic pathological changes after dissecting pigs.

Number	Pleurisy	Peritonitis	Meningitis	Pericarditis	Hepatitis	Splenitis	Pneumonia	Total score
21 (WT)	0	0	1	0	1	0	1	3
23 (WT)	0	0	1	0	1	0	1	3
201 (WT)	0	0	1	1	1	0	1	4
210 (WT)	0	0	1	1	1	0	1	4
214 (WT)	0	0	1	0	1	0	1	3
217 (WT)	0	0	1	0	1	0	1	3
13 (TG)	0	0	1	0	0	0	1	2
103 (TG)	0	0	1	0	0	0	0	1
105 (TG)	0	0	1	0	0	0	1	2
202 (TG)	0	0	1	0	1	0	1	3
212 (TG)	0	0	1	0	0	0	1	2
28 (Mock)	0	0	0	0	0	0	0	0
86 (Mock)	0	0	0	0	0	0	0	0
20 (Mock)	0	0	0	0	0	0	0	0

Scoring scale from 0 to 3, with 3 being the severest. WT and TG pigs were co-housed with other pigs intratracheally infected with *G. parasuis*, while pigs in the mock group were raised separately.