

Supplementary Materials

Table S1. Adverse events following the vaccination.

Group No.	Pig No.	Immunization	The Primary Vaccination				The Booster Vaccination			
			Red patch * ₁	Induration * ₂	Fever * ₃	Inactivity * ₄	Red Patch	Induration	Fever	Inactivity
1	1	Vaccinated (SER-ME)	–	–	–	–	–	–	–	–
	2		–	–	–	–	–	+	–	–
	3		–	–	+	–	–	+	–	–
	4		+	+	–	–	–	–	–	–
2	5	Unvaccinated control	Not applicable							
	6									
	7									
	8									
3	9	Vaccinated (SER-ME)	+	+	–	–	–	–	–	–
	10		+	–	+	–	–	–	–	–
	11		+	–	–	–	–	–	–	–
	12		–	–	–	–	–	–	–	–
4	13	Unvaccinated control	Not applicable							
	14									
	15									
	16									

Adverse events following vaccinations were observed for 7 days. *₁ Red patch at the vaccination site. *₂ Induration by vaccination. *₃ Fever above 40.5 °C. *₄ Clinical signs of anorexia or depression. “–” shows no clinical sign and “+” shows adverse event.

Table S2. Detection of *E. rhusiopathiae* cells in organs of pigs.

Group No.	Pig No.	Immunization	Challenge Strain	From Organs * ₁						
				Heart	Liver	Spleen	Kidney	Lung	Synovial Fluid	Mandibular Ltmph Nodes
1	1	Vaccinated (SER-ME)	Fujisawa (reference)	–	–	–	–	–	–	–
	2			–	–	–	–	–	–	–
	3			–	–	–	–	–	–	–
	4			–	–	–	–	–	–	–
2	5	Unvaccinated control	Fujisawa (reference)	+	+	+	+	+	+	+
	6			+	+	+	+	+	+	+
	7			+	+	+	+	+	+	+
	8			+	+	+	+	+	+	–
3	9	Vaccinated (SER-ME)	2012 Miyazaki (variant)	–	–	–	–	–	–	–
	10			–	–	–	–	–	–	–
	11			–	–	–	–	–	–	–
	12			–	–	–	–	–	–	–
4	13	Unvaccinated control	2012 Miyazaki (variant)	+	+	+	+	+	+	+
	14			+	+	+	+	+	+	+
	15			+	+	+	+	+	+	+
	16			+	+	+	+	+	+	+

*₁ *E. rhusiopathiae* colonies from organ samples collected after the pigs’ death including humane endpoint are shown. “–” shows no colony and “+” shows colonies on the agar plate.