

		Percent Identity															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Divergence	1	█	98.2	94.1	87.4	93.8	80.2	56.1	57.9	57.8	57.0	57.5	57.3	57.8	91.7	1	NPUST-2789-3W-2
	2	1.8	█	95.1	87.9	94.8	80.6	56.4	58.0	58.0	57.2	57.6	57.3	57.8	92.6	2	Amervac-PRRS
	3	6.5	5.2	█	88.6	98.9	80.5	56.2	57.8	57.6	56.8	57.5	57.2	57.6	91.8	3	Lelystad-virus
	4	12.9	12.3	11.3	█	88.3	79.4	56.8	58.7	57.4	57.4	57.3	56.8	58.2	85.7	4	Ingelvac-PRRSFLEX
	5	6.6	5.4	1.0	11.5	█	80.3	56.1	57.6	57.6	56.8	57.7	57.3	57.5	91.5	5	Porcilis-PRRS
	6	24.1	23.7	23.6	24.9	23.8	█	55.8	58.0	57.3	56.6	57.1	56.9	58.0	79.4	6	Lena
	7	58.7	58.3	58.5	57.8	58.6	58.9	█	81.9	87.0	88.4	85.8	84.0	79.1	56.0	7	MD001
	8	57.8	57.7	58.2	57.6	58.2	58.4	15.8	█	84.9	83.4	83.8	82.5	88.1	57.7	8	MN184
	9	58.1	57.9	58.5	57.9	58.3	58.4	12.0	14.9	█	98.1	91.2	89.0	82.0	57.5	9	Ingelvac-MLV
	10	58.1	57.8	58.5	57.6	58.3	58.2	12.1	15.2	0.5	█	89.6	87.5	80.7	56.7	10	VR2332
	11	58.5	58.1	58.6	57.6	58.4	58.5	13.0	16.0	9.2	9.5	█	91.7	81.8	57.4	11	Fostera-PRRS
	12	58.7	58.6	59.1	58.5	58.8	58.6	15.0	17.2	11.5	11.8	8.1	█	80.7	56.9	12	JXA1
	13	58.2	57.9	58.6	58.6	58.7	57.9	19.9	13.8	18.7	18.9	19.0	20.0	█	57.3	13	107-844
	14	9.1	8.1	9.0	15.1	9.1	25.4	59.2	58.3	59.0	58.9	58.6	59.4	59.1	█	14	HUN60077-16
	1	2	3	4	5	6	7	8	9	10	11	12	13	14			

1

2

3

Figure S1. Nucleotide sequence identity of the complete genome of PRRSV/NPUST-2789-3W-2/TW/2018 with that of other PRRSVs.

		Percent Identity																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
Divergence	1	█	99.8	99.8	99.0	98.5	94.2	92.6	94.5	82.8	98.2	59.7	59.2	59.9	60.7	58.4	58.4	56.8	1	NPUST-2789-3W-2
	2	0.2	█	99.7	98.9	98.4	94.0	92.4	94.3	82.7	98.1	59.9	59.4	60.0	60.8	58.6	58.3	57.0	2	NPUST-2789-3W-5
	3	0.2	0.3	█	98.9	98.4	94.0	92.4	94.3	82.7	98.1	59.5	59.1	59.7	60.5	58.3	58.3	56.6	3	NPUST-2860-S-6
	4	1.0	1.2	1.2	█	99.2	94.3	92.6	94.8	82.7	98.5	60.2	59.7	60.4	60.5	58.9	58.7	57.3	4	Amervac-PRRS
	5	1.5	1.7	1.7	0.8	█	94.2	92.4	94.7	82.4	98.4	60.4	59.9	60.5	60.7	59.1	58.9	57.4	5	Pyrsvac-183
	6	6.3	6.5	6.5	6.1	6.3	█	89.8	98.9	83.3	94.2	60.5	60.7	60.7	60.4	58.9	59.2	58.1	6	Porcilis-PRRS
	7	8.2	8.4	8.4	8.2	8.4	11.5	█	90.6	82.8	92.4	60.2	60.4	60.4	61.3	60.7	59.5	58.6	7	Ingelvac-PRRSFLEX
	8	5.9	6.1	6.1	5.5	5.7	1.2	10.5	█	83.2	94.7	60.4	60.5	60.5	60.2	58.7	58.7	57.9	8	Lelystad-virus
	9	20.6	20.9	20.9	20.9	21.4	19.9	20.6	20.1	█	82.7	59.1	58.3	59.5	58.7	57.8	57.6	58.3	9	Lena
	10	1.8	2.0	2.0	1.5	1.7	6.3	8.4	5.7	20.9	█	59.5	59.1	59.7	60.2	58.3	58.1	56.6	10	HUN60077-16
	11	53.0	52.6	53.4	51.9	51.5	51.3	52.1	51.7	54.3	53.5	█	91.6	99.4	89.2	86.9	87.1	88.0	11	Ingelvac-MLV
	12	54.0	53.6	54.4	52.9	52.5	50.8	51.6	51.2	56.4	54.5	9.3	█	91.4	94.5	87.7	90.3	87.9	12	Fostera-PRRS
	13	52.6	52.2	53.0	51.5	51.2	50.9	51.7	51.3	53.2	53.2	0.7	9.5	█	89.2	86.9	87.1	88.3	13	VR2332
	14	50.5	50.2	50.9	50.9	50.6	51.4	49.3	51.8	55.0	51.7	12.2	5.9	12.2	█	87.5	88.5	87.1	14	JXA1
	15	56.1	55.7	56.6	55.0	54.6	55.2	51.0	55.6	57.8	56.6	15.3	14.2	15.3	14.3	█	86.9	90.1	15	MN184
	16	56.1	56.6	56.6	55.4	55.0	54.4	53.7	55.6	57.9	57.2	15.0	10.9	15.0	13.1	15.2	█	85.3	16	MD001
	17	60.2	59.8	60.7	59.0	58.6	57.1	55.9	57.5	56.4	60.7	13.8	14.0	13.3	15.0	11.2	17.5	█	17	107-844
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17			

4

5

6

7

Figure S2. Nucleotide sequence identity of ORF5 of PRRSV/NPUST-2789-3W-2/TW/2018 with that of other PRRSVs.