

Table 1. Statistical comparison between mRNA relative expressions in swIAV H1N2 (I) single infections and co-inoculations of NPT_r cells with PRRSV-1 (P). The mean values and the standard deviations of the relative expression are shown for every condition. *P* values are presented in the last column. Comparisons were made using one-way ANOVA test and Tukey's post-test.

Messenger RNA	mRNA relative expression ± SD				I24 vs. I24_P24
	Control	P24	I24	I24_P24	
Pattern recognition receptors	RIG-I	1.94 ± 0.1	2.04 ± 0.3	14.83 ± 2.5	2.48 ± 0.9 <0.0001**
	MDA5	2.09 ± 0.3	1.71 ± 0.2	4.50 ± 0.7	1.97 ± 0.7 0.0009**
	TLR2	3.72 ± 1.6	4.49 ± 2.4	6.99 ± 5.8	3.15 ± 3.1 ns
	TLR3	2.78 ± 0.4	2.23 ± 0.3	1.92 ± 0.3	1.62 ± 0.4 ns
	TLR4	2.45 ± 2.0	4.26 ± 4.9	3.15 ± 4.8	3.51 ± 3.8 ns
	TLR6	6.80 ± 2.0	6.02 ± 1.4	3.42 ± 0.6	3.22 ± 1.4 ns
	TLR7	2.65 ± 0.9	2.01 ± 0.6	2.01 ± 0.6	1.92 ± 0.8 ns
	TLR8	4.90 ± 5.2	9.41 ± 12.6	15.46 ± 22.1	27.56 ± 40.2 ns
	TLR9	9.83 ± 15.9	23.21 ± 16.8	19.31 ± 9.5	20.49 ± 20.7 ns
	TLR10	4.20 ± 1.2	2.68 ± 1.5	1.50 ± 0.3	3.63 ± 2.9 ns
Interferons	IFNα	3.56 ± 1.1	4.25 ± 1.8	3.88 ± 0.8	5.45 ± 4.5 ns
	IFNβ	21.88 ± 17.4	42.25 ± 19.7	3911.05 ± 726.6	673.17 ± 195.4 0.0011**
	IFNλ1	2.27 ± 0.9	2.75 ± 1.1	5.31 ± 1.0	3.53 ± 1.5 ns
Interferon stimulated genes	PKR	1.87 ± 0.2	2.23 ± 2.0	4.74 ± 2.1	1.96 ± 0.9 0.0392*
	OAS	59.25 ± 6.9	74.35 ± 21.3	1677.44 ± 373.0	100.67 ± 69.9 0.0015**
	MX1	1.57 ± 0.2	1.49 ± 0.2	22.04 ± 4.6	2.75 ± 0.8 0.0031**
	MX2	6.46 ± 1.4	6.96 ± 1.4	61.01 ± 11.0	6.44 ± 3.4 0.0001**
	ISG12	47.60 ± 15.2	66.88 ± 18.3	111.00 ± 60.1	48.99 ± 43.9 ns
	ISG15	2648.03 ± 1365.5	5241.87 ± 1400.4	209624.87 ± 54923.2	22576.62 ± 1243.8 0.0003**

Ns: not significant, SD: Standard deviation, ***P*<0.01 and **P*<0.05, Genes showing significant differences are represented in bold.

Table 2. Statistical comparisons between mRNA relative expressions in swIAV H1N2 (I) single infections and co-inoculations of NPTr cells with PRRSV-1 (P) with 1 and 6 hours' delay. The mean values and the standard deviations of the relative expression are shown for every condition. P values are presented in the last four columns. Comparisons were made using one-way ANOVA test and Tukey's post-test.

Messenger RNA	mRNA relative expression ± SD									I23 vs. P24_I23	I18 vs. P24_I18	I24 vs. I24_P23	I24 vs. I24_P18	
	Control	P24	I18	I23	I24	P24_I23	P24_I18	I24_P23	I24_P18	P24_I23	P24_I18	I24_P23	I24_P18	
Pattern recognition receptors	RIG-I	1.94 ± 0.1	2.04 ± 0.3	16.79 ± 2.87	19.89 ± 5.82	14.83 ± 2.5	6.13 ± 3.62	9.18 ± 2.96	21.36 ± 8.4	28.02 ± 5.4	0.0079**	ns	ns	0.0486*
	MDA5	2.09 ± 0.3	1.71 ± 0.2	5.28 ± 0.23	5.75 ± 1.42	4.50 ± 0.7	3.31 ± 0.88	3.78 ± 1.13	5.75 ± 1.9	8.44 ± 1.3	ns	ns	ns	ns
	TLR2	3.72 ± 1.6	4.49 ± 2.4	8.72 ± 3.3	6.51 ± 3.82	6.99 ± 5.8	7.77 ± 3.95	7.45 ± 5.65	6.76 ± 2.5	8.08 ± 5.7	ns	ns	ns	ns
	TLR3	2.78 ± 0.4	2.23 ± 0.3	2.63 ± 0.24	2.13 ± 0.54	1.92 ± 0.3	2.62 ± 0.57	2.94 ± 0.6	2.31 ± 0.2	2.31 ± 0.4	ns	ns	ns	ns
	TLR4	2.45 ± 2.0	4.26 ± 4.9	1.57 ± 2.44	2.08 ± 1.41	3.15 ± 4.8	4.26 ± 6.36	4.79 ± 3.44	6.43 ± 4.5	1.53 ± 1.6	ns	ns	ns	ns
	TLR6	6.80 ± 2.0	6.02 ± 1.4	3.03 ± 1.17	3.52 ± 0.29	3.42 ± 0.6	7.6 ± 1.89	7.05 ± 1.8	4.27 ± 0.6	4.47 ± 1.5	0.0013**	0.0004**	ns	ns
	TLR7	2.65 ± 0.9	2.01 ± 0.6	2.54 ± 0.46	2.01 ± 0.6	2.01 ± 0.6	2.01 ± 0.6	2.01 ± 0.6	2.80 ± 0.3	2.76 ± 0.4	ns	ns	ns	ns
	TLR8	4.90 ± 5.2	9.41 ± 12.6	9.35 ± 6.56	10.96 ± 9.64	15.46 ± 22.1	86.97 ± 62.99	20.39 ± 21.46	14.43 ± 20.1	4.43 ± 8.8	ns	ns	ns	ns
	TLR9	9.83 ± 15.9	23.21 ± 16.8	36.25 ± 13.4	28.91 ± 13.8	19.31 ± 9.5	21.34 ± 8.78	19.87 ± 10.09	9.12 ± 5.9	18.07 ± 12.0	ns	ns	ns	ns
	TLR10	4.20 ± 1.2	2.68 ± 1.5	2.03 ± 1.01	2.28 ± 0.65	1.50 ± 0.3	4.77 ± 1.81	5.15 ± 2.01	2.73 ± 0.6	2.20 ± 1.6	0.0448*	0.0062**	ns	ns
Interferons	IFNα	3.56 ± 1.1	4.25 ± 1.8	3.62 ± 0.89	2.97 ± 0.41	3.88 ± 0.8	5.82 ± 1.69	4.47 ± 2.05	2.77 ± 0.5	2.62 ± 0.7	0.0317*	ns	ns	ns
	IFNβ	21.88 ± 17.4	42.25 ± 19.7	4974.1 ± 858.5	7334.6 ± 2013.14	3911.05 ± 726.6	1897.06 ± 1072.05	3384.59 ± 216.1852	37.35 ± 1460.981	61.37 ± 1662.9	0.006**	ns	ns	0.0097**
	IFNλ1	2.27 ± 0.9	2.75 ± 1.1	5.97 ± 1.92	6.12 ± 1.94	5.31 ± 1.0	4.33 ± 1.10	5.78 ± 1.71	5.68 ± 1.5	8.71 ± 2.2	ns	ns	ns	ns
Interferon stimulated genes	PKR	1.87 ± 0.2	2.23 ± 2.0	6.52 ± 0.69	7.72 ± 0.68	4.74 ± 2.1	3.10 ± 1.45	4.84 ± 0.98	5.91 ± 2.2	6.24 ± 3.6	0.0026*	ns	ns	ns
	OAS	59.25 ± 6.9	74.35 ± 21.3	2302.61 ± 442.6	2409.17 ± 625.62	1677.44 ± 373.0	293.18 ± 169.09	640.35 ± 132.64	2034.66 ± 508.0	4931.54 ± 1228.9	0.0004**	0.0046**	ns	0.0067**
	MX1	1.57 ± 0.2	1.49 ± 0.2	27 ± 2.89	32.27 ± 7.22	22.04 ± 4.6	7.28 ± 3.57	12.12 ± 1.95	32.67 ± 7.8	53.08 ± 11.8	0.0054**	ns	ns	ns
	MX2	6.46 ± 1.4	6.96 ± 1.4	76.60 ± 9.57	104.36 ± 24.31	61.01 ± 11.0	17.34 ± 8.96	34.70 ± 6.05	92.21 ± 28.5	159.12 ± 37.5	0.0002**	0.0436*	ns	0.0229*
	ISG12	47.6 ± 15.2	66.88 ± 18.3	138.32 ± 29.34	141.56 ± 26.67	111.00 ± 60.1	74.99 ± 49.32	78.26 ± 38.43	117.07 ± 26.1	147.15 ± 35.6	0.0292*	ns	ns	ns
	ISG15	2648.03 ± 5241.87±	244759.59 ±	272094.50 ±	209624.87 ±	80336.62 ±	98097.28 ±	226895.23 ±	682603.42 ±	230651.7	ns	ns	ns	ns

Ns: not significant, SD: Standard deviation, **P<0.01 and *P<0.05, Genes showing significant differences in one of the conditions at least are represented in bold.

Table 3. Statistical comparisons between mRNA relative expressions in swIAV H1N2 (I) single infections and co-inoculations of NPT_r cells with active (P) and inactivated PRRSV-1 (Pinac). The mean values and the standard deviations of the relative expression are shown for every condition. P values are presented in the last three columns. Comparisons were made using one-way ANOVA test and Tukey's post-test.

N s : n o t s i r i g e s n	Messenger RNA	mRNA relative expression ± SD					I24 vs I24_P24	I24 vs I24_Pinac	I24_P24 vs I24_Pinac
		Control	P24	I24	I24_P24	I24_Pinac	I24_P24	I24_Pinac	I24_P24
n PRRs	RIG-I	2.79 ± 0.9	3.91 ± 0.5	105.93 ± 26.1	1.38 ± 0.2	4.70 ± 1.2	<0.0001 **	0.0004**	<0.0001**
	MDA5	2.32 ± 0.2	2.14 ± 0.2	13.87 ± 0.8	1.51 ± 0.3	2.69 ± 0.5	<0.0001 **	ns	<0.0001**
Interferons	IFNβ	9.39 ± 3.2	8.46 ± 3.9	665.89 ± 116.5	9.29 ± 9.3	26.78 ± 6.5	<0.0001 **	ns	0.0006 **
	IFN λ1	225.87 ± 49.1	29.85 ± 21.4	780.17 ± 228.9	27.64 ± 3.9	75.39 ± 62.8	<0.0001**	<0.0001**	ns
	IFNλ3	32.55 ± 37.9	166.08 ± 78.6	30523.76 ± 9265.3	277.79 ± 64.6	938.36 ± 372.4	<0.0001**	0.0074**	<0.0001**
Interferon stimulated genes	PKR	5.30 ± 0.8	3.92 ± 0.6	30.70 ± 3.5	1.15 ± 0.1	5.36 ± 0.8	<0.0001**	<0.0001**	<0.0001**
	OAS	1.57 ± 0.5	18.01 ± 3.2	434.40 ± 109.1	4.43 ± 0.9	23.18 ± 8.2	<0.0001**	<0.0001**	<0.0001**
	MX1	2.54 ± 0.6	4.42 ± 0.8	164.11 ± 28.5	1.45 ± 0.3	8.74 ± 2.3	<0.0001**	0.0070**	<0.0001**
	MX2	6.62 ± 1.2	10.64 ± 2.9	527.58 ± 87.1	1.67 ± 0.4	15.54 ± 3.8	<0.0001**	0.0001 **	<0.0001**
	ISG12	2.78 ± 0.3	1.79 ± 0.2	6.32 ± 0.7	1.50 ± 0.2	2.90 ± 0.4	<0.0001**	0.0180*	<0.0001**
	ISG15	1.64 ± 0.3	7.35 ± 1.5	250.15 ± 118.5	8.57 ± 1.6	17.95 ± 5.8	<0.0001**	ns	0.001**

Ns: not significant, SD: Standard deviation, **P<0.01 *P<0.05, Genes showing significant differences in one of the conditions at least are represented in bold.

Table 4. Statistical comparisons between mRNA relative expressions in swIAV H1N2 (I) single infections and multiple infections of Precision-Cut Lung Slices (PCLS) with active (P) and inactivated PRRSV-1 (Pinac). The mean values and the standard deviations of the relative expression are shown for every condition. P values are presented in the last three columns. Comparisons were made using one-way ANOVA test and Tukey's post-test.

Messenger RNA	mRNA relative expression ± SD					I24 vs I24_P24	I24 vs I24_Pinac	I24_P24 vs I24_Pinac
	Control	P24	I24	I24_P24	I24_Pinac	I24_P24	I24_Pinac	I24_Pinac
PRRs	RIGI	20.23 ± 29.5	24.55 ± 12.5	21647.0 ± 5685.1	31.14 ± 22.7	49.87 ± 22.4	<0.0001 **	0.0057**
	MDA5	69.12 ± 97.6	39.05 ± 30.4	2634.07 ± 7029.9	21.61 ± 12.1	75.96 ± 54.8	<0.0001 **	ns
Interferons	IFNβ	1.37 ± 1.5	1485.37 ± 1068.1	615.66 ± 1558.2	457.14 ± 274.2	44.01 ± 28.6	ns	ns
Interferon stimulated genes	PKR	23.99 ± 34.3	16.43 ± 10.9	837.37 ± 2222.9	11.81 ± 7.4	26.83 ± 15.9	0.0001**	ns
	OAS	15.61 ± 24.8	32.86 ± 33.1	785.82 ± 1158.7	21.19 ± 28.4	51.40 ± 65.6	0.0271*	ns
	MX1	58.92 ± 14.1	104.76 ± 82.8	14702.68 ± 38494.2	283.59 ± 214.5	477.83 ± 168.3	0.0007**	ns
	MX2	11.75 ± 10.1	10.45 ± 11.9	2258.53 ± 5784.8	22.17 ± 20.8	52.90 ± 23.3	<0.0001**	ns
	ISG12	16.77 ± 19.1	73.45 ± 60.9	5583.01 ± 10106.2	869.02 ± 530.3	571.86 ± 265.8	ns	ns
	ISG15	76.74 ± 78.6	204.13 ± 338.9	17267.75 ± 26798.8	182.57 ± 107.4	2508.50 ± 3556.5	0.0055**	ns

t significant, SD: Standard deviation, **P<0.01 *P<0.05, Genes showing significant differences in one of the conditions at least are represented in bold.