

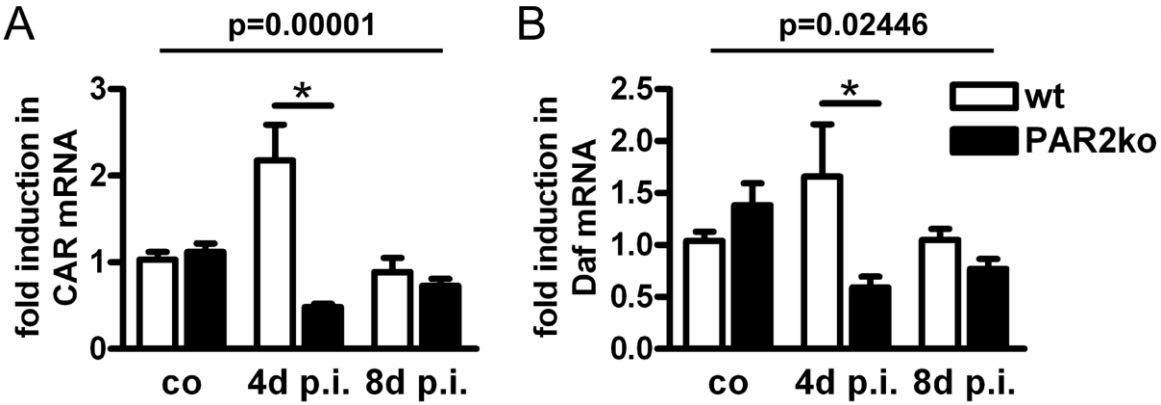
Online data supplement

Supplemental Figure 1. PAR2 deficiency results in dysregulated CAR and Daf levels during myocarditis Expression of (A) CAR and (B) DAF in control (co) and CVB3-infected wt and PAR2ko mice. Expression levels are fold to wt co (mean was set to 1). Data are mean \pm SEM. (n=6-8 mice/group). *p<0.05 versus wt and p-value according to non parametric Brunner modeling of longitudinal data

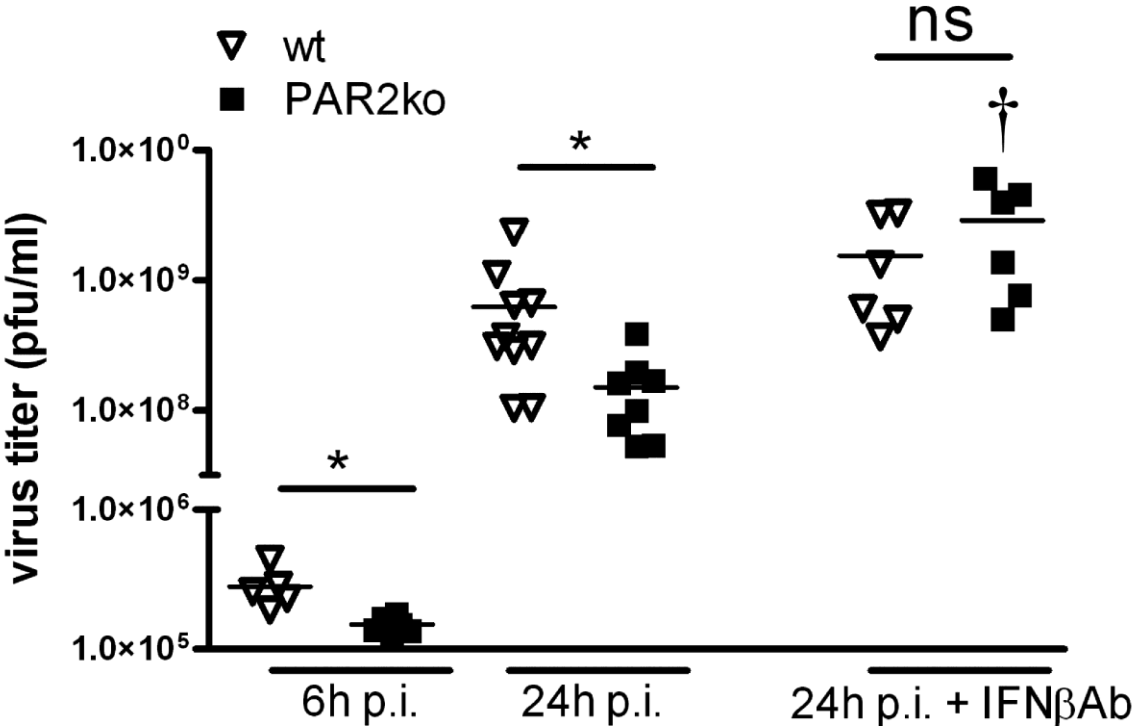
Supplemental Figure 2. Reduced virus replication in PAR2ko cardiomyocytes is dependent on IFN β Plaque titer from wt and PAR2ko cardiomyocytes after infection with CVB3 for 6 and 24h with and without adding a neutralizing IFN β antibody. Each symbol represents the virus load (pfu/ml) from an individual biological sample (n=5-9). *p<0.05 versus wt † p<0.05 versus 24h p.i. of the respective genotype

Supplemental Figure 3. Schematic drawing of possible interactions between PAR2 and TLR3

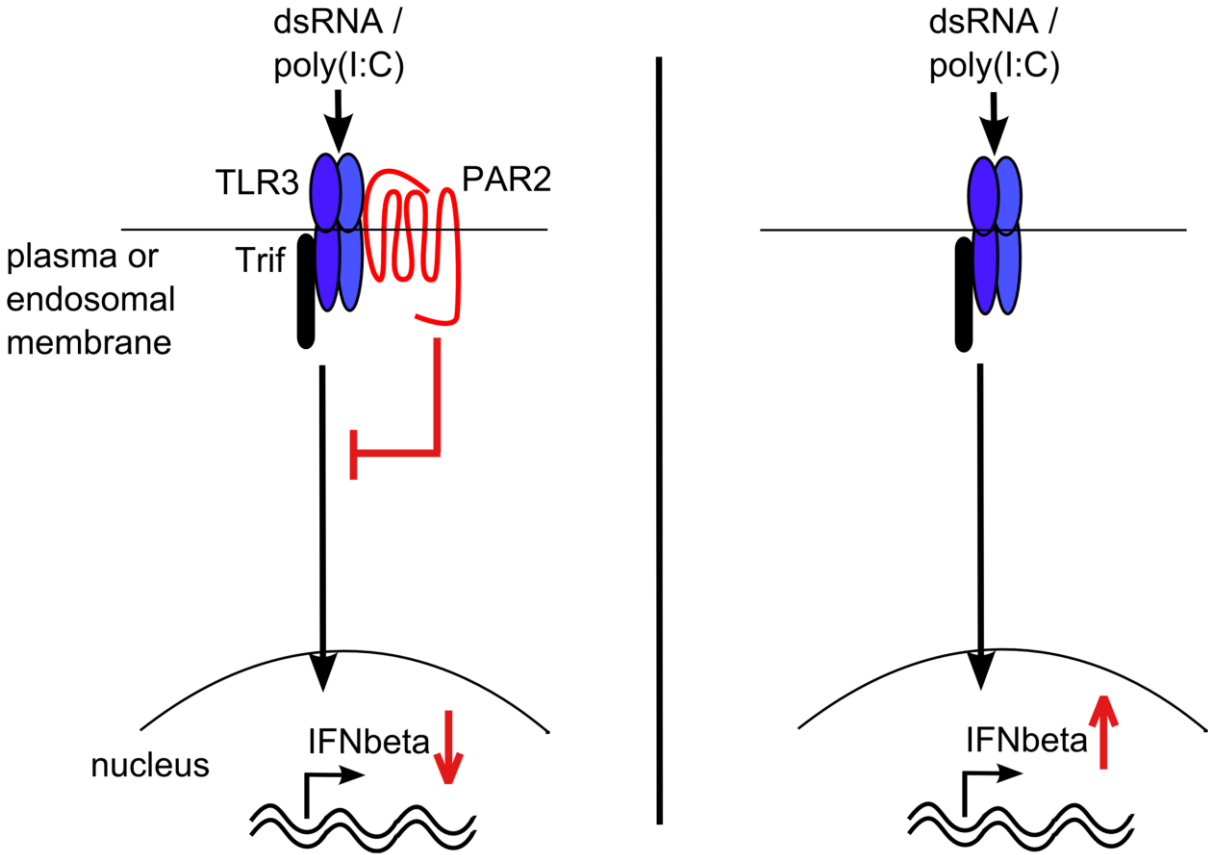
Supplemental Figure 1.



Supplemental Figure 2.



Supplemental Figure 3.



Supplemental Table 1: Baseline characteristics of patients.

	Group 1	Group 2
Sex (m/f)	22/13	21/15
Age (years)	53.2 ± 12.2	54.9 ± 12.5
BMI (kg/m²)	26.3 ± 4.9	26.1 ± 4.8
LVEF (%)	41.5 ± 12.7	31.4 ± 9.7*
LVEDD (mm)	58.9 ± 11.5	58.1 ± 8.3
CD3 (n/mm²)	3.5 ± 2.4	8.5 ± 5.3*
CD45 (n/mm²)	12.3 ± 8.3	22.8 ± 15.2*
Mac-1 (n/mm²)	27.9 ± 18.6	36.9 ± 17.1*
LFA-1 (n/mm²)	10.3 ± 5.6	17.5 ± 12.2*
HLA (n/ mm²)	5.2 ± 2.0	6.5 ± 2.7 *
ICAM-1 (AF/%)	1.4 ± 0.9	2.3 ± 1.2*
VCAM-1 (AF/%)	0.05 ± 0.05	0.07 ± 0.1
Creatinine (mg/dL)	0.9 ± 0.15	0.94 ± 0.20
Creatin Kinase (mg/dL)	98.9 ± 134	109.1 ± 109
Hemoglobin (g/dL)	14.2 ± 1.3	14.1 ± 1.5
Leukocytes (n/nL)	7.96 ± 2.2	7.81 ± 2.09
Platelets (n/nL)	255 ± 92	259 ± 81

Data are as mean \pm SD. Patients were divided according to cardiac PAR2 expression into group 1 (low expression, n=35) and group 2 (high expression, n=36). *p>0.05 versus high PAR2 expression

Supplemental Table 2: Haemodynamic parameters of wt and PAR2ko mice 28d p.i.

	wt-co	wt-CVB3	PAR2ko-co	PAR2ko-CVB3
HW/BW (mg/g)	4.7±0.1	5.9±0.8†	5.1±0.2	5.6±0.5 [§]
global heart function				
HR (bpm)	515.8±47.5	381±75.3†	519.3±36.6	502.7±68.7
SV (µl)	37.24±12.45	42.10±12.30	44.36±9.46	44.58±13.69
CO (µl/min)	21733±5719	17203±3044	23078±5288	24720±4434*
EF (%)	69.69±7.74	64.36±5.93	64.08±12.96	69.27±20.08
systolic function				
dP/dtmax (mmHg/s)	7747±1294	3963±1400†	6747±1280	5509±1913
diastolic function				
dP/dtmin (mmHg/s)	-5684±878	-2596±911†	-4916±844	-3761±11227
Tau (ms)	11.13±1.33	14.53±2.21†	11.54±1.79	10.60±1.78

Data are mean ± SEM. (n=6-8 mice/group). Data were analyzed by Mann-Whitney Test. *p<0.05 versus wt and † p<0.05 versus co mice of the respective genotype.

HW/BW (heart weight/body weight), HR (heart rate), SV (stroke volume), CO (cardiac output), EF (ejection fraction), dP/dtmax (contractility), dP/dtmin (maximum rate of pressure change), Tau (isovolumic relaxation).