Supplementary Table 1. Exclusions

	Vehicle	Single dose	Multiple doses	
Initial enrollment of mice for MI studies	112			
Death after MI (all deaths were within 48 h)	21			
Excluded because EF >35%	13			
Mice assigned to group	26	26	26	
Death after 1st infusion	2	2	3	
Death after 2nd infusion	0	0	2	
Death after 3rd infusion	2	0	1	
Total mice included in final analysis	22	24	20	

EF, ejection fraction; MI, myocardial infarction.

	Pre-Occlusion	Occlusion			Reperfusion		
		10 min	30 min	60 min	1 min	5 min	10 min
<u>Temperature</u> (°C)							
Vehicle	37.1 ± 0.0	37.0 ± 0.1	37.1 ± 0.0	37.2 ± 0.0	37.1 ± 0.0	37.1 ± 0.0	37.1 ± 0.1
Single dose Multiple doses	37.1 ± 0.0 37.1 ± 0.0	37.1 ± 0.1 37.1 ± 0.0	37.1 ± 0.0 37.1 ± 0.0	37.1 ± 0.0 37.1 ± 0.1	37.1 ± 0.0 37.1 ± 0.0	37.1 ± 0.0 37.1 ± 0.1	37.1 ± 0.1 37.1 ± 0.0
Heart rate (beats/min) Vehicle Single dose Multiple doses	465 ± 9 457 ± 8 458 ± 8	447 ± 7 450 ± 10 447 ± 7	463 ± 10 460 ± 11 467 ± 11	492 ± 12 480 ± 15 498 ± 12	503 ± 10 503 ± 15 504 ± 8	525 ± 14 510 ± 14 515 ± 9	536 ± 14 511 ± 15 513 ± 14

A. Measurements of rectal temperature and heart rate were taken before the 60-min coronary occlusion (pre-occlusion), at 10, 30 and 60 min into the 60-min occlusion, and at 1, 5 and 10 min after reperfusion. Rectal temperature was continuously monitored and carefully controlled throughout the experiment, as detailed in the text. Data are means \pm SEM.

B. Rectal Temperature and Heart Rate on the Days of the Echocardiogram

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	Pre-Rx 1 (BSL)	Pre-Rx 2	Pre-Rx 3	Final Echo
Temperature (°C)				
Vehicle	37.4 ± 0.1	37.7 ± 0.1	37.7 ± 0.1	37.6 ± 0.1
Single dose	37.4 ± 0.1	37.8 ± 0.2	37.7 ± 0.1	37.5 ± 0.1
Multiple doses	37.2 ± 0.1	37.6 ± 0.1	37.6 ± 0.1	37.8 ± 0.1
Heart rate (beats/min)				
Vehicle	519 ± 7	517 ± 10	548 ± 8	498 ± 9
Single dose	517 ± 9	528 ± 8	522 ± 8	494 ± 8
Multiple doses	506 ± 6	538 ± 12	549 ± 6	516 ± 10

B. Measurements of rectal temperature and heart rate were taken during the echocardiographic studies. First, second, and third Rx indicates first, second, and third treatment. Data are means \pm SEM.

Supplementary Table 3

A. Body Weight on the Days of Coronary Occlusion and Echocardiograms

	Control (n=6)	Vehicle (n=22)	Single dose (n=24)	Multiple doses (n=20)
Body weight(g)				
Day of Occlusion		21.9 ± 0.2	22.0 ± 0.3	22.9 ± 0.3 #
Pre-Rx 1 (BSL)		25.4 ± 0.4	24.5 ± 0.4	25.8 ± 0.4
Pre-Rx 2		25.5 ± 0.3	25.0 ± 0.4	26.0 ± 0.4
Pre-Rx 3		25.7 ± 0.4	25.4 ± 0.3	25.2 ± 0.4
Final Echo/Sacrifice	24.8 ± 0.7	24.1 ± 0.5	24.8 ± 0.4	26.2 ± 0.3 #
<u>Δ Body Weight(g)</u>				
Final-Pre-Rx 1		-1.3 ± 0.7	0.3 ± 0.4	0.4 ± 0.3 #
Final-Pre-Rx 2		-1.3 ± 0.5	-0.1 ± 0.3 #	0.2 ± 0.3 #
Final-Pre-Rx 3		-1.6 ± 0.5	-0.6 ± 0.3	1.0 ± 0.3 **

Measurements of body weight taken on the day of 60-minute coronary occlusion and on the day of each echocardiographic study. Echocardiograms were performed prior to the first treatment (3 months after 60-minute coronary occlusion), and 5 weeks after each treatment. Rx, treatment. # P<0.05 vs. Vehicle; # P<0.05 vs. Single dose. Data are means # SEM.

B. Morphometric Measurements

	Normal control (n=6)	Vehicle (n=10)	Single dose (n=11)	Multiple doses (n=10)
LV Mass (mg)	105.1 ± 7.5#	141.7 ± 8.3	117.1 ± 5.7#	109.8 ± 3.1
LV Mass/Body Weight (mg/g)	4.3 ± 0.4 #	5.8 ± 0.3	4.9 ± 0.3	4.2 ± 0.1 #
LV Mass/Tibia Length (mg/mm)	5.7 ± 0.4 #	8.0 ± 0.4	6.4 ± 0.3 #	6.0 ± 0.2 #
Lung weight/Body Weight (mg/g)	6.7 ± 0.1	7.1 ± 0.2	7.4 ± 0.3	6.6 ± 0.2
Lung weight/Tibia Length (mg/mm)	9.1 ± 0.3	9.6 ± 0.2	9.7 ± 0.4	9.5 ± 0.2

LV mass, body weight, tibia length, and lung weight. # P<0.05 vs. Vehicle. Data are means ± SEM.

C. Temperature and Heart Rate on the Day of the Hemodynamics Study

Temperature (°C)		Heart rate (beats/min)	
Vehicle	37.1 ± 0.1	461 ± 10	
Single dose	37.0 ± 0.2	439 ± 8	
Multiple doses	37.1 ± 0.1	467 ± 12	

Measurements of rectal temperature and heart rate were taken 30 min after LV catheterization during hemodynamics studies. Data are means ± SEM.