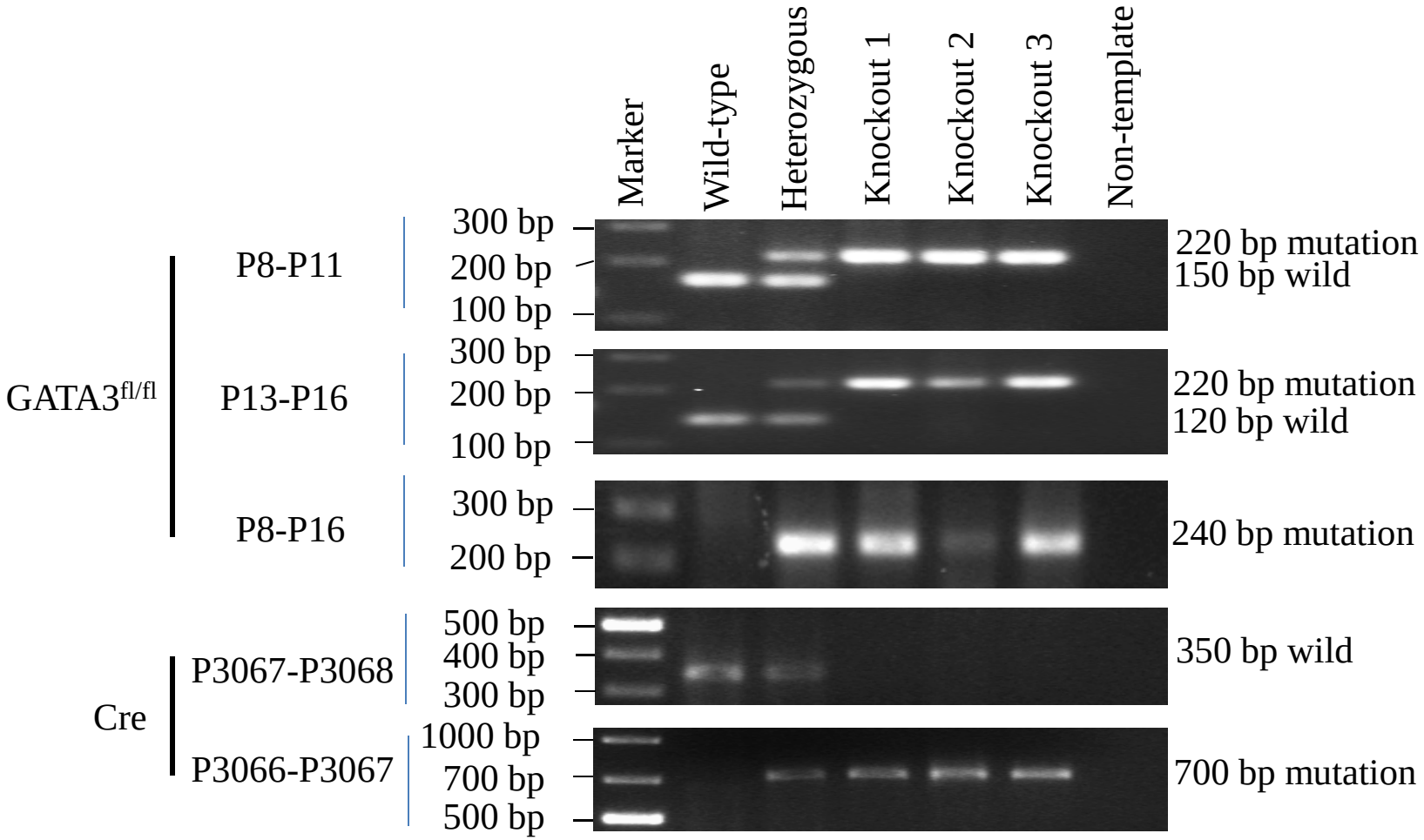

Marker
Wild-type
Heterozygous
Knockout 1
Knockout 2
Knockout 3
Non-template
GATA3fl/fl
Cre
P8-P11
P13-P16
P8-P16
P3067-P3068
P3066-P3067
300 bp
200 bp
100 bp
300 bp
200 bp
100 bp
300 bp
200 bp
500 bp
400 bp
300 bp
1000 bp
700 bp
500 bp
220 bp mutation
150 bp wild
220 bp mutation
120 bp wild
240 bp mutation
350 bp wild
700 bp mutation

Online Fig. 1

Online Fig. 1. Genotyping of mGATA3KO Mice. The GATA3 $^{fl/fl}$ mouse was generated by cloning the GATA3 exon 4 gene which is flanked by two loxP sites. Therefore, we used exon 4 (E4) and the loxP sites to determine the presence and deletion of GATA3 in myeloid cells. Mice carrying either the GATA3 floxed allele or the GATA3 deleted allele were identified by PCR with the following primer pairs: P8-P11, P13-P16, and P8-P16. For the identification of the Cre gene, we used the following PCR primers: P3066-P3067 and P3067-3068. GATA3 $^{fl/fl}$ mice were crossed with LysM-Cre mice (purchased from The Jackson Laboratory) to generate homozygous mGATA3KO mice. All mice were bred and maintained in the Cedars-Sinai Medical Center pathogen–free animal facility, and experiments used approved protocols according to the Institutional Animal Care and Use Committee guidelines of Cedars-Sinai Medical Center.

For genotyping, tail samples were collected and lysed at 55°C overnight in 100 l lysis buffer (100 mM Tris-HCl, pH 8.5, 5 mM EDTA, 0.2% SDS, 200 mM NaCl and 1 mg/ml of Proteinase K). After a 1:10 dilution with distilled water, 1 l was used as template for PCR. The sequences of the primers were as follows:

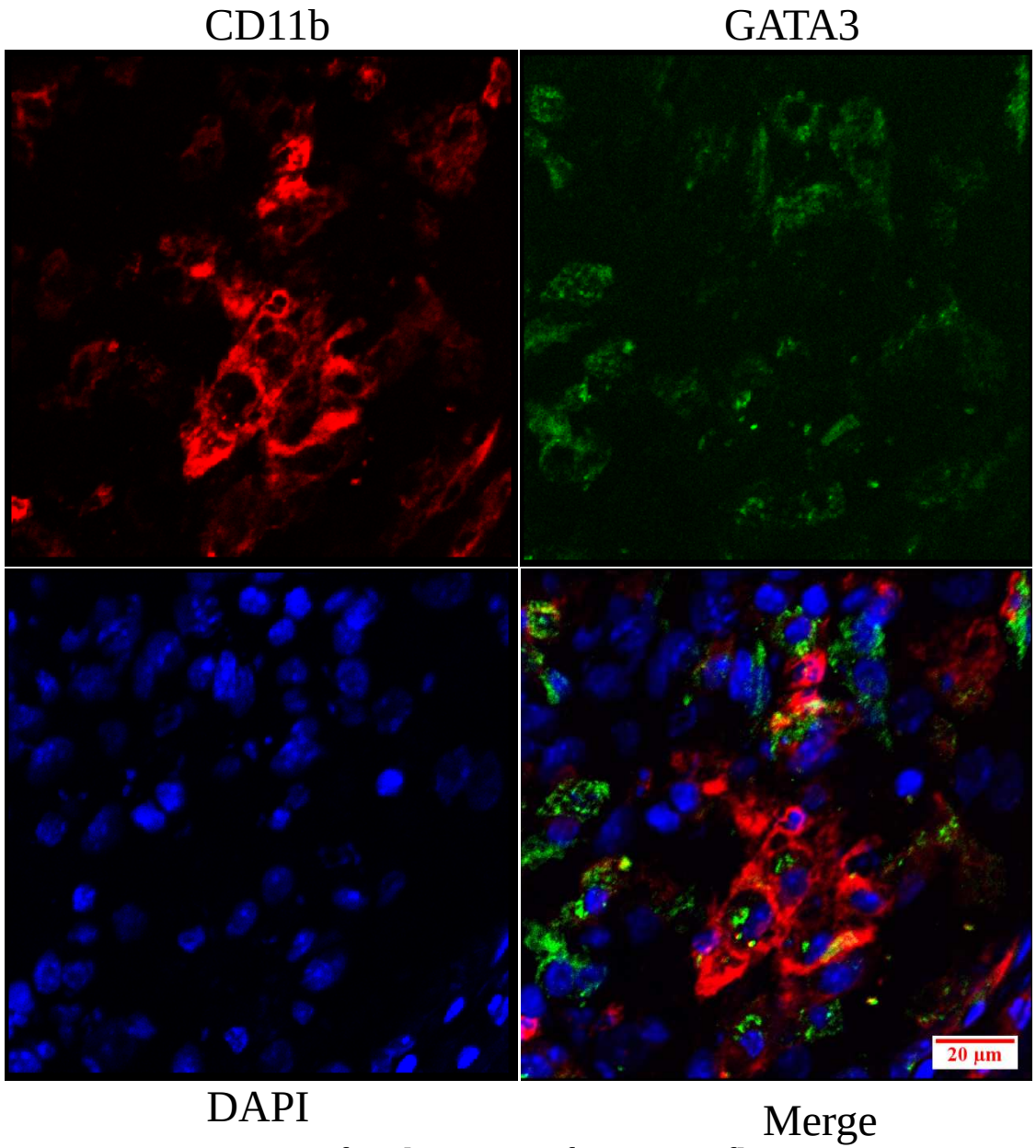
5 -TCAGGGCACTAAGGGTTGTTAACTT-3 (P8)
5 -GAATTCCATCCATGAGACACACAA-3 (P11)
5 - CAGTCTCTGGTATTGATCTGCTTCTT-3 (P13)
5 -GTGCAGCAGAGCAGGAAACTCTCAC-3 (P16)
5’-CCC AGA AAT GCC AGA TTA CG-3’ (P3066)
5’-CTT GGG CTG CCA GAA TTT CTC-3’ (P3067)
5’-TTA CAG TCG GCC AGG CTG AC-3’ (P3068)

Online Table 1. The List of Antibodies Used in Each Experiment with the Direct Link to the Website

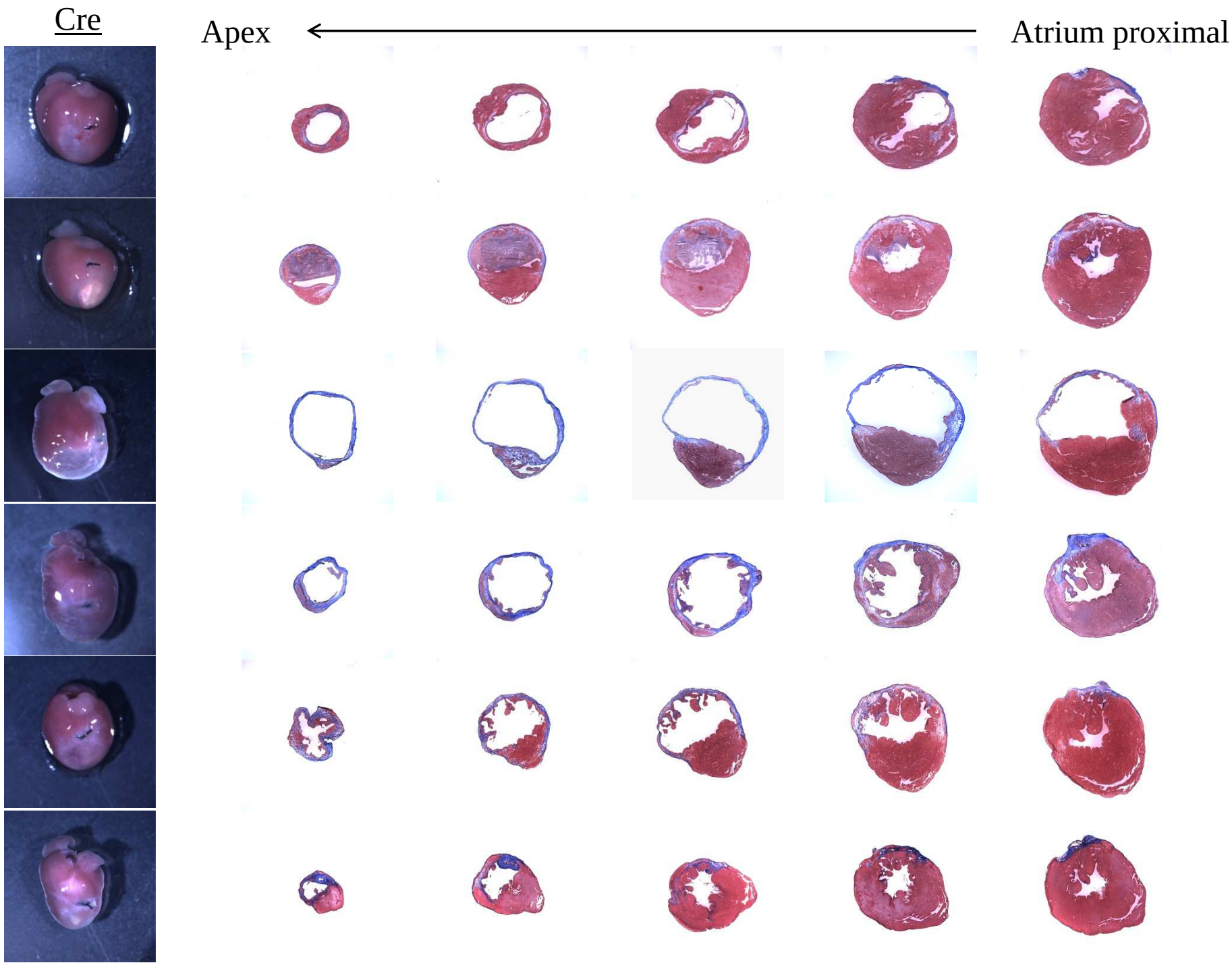
Antibody used for Immunostaining		
CL8942AP	Rat anti-mouse MAC2 (GALECTIN-3)	https://www.cedarlanelabs.com/Products/Detail/CL8942AP
AF3626-SP	Goat anti-mouse IL-33	https://resources.rndsystems.com/pdfs/datasheets/af3626.pdf
sc-1260	Goat anti-mouse IL-4 (C-19)	https://datasheets.scbt.com/sc-1260.pdf
HAF-019	Donkey anti-goat IgG-HRP	https://resources.rndsystems.com/pdfs/datasheets/haf019.pdf
BA-4001	Biotinylated Rabbit Anti-Rag IgG	http://docs.vectorlabs.com/protocols/BA-4001.pdf
558686	Mouse anti-GATA3	http://www.bdbiosciences.com/ds/pm/tds/558686.pdf
Antibody used for fluorescent Immunostaining		
sc-22206	Goat anti-mouse GATA3	https://datasheets.scbt.com/sc-22206.pdf
14-0112-82	Rat anti mouse CD11b	http://www.ebioscience.com/media/pdf/tds/14/14-0112.pdf
sc-362255	Donkey anti-goat IgG-CFL 488	https://datasheets.scbt.com/sc-362255.pdf
ab175475	Donkey Anti-Rat IgG H&L (Alexa Fluor® 568)	http://www.abcam.com/donkey-rat-igg-hl-alexa-fluor-568-preadsorbed-ab175475.html
123110	PE anti-mouse F4/80 Antibody	http://www.biolegend.com/pe-anti-mouse-f4-80-antibody-4068.html
Antibody used for Western blot		
sc-22206	Goat anti-mouse GATA3	https://datasheets.scbt.com/sc-22206.pdf
sc-25778	Rabbit anti GAPDH	https://datasheets.scbt.com/sc-25778.pdf
Antibody used for FACS		
128018	PE/Cy7 anti-mouse Ly-6C Antibody	http://www.biolegend.com/pe-cy7-anti-mouse-ly-6c-antibody-6063.html
127616	PerCP/Cy5.5 anti-mouse Ly-6G Antibody	http://www.biolegend.com/percp-cy55-anti-mouse-ly-6g-antibody-6116.html
150608	FITC anti-mouse CD192 (CCR2) Antibody	http://www.biolegend.com/fitc-anti-mouse-cd192-ccr2-antibody-13354.html
101212	APC anti-mouse/human CD11b Antibody	http://www.biolegend.com/apc-anti-mouse-human-cd11b-antibody-345.html
123110	PE anti-mouse F4/80 Antibody	http://www.biolegend.com/pe-anti-mouse-f4-80-antibody-4068.html

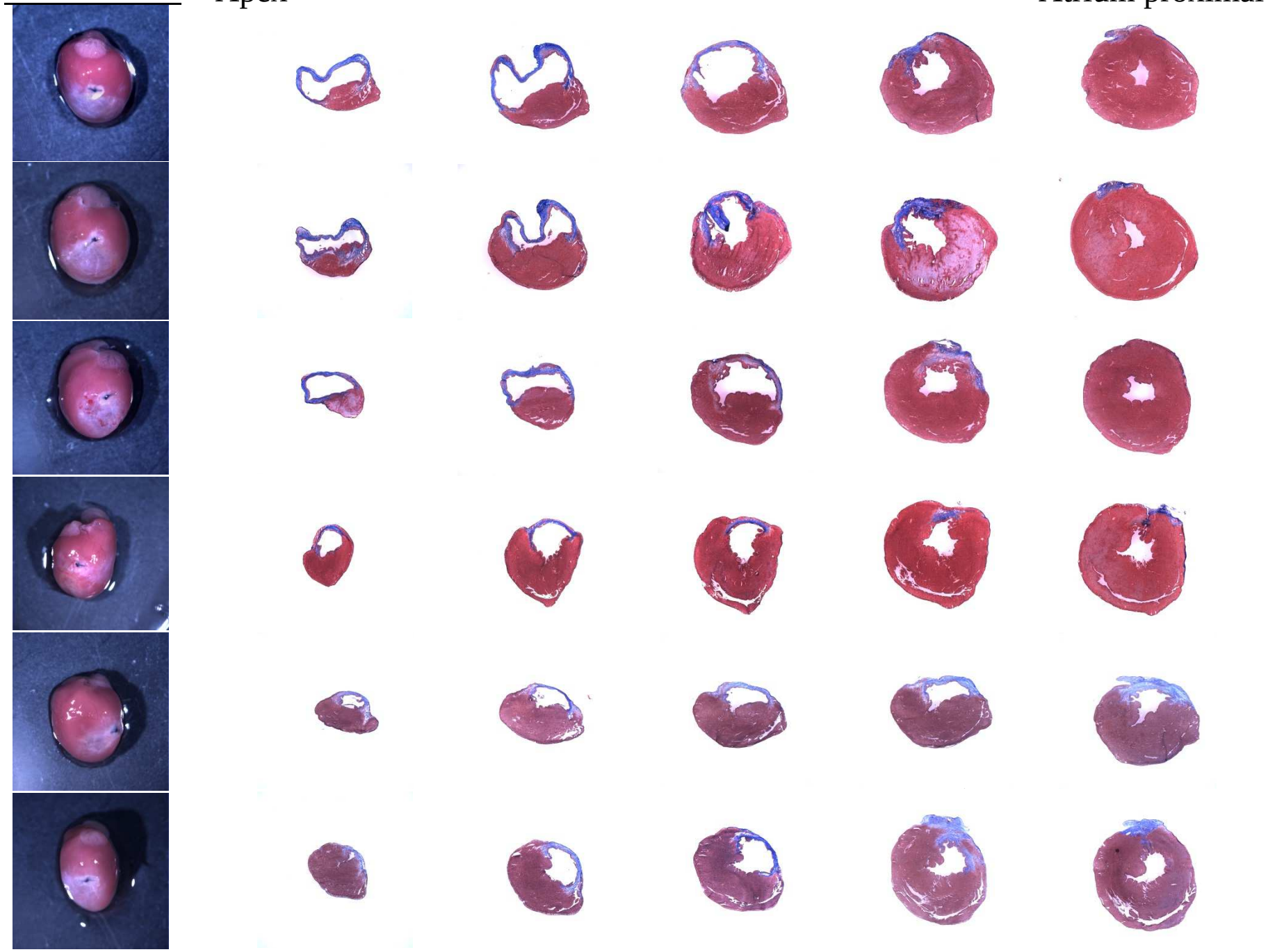
Online Table 2. The list of primers used to amplify indicated genes are included.

Primers		
Name	Forward	Reverse
GAPDH	TCAAGCTCATTTCCTGGTATGAC	TTACTCCTTGGAGGCCATGT
GATA3	CTTATCAAGCCCAAGCGAAG	CATTAGCGTTCCTCCTCCAG
GATA3E1a	GAGCGTCAGCAACAGTGAAG	CCACACTGCACACTGATTCC
GATA3E1b	CAATCTGACCGGGCAGGT	CAGAGACGGTTGCTCTTCCG
ARG1	GGTTCTGGGAGGCCTATCTT	TCCCAAGAGTTGGGTTCACT

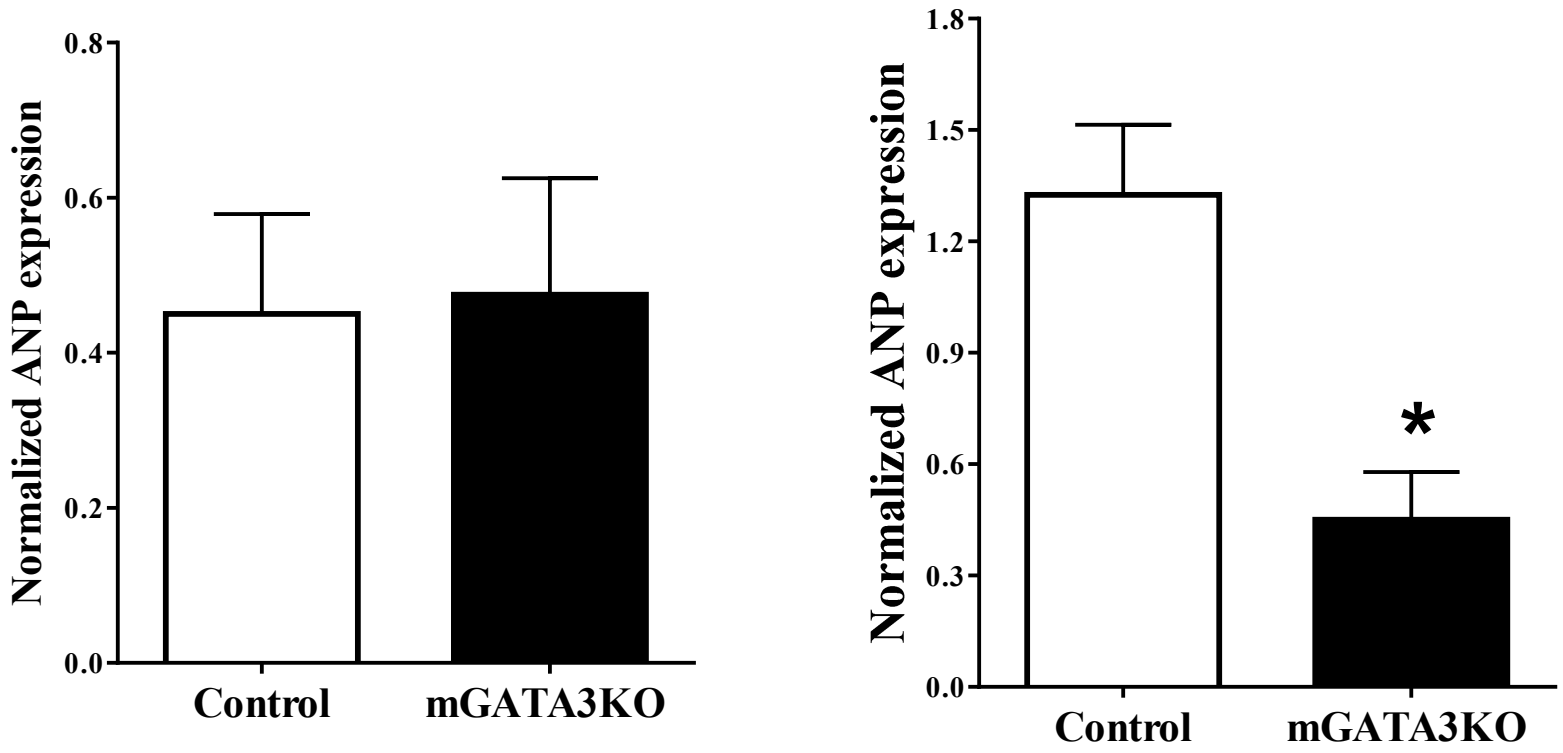


Online Fig. 2. A Representative Confocal Image of Immunofluorescence Staining of LV Sections from Cre Mice subjected to MI for Eight Days. The sections were stained with CD11b-AF568 (red), GATA3-CFL488 (green) and DAPI (blue). Magnification at 10 X 63.

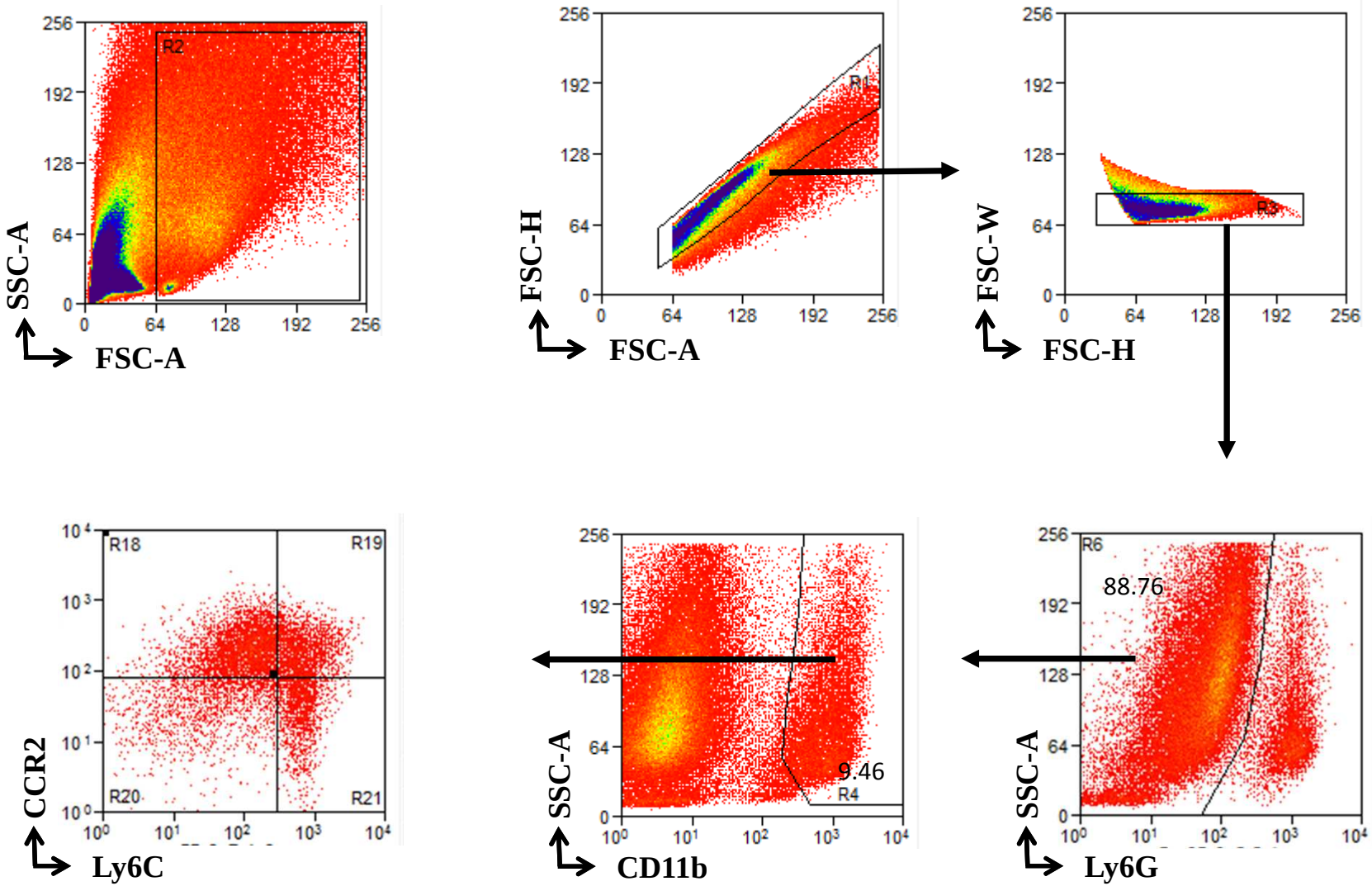

Cre
Apex
Atrium proximal


mGATA3KO
Apex
Atrium proximal

Online Fig. 3. Photograph of Sections from all the Harvest Hearts from the Two Mice Genotypes After MI. To analyze the morphology of the ischemic hearts; they were harvested, rapidly frozen in liquid nitrogen, sectioned, and stained for collagen. Morphologically, the mGATA3KO hearts had more myocardium (red stain) and less collagen (blue stain) compared with the control Cre hearts.



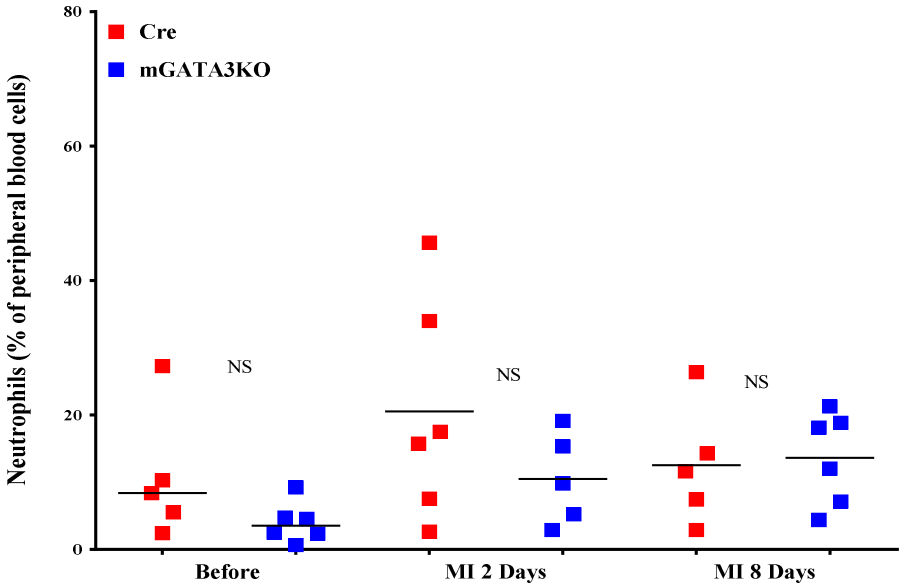
Online Fig. 4. Expression of atrial natriuretic factor (ANP) in the control Cre mice before (left panel) and after (right panel) 2 months artic constriction. There was no significant difference in the expression of ANP between the two mice genotypes before aortic banding; however significant differences ($p<0.05$) was detected after the banding, designated by *.

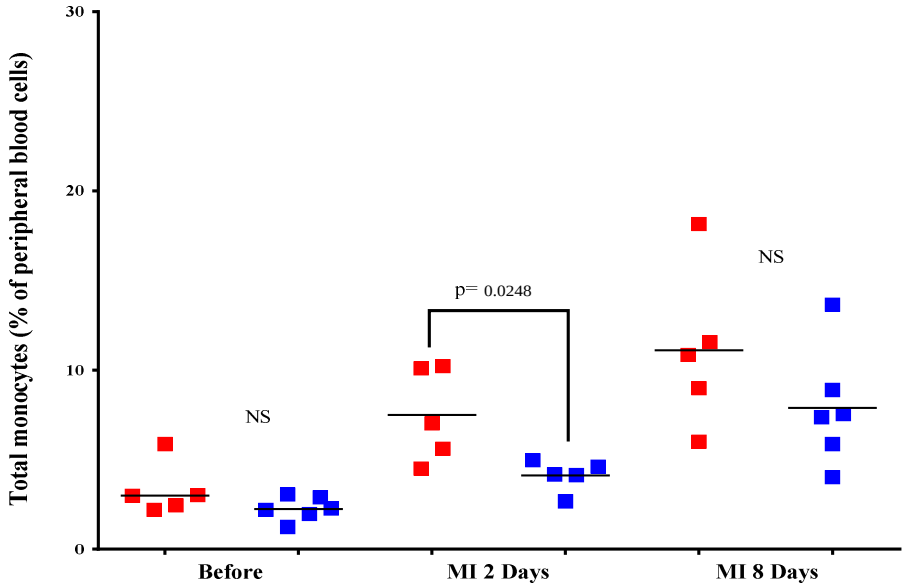

SSC-A
FSC-A
R2
FSC-H
FSC-A
R1
FSC-W
FSC-H
R3
CCR2
Ly6C
R18
R19
R20
R21
SSC-A
CD11b
9.46
R4
SSC-A
Ly6G
R6
88.76

Online Fig. 4.

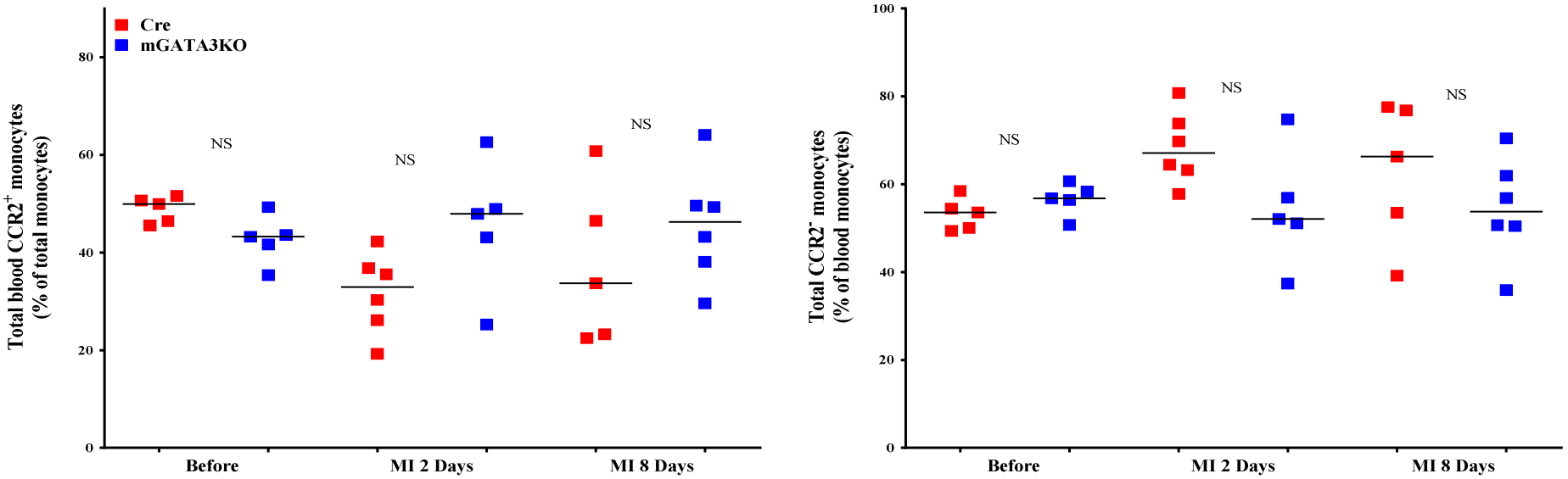
Online Fig. 5. Basic Flow Cytometry Gating Strategy and Phenotypic Definitions of Granulocyte and Monocyte Subsets.

Cells were gated on a forward scatter/side scatter (FSC/SSC) plot. After separation of the single cell population, leukocytes were then further gated to determine Ly6G-positive and Ly6G-negative cells. Ly6G-negative cells were further gated for CD11b-positive cells representing the total monocyte population. Monocytes were further gated into the main subsets based on the CCR2/Ly6C expression properties. The list of antibodies used in the flow cytometry experiments are included in **Online Table 1**.

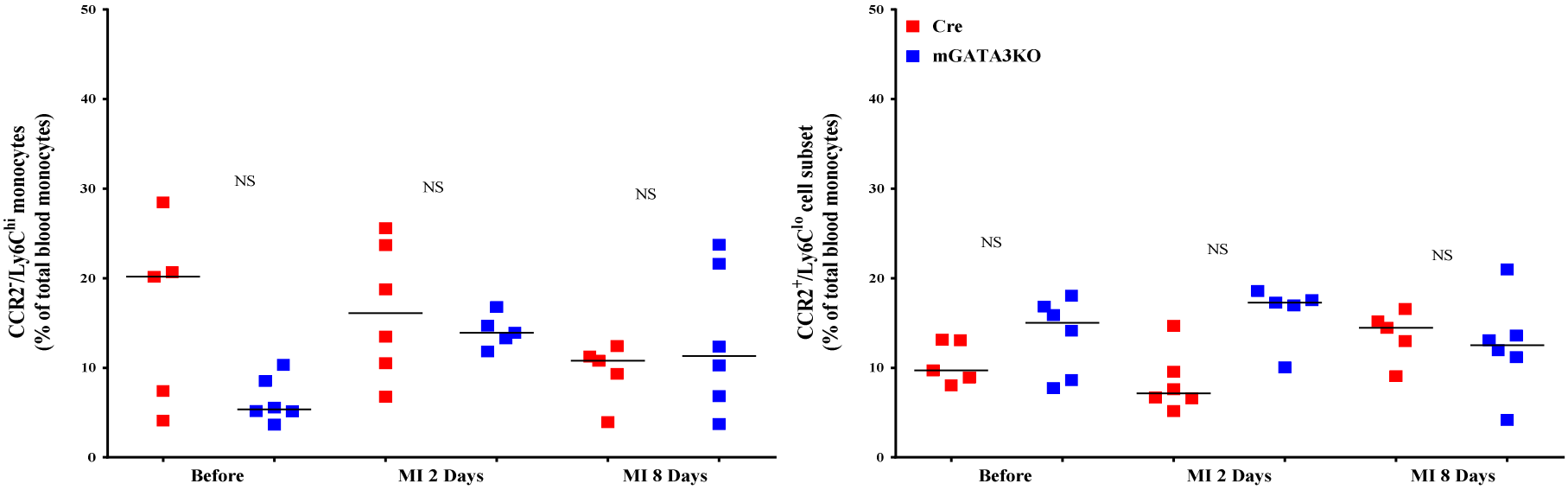

Cre
mGATA3KO
Neutrophils (% of peripheral blood cells)
80
60
40
20
0
NS
NS
NS
Before
MI 2 Days
MI 8 Days


Total monocytes (% of peripheral blood cells)
30
20
10
0
NS
p= 0.0248
NS
Before
MI 2 Days
MI 8 Days

Online Fig. 5.


Cre
mGATA3KO
Total blood CCR2+ monocytes
(% of total monocytes)
NS
NS
NS
0
20
40
60
80
Before
MI 2 Days
MI 8 Days
Total CCR2- monocytes
(% of blood monocytes)
NS
NS
NS
0
20
40
60
80
100
Before
MI 2 Days
MI 8 Days

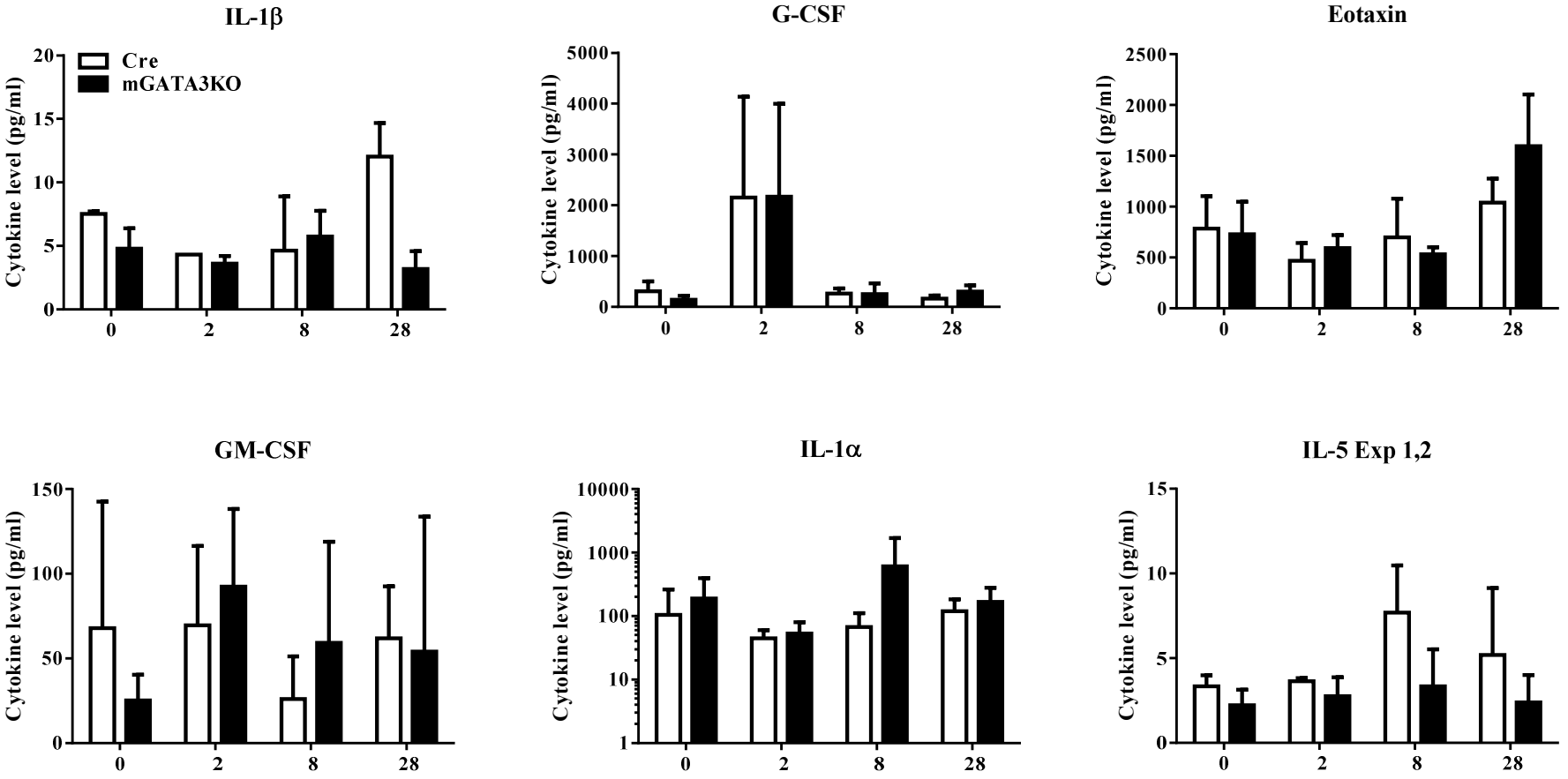
Online Fig. 5.


CCR2-/Ly6Chi monocytes
(% of total blood monocytes)
50
40
30
20
10
0
NS
NS
NS
Before
MI 2 Days
MI 8 Days
Cre
mGATA3KO
CCR2+/Ly6Clo cell subset
(% of total blood monocytes)
50
40
30
20
10
0
NS
NS
NS
Before
MI 2 Days
MI 8 Days

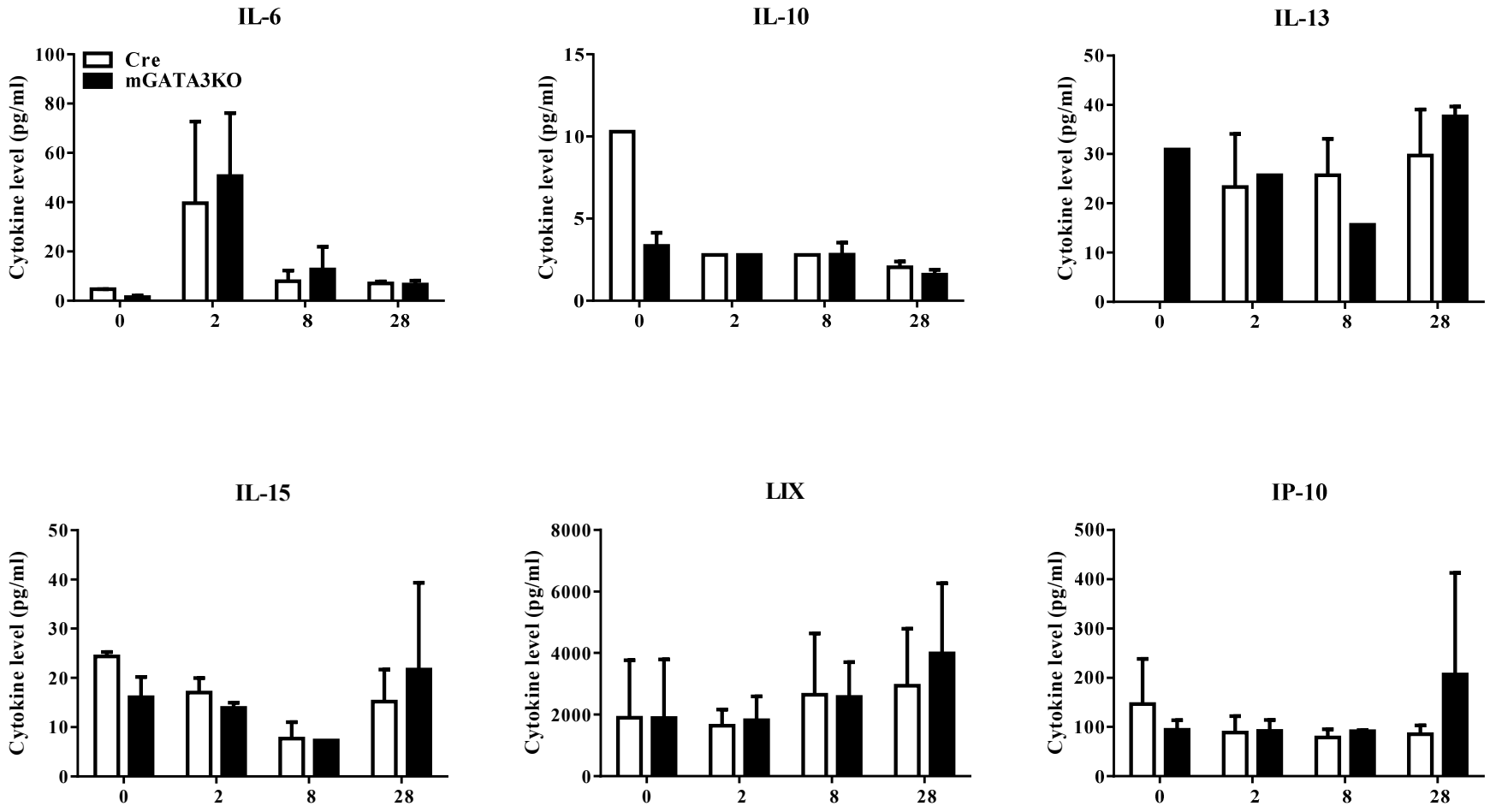
Online Fig. 5.

Online Fig. 6. White Blood Cells from Peripheral Blood From the Two Mouse Genotypes Analyzed by Flow Cytometry.

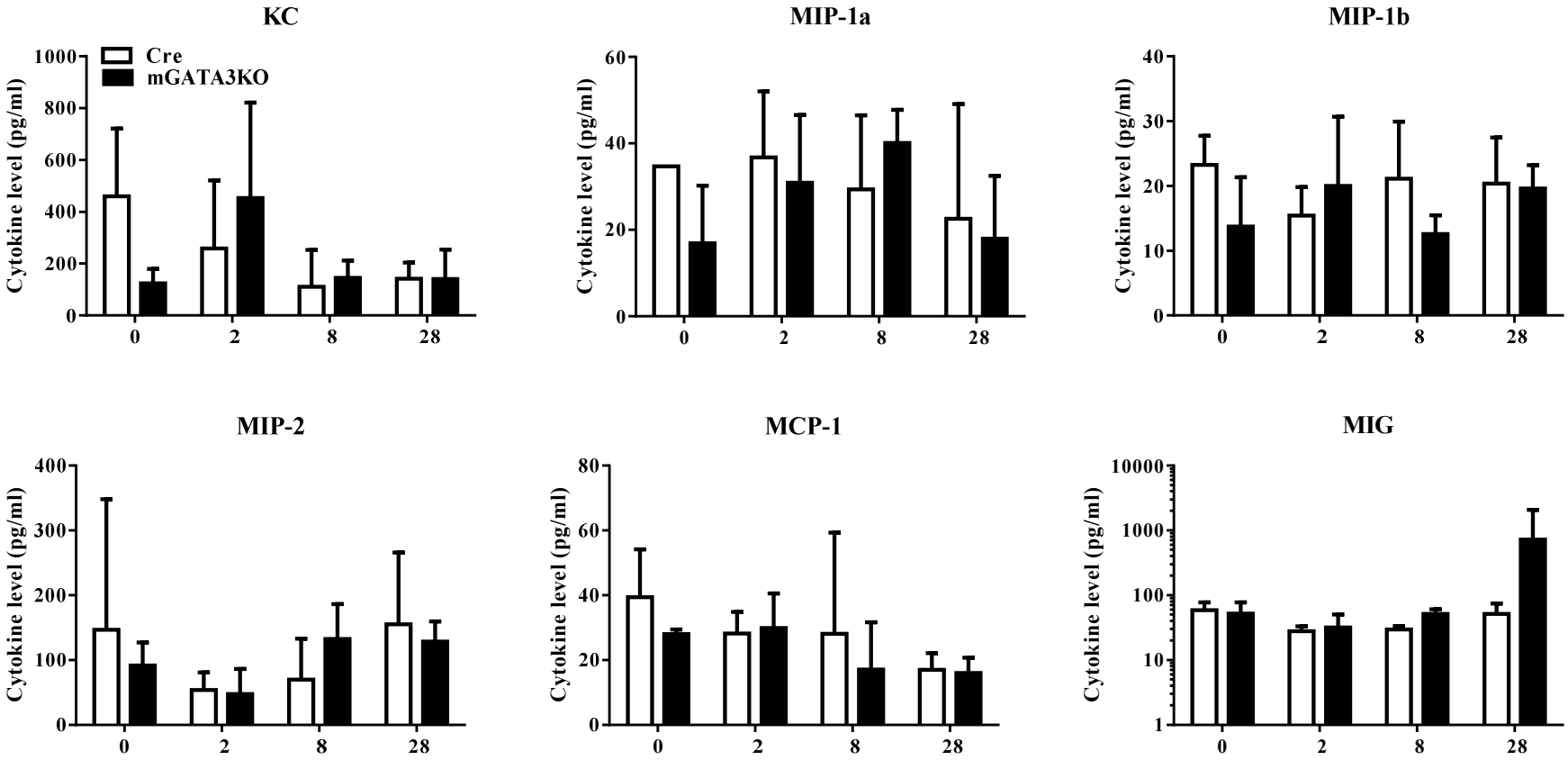
White blood cells were collected from the peripheral blood before and after MI, and analyzed by flow cytometry. The gating strategy is outlined **Online Fig. 4)**. Each data point represent one mouse/genotype.


IL-1β
Cre
mGATA3KO
Cytokine level (pg/ml)
0
5
10
15
20
0
2
8
28
G-CSF
Cytokine level (pg/ml)
0
1000
2000
3000
4000
5000
0
2
8
28
Eotaxin
Cytokine level (pg/ml)
0
500
1000
1500
2000
2500
0
2
8
28
GM-CSF
Cytokine level (pg/ml)
0
50
100
150
0
2
8
28
IL-1α
Cytokine level (pg/ml)
1
10
100
1000
10000
0
2
8
28
IL-5 Exp 1,2
Cytokine level (pg/ml)
0
5
10
15
0
2
8
28

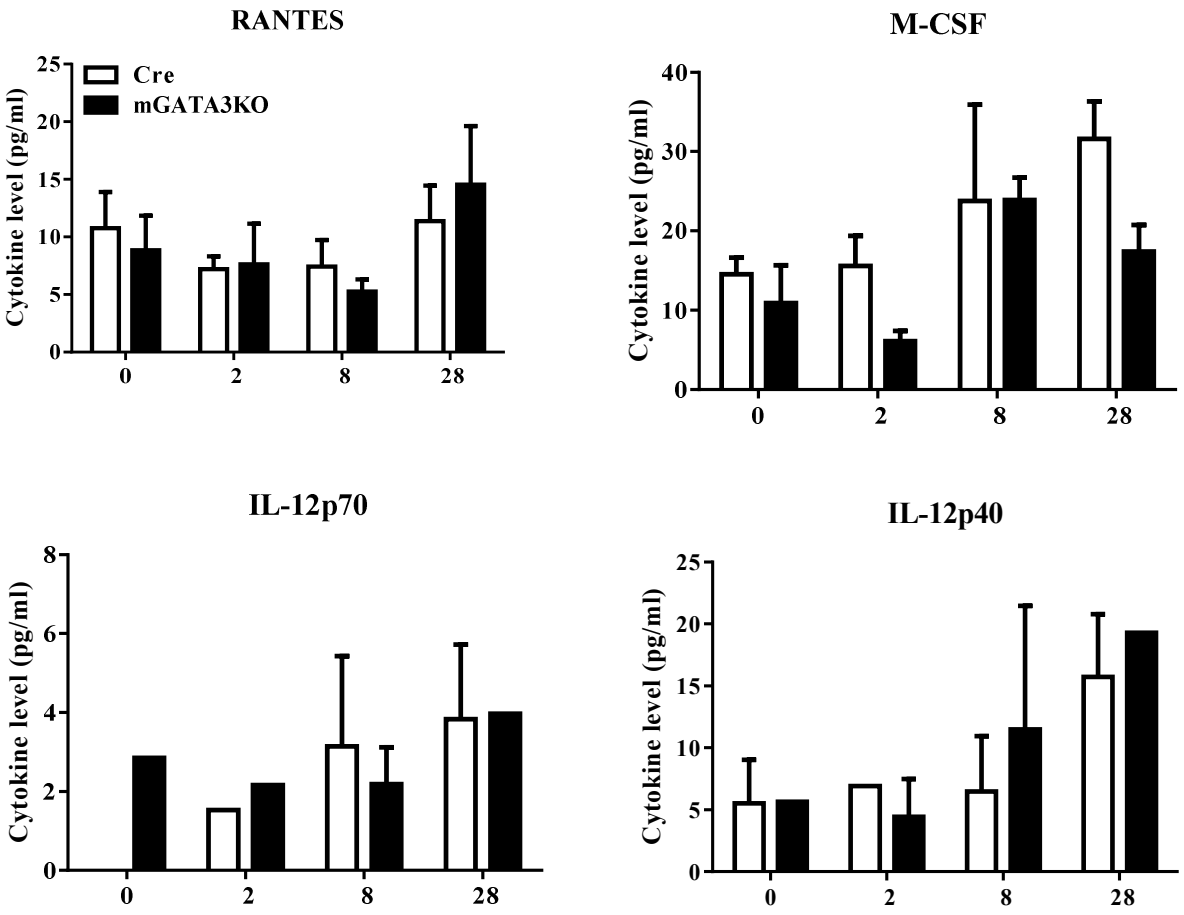
Online Fig. 6.


IL-6
Cre
mGATA3KO
Cytokine level (pg/ml)
100
80
60
40
20
0
0
2
8
28
IL-10
Cytokine level (pg/ml)
15
10
5
0
0
2
8
28
IL-13
Cytokine level (pg/ml)
50
40
30
20
10
0
0
2
8
28
IL-15
Cytokine level (pg/ml)
50
40
30
20
10
0
0
2
8
28
LIX
Cytokine level (pg/ml)
8000
6000
4000
2000
0
0
2
8
28
IP-10
Cytokine level (pg/ml)
500
400
300
200
100
0
0
2
8
28

Online Fig. 6.


KC
MIP-1a
MIP-1b
MIP-2
MCP-1
MIG
Cre
mGATA3KO
Cytokine level (pg/ml)
0
2
8
28

Online Fig. 6.


RANTES
Cre
mGATA3KO
Cytokine level (pg/ml)
25
20
15
10
5
0
0
2
8
28
M-CSF
Cytokine level (pg/ml)
40
30
20
10
0
0
2
8
28
IL-12p70
Cytokine level (pg/ml)
8
6
4
2
0
0
2
8
28
IL-12p40
Cytokine level (pg/ml)
25
20
15
10
5
0
0
2
8
28

Online Fig. 6.

Online Fig. 7. Analysis of Serum Proteins From the Two Mice Genotypes Before and After MI. Serum was collected from the two mouse genotypes (4 mice/time point/genotype), and the serum proteins were analyzed for the presence of indicated growth factors and cytokines. We did not detect major changes in the composition of the serum proteins between the two mice genotypes before and after MI.