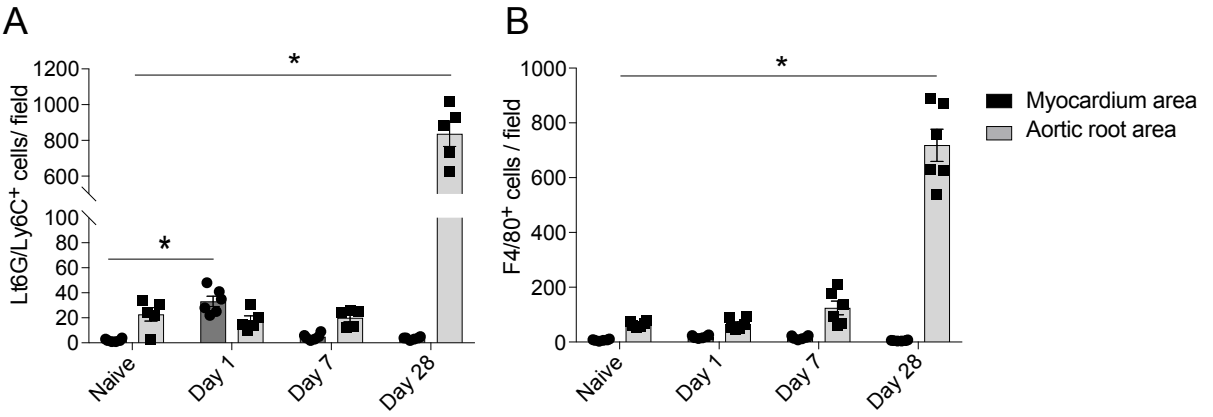
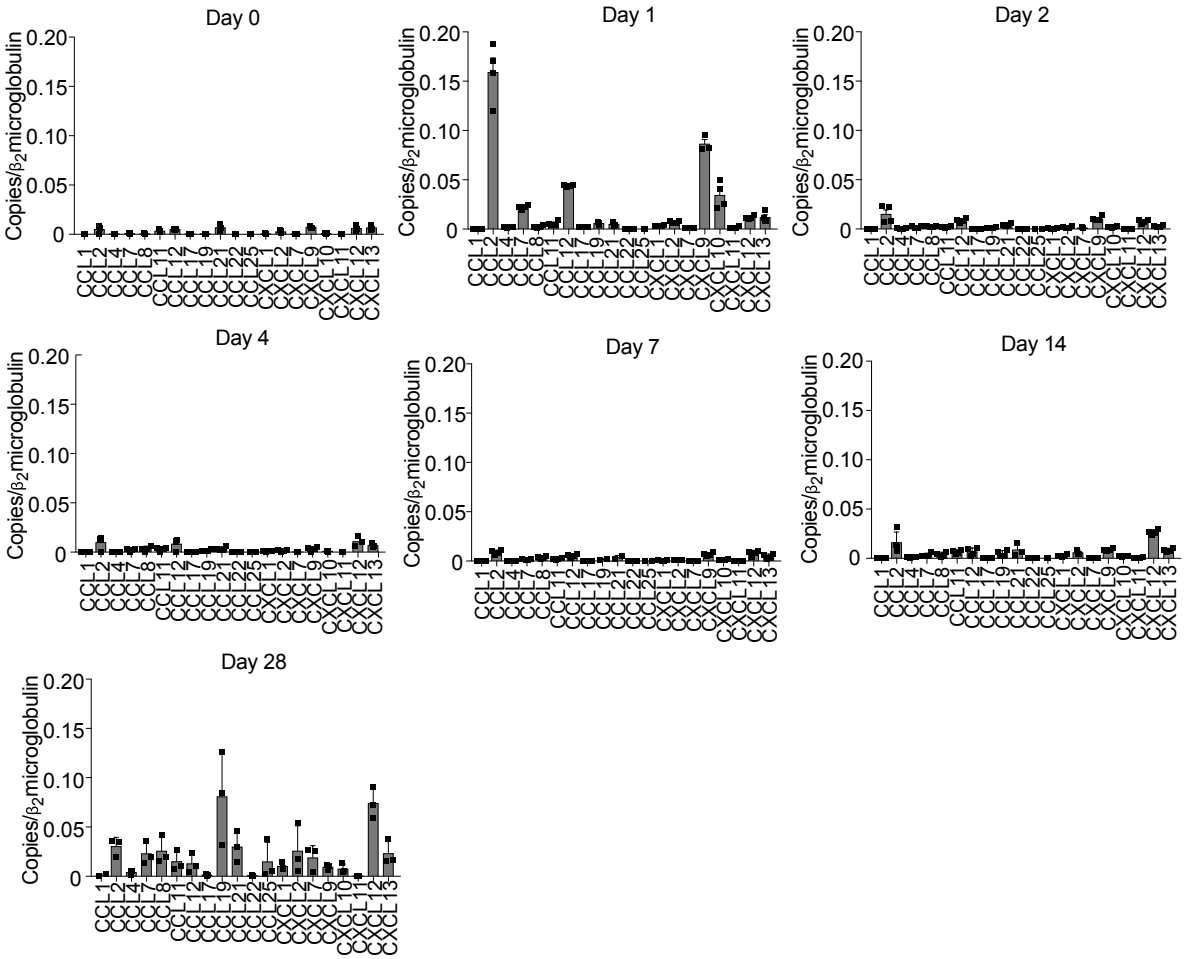
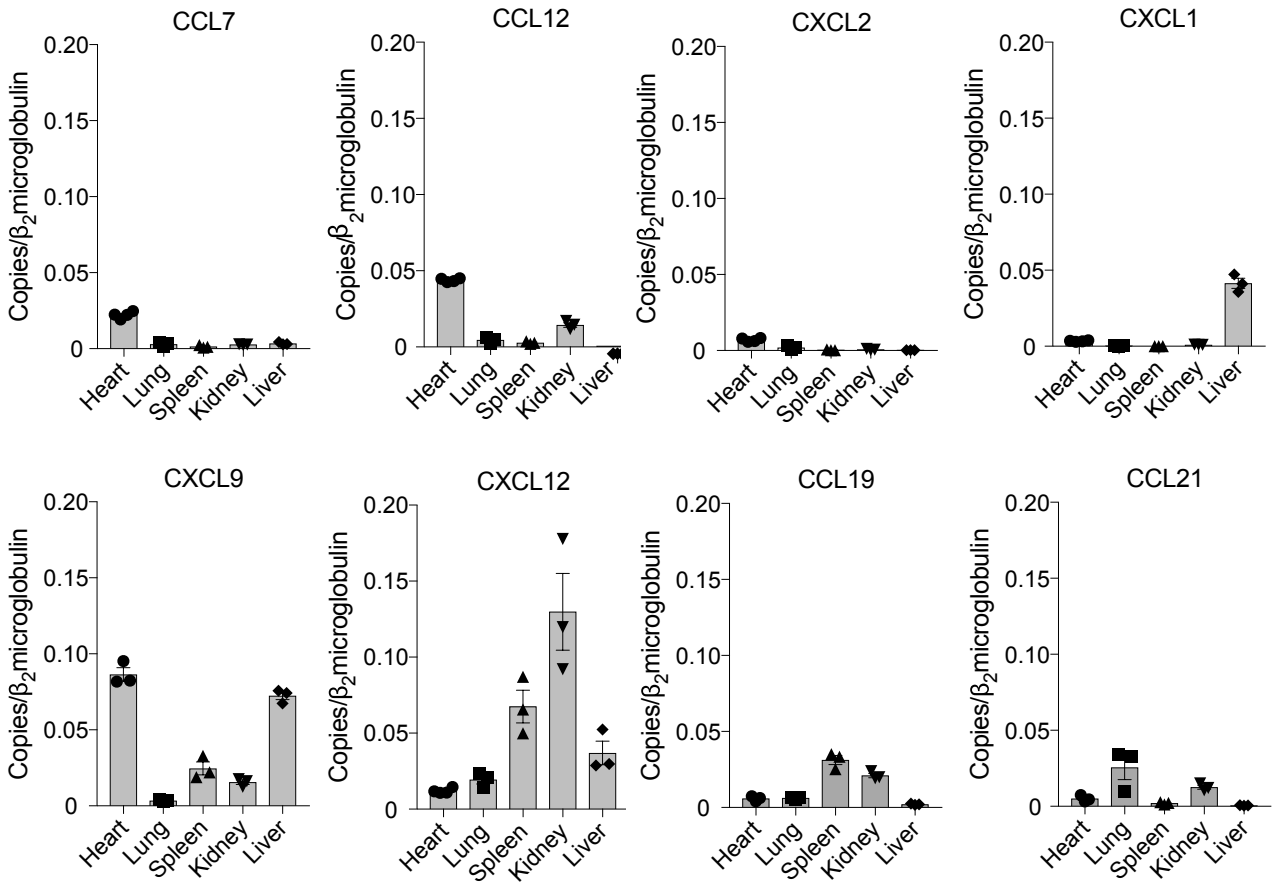


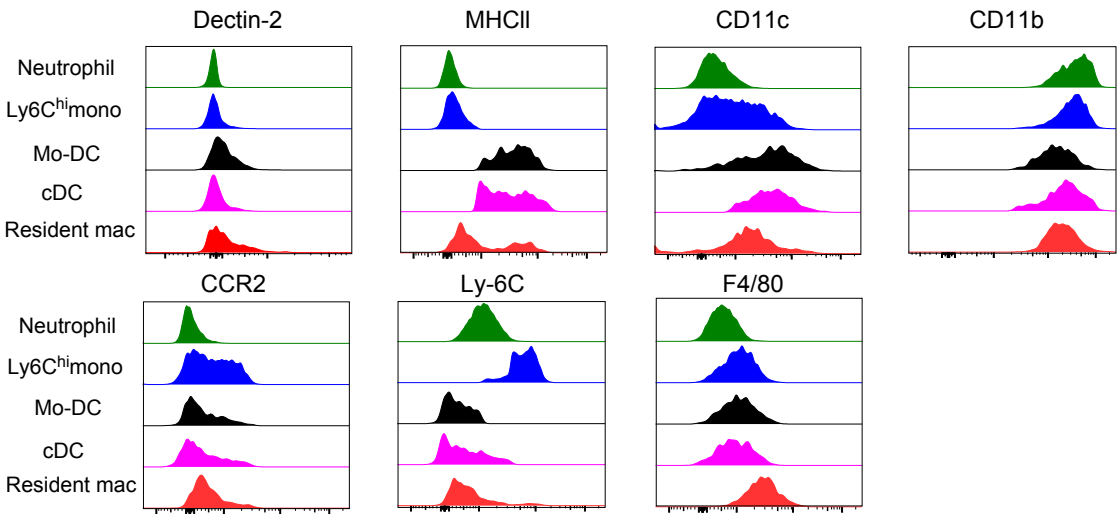
Supplemental Figure 1. Temporal and spacial distribution of inflammatory cells in the heart. Hearts were isolated from naive or CAWS-injected WT mice (on day 1, 7 or 28) and stained with anti-Ly6G/Ly6C or F4/80 for IHC. The number of Ly6G/Ly6C-positive cells **(A)** or F4/80-positive cells **(B)** was counted in high-power fields (600 um x 600 um) in myocardium area or aortic root area (mean ± SEM, n= 3 mice per group, cell number of 2 fields are counted in each area of the mice, *, $p< 0.001$ versus naive in each area). Scale bars in the low-power field, 1 mm; Scale bars in the high-power field, 100 um. All p values were calculated using unpaired two-tailed Student's t test.



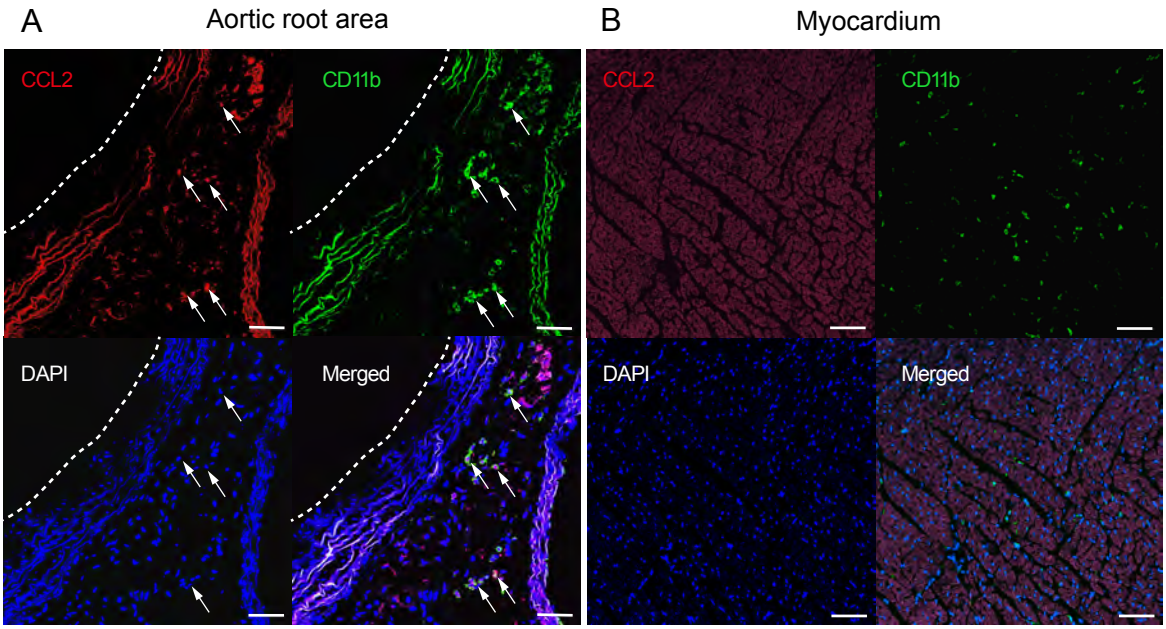
Supplemental Figure 2. Chemokines levels in the heart over the course of CAWS-induced vasculitis. Real-time qPCR analysis for chemokine levels on RNA isolated from heart tissue on day 1, 2, 4, 7, 14, 21 and 28 after CAWS injection (mean ± SEM, n = 3-4 per group).



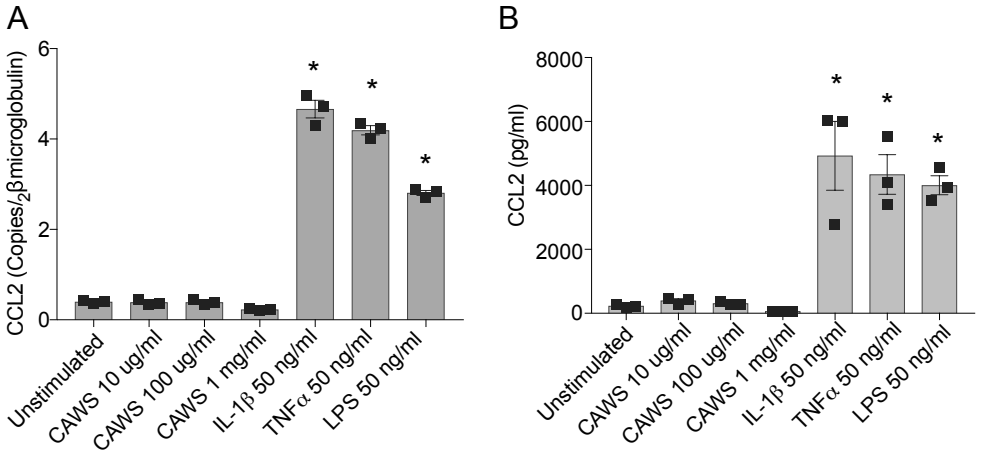
Supplemental Figure 3. Chemokine levels in various organs day 1 after CAWS injection. Wild type mice were injected with CAWS and 1 day later, heart, lung, spleen, kidney and liver were harvested and assessed for chemokine RNA levles by qPCR (mean ± SEM, n = 3-4).



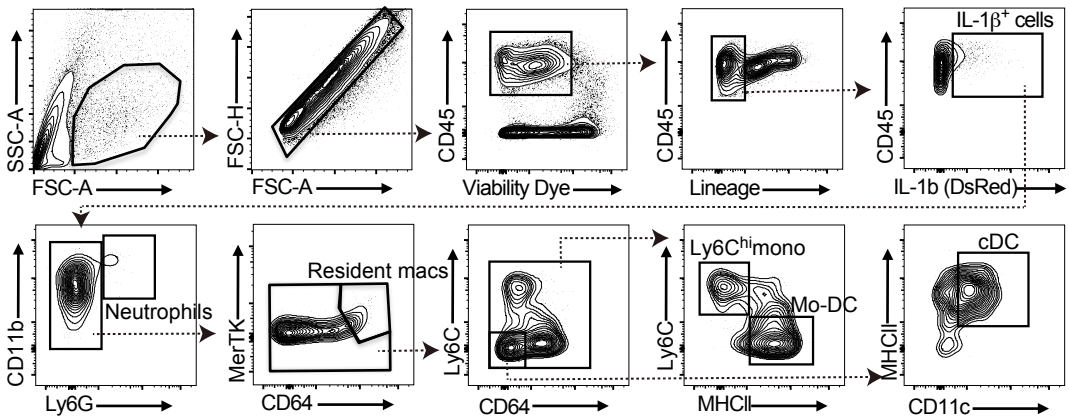
Supplemental Figure 4. Phenotype of myeloid subsets recovered from WT hearts day 1 after CAWS injection. Representative histograms of cardiac cell population labeled with antibodies to Dectin-2, MHC-II, CD11c, CD11b, CCR2, Ly6C and F4/80. The data is one representative of 3 independent experiments.



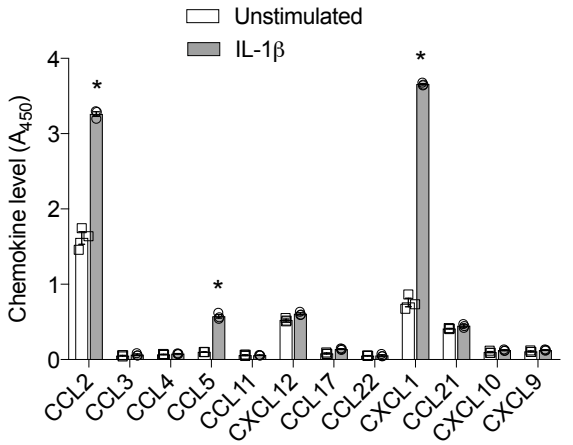
Supplemental Figure 5. CCL2 is preferentially produced by CD11b+ cells in the aortic root compared to the myocardium following i.p. CAWS injection. **(A)** Aortic root area or **(B)** myocardium isolated from *Ccl2-RFP*$^{fl/fl}$ reporter mice on day 1 after CAWS injection was stained for CD11b (green) and analyzed by confocal microscopy. Arrows indicate co-localization (yellow) of CD11b (green) with CCL2 (red). Scale bars= 50 um.



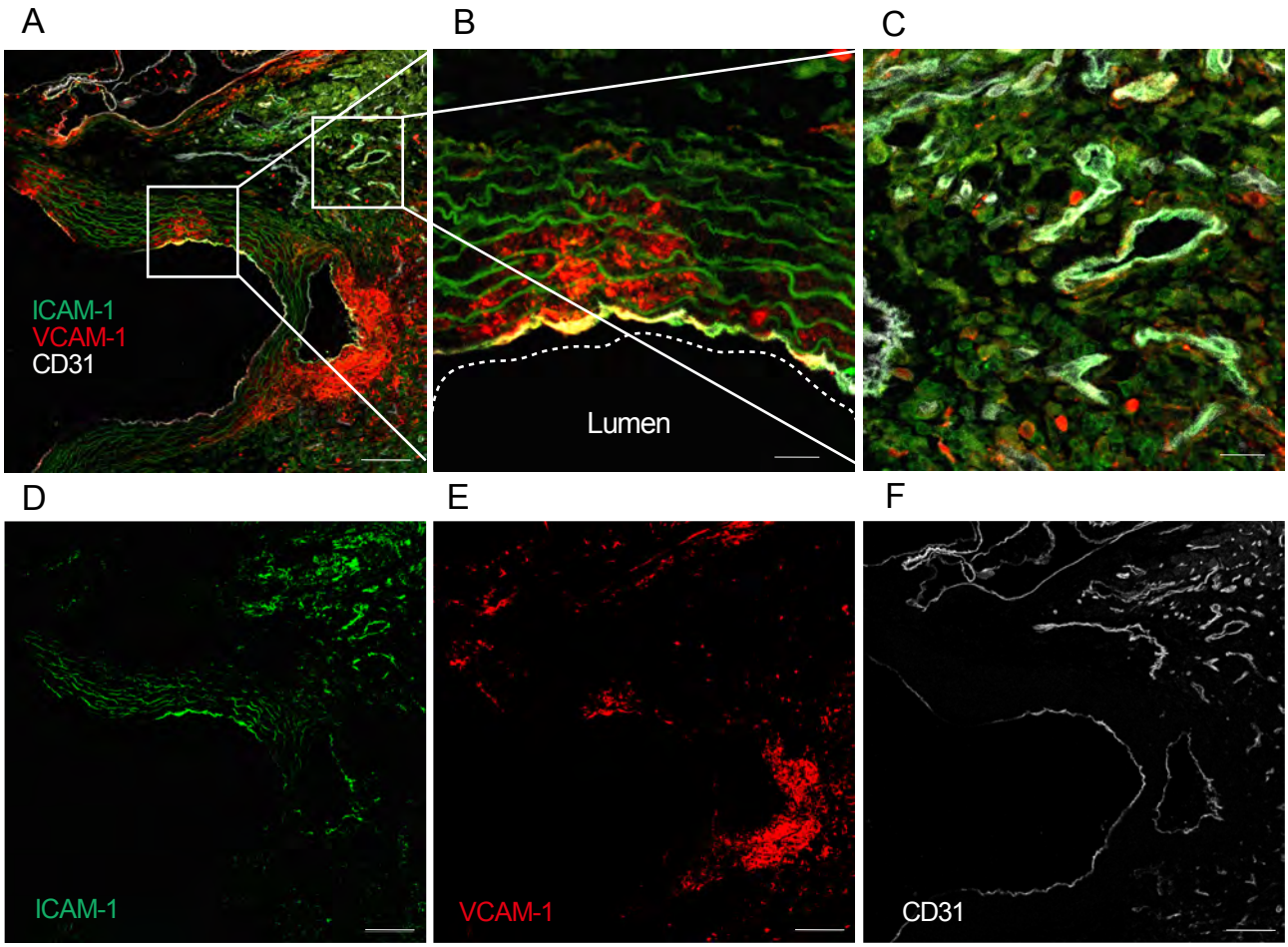
Supplemental Figure 6. Cardiac fibroblasts did not produce CCL2 in response to CAWS stimulation. Primary mouse cardiac fibroblasts were stimulated with IL-1β, TNFα, LPS, or CAWS for 18 hours. (**A**) CCL2 RNA levels were assessed by qPCR and (**B**) protein release by ELISA **(**mean ± SEM, n=3, *, p< 0.0001 versus Unstimulated). All p values were calculated using unpaired two-tailed Student's t test.



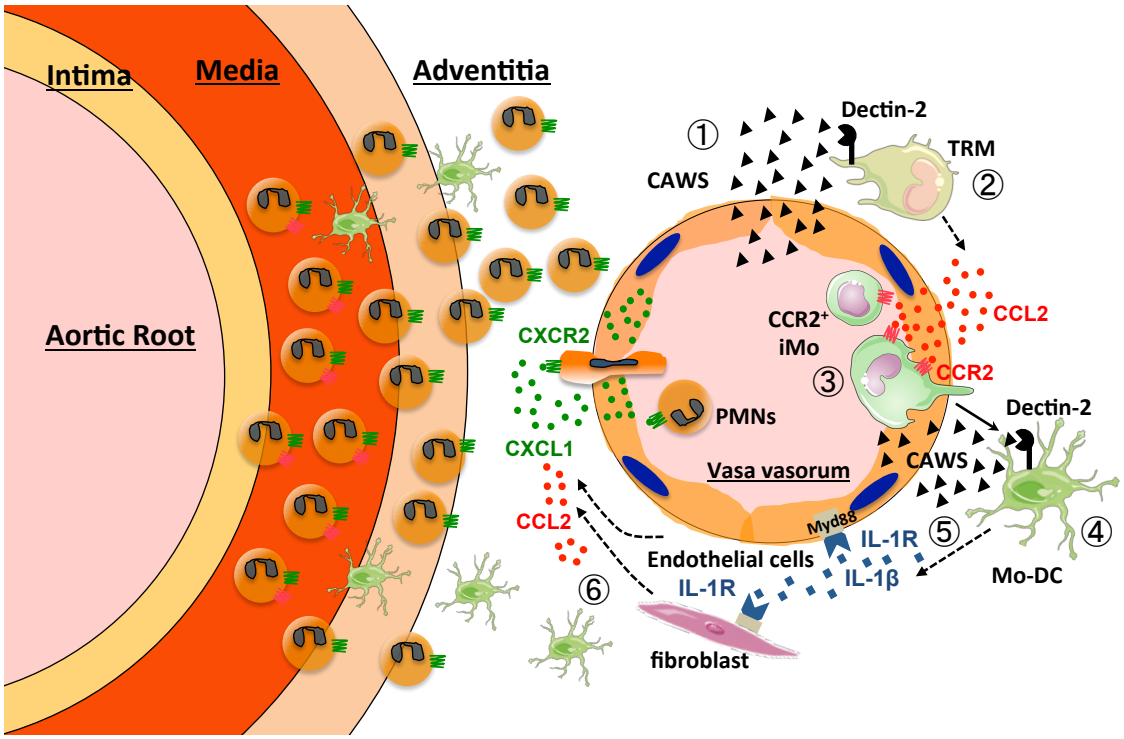
Supplemental Figure 7. Flow cytometric gating strategy for single cell suspensions isolated from the hearts of *pIL1-DsRed* transgenic mice. Representative contour plots of DsRed^{+} IL-1β-expressing cells derived from WT or *pIL1-DsRed* transgenic hearts 7 days after CAWS injection. One representative of 3 independent experiments.



Supplemental Figure 8. Cardiac fibroblasts secrete chemokine proteins following stimulation with IL-1b. Mouse cardiac fibroblasts were stimulated with IL-1b (20 ng/ml) for 18 hours and chemokine protein levels in the culture supernatant were measured by ELISA (mean± SEM, n = 3, *, p< 0.0001 versus Unstimulated). All p values were calculated using unpaired two-tailed Student's t test.



Supplemental Figure 9. ICAM-1 and VCAM-1 expression in the aortic root area of the heart on day 28 after CAWS injection. (A-F) Sections of heart tissue were stained with ICAM-1, VCAM-1 and CD31. **A**, ICAM-1; **B**, VCAM-1; **C**, CD31; **D**, Merged image of A-C; **E**, luminal endothelium; **F**, adventitical area. Green autofluorescent elastic fibers in the medial wall. Scale bars= 100 um.



Supplemental Figure 10. CAWS induces Dectin-2-dependent CCL2 production in tissue resident macrophages in the aortic root and coronary arteries initiating arteritis. ① Deposition of CAWS in the adventitia of the aortic root on day 1; ② CAWS activates Dectin-2 on tissue resident macrophages (TRM) to release CCL2; ③ CCL2 induces the recruitment of $CCR2^{+}$ inflammatory monocytes (iMo) into the adventitia; ④ iMo differentiate into monocyte derived-dendritic cells (Mo-DC) in the adventitia; ⑤ CAWS activates Dectin-2 on Mo-DC to release IL-1ß; ⑥ IL-1ß activates endothelial cells and fibroblasts in the adventitia to release CXCL1 and CCL2, which recruit neutrophils (PMN) and iMo, respectively, into the adventitia driving and amplifying vascular inflammation.

Supplemental Table 1.

ANTIBODIES	SOURCE	Clone
CD11b-BV510	BioLegend	M1/70
CD11c-BV605	BioLegend	N418
CD31-Pacific Blue	BioLegend	390
CD45-FITC	BioLegend	30-F11
CD45-BV711	BioLegend	30-F11
CD45.1-FITC	BioLegend	A20
CD45.2-APC	BioLegend	104
I-A/I-E-PerCP/Cy5.5	BioLegend	M5/114.15.2
CD62P-PE	BioLegend	RMP-1
CD64-PE/Cy7	BioLegend	X54-5/7.1
CD90.2-APC	BioLegend	Thy1.2
CD106-PE	BioLegend	429
CD106-AF488	BioLegend	429
CD172a-APC	BioLegend	P84
F4/80-BV650	BioLegend	BM8
Ly6C-BV421	BioLegend	HK1.4
Ly6G-BV786	BioLegend	1A8
XCR1-BV421	BioLegend	ZET
MERTK-FITC	BioLegend	2B10C42
CD11b-Biotin	BioLegend	M1/70
CD11c-Biotin	BioLegend	N418
CD19-BUV395	BD Biosciences	1D3
Thy1.1-BUV395	BD Biosciences	53-2.1
NK1.1-BUV395	BD Biosciences	PK136
CD54-PE	BD Biosciences	3E2
CD62E-PE	BD Biosciences	10E9.6
Ly6G-PE	BD Biosciences	1A8
Streptavidin-FITC	BD Biosciences	N/A
CCR2-AF700	R&D Systems	475301
CCR2-PE	R&D Systems	475301
MERTK-APC	R&D Systems	108928
Dectin-2-APC	R&D Systems	N/A
polyclonal Goat IgG	R&D Systems	N/A
CD24-PE	eBioscience	30-F1
gp38-PE/Cy7	eBioscience	8.1.1
Purified F4/80	Cell Signaling Technology	N/A
Purified Ly-6G/Ly-6C	Novus Biologicals	RB6-8C5
Purified Dectin-2	Bio-Rad	D2.11E4
Anti-rat IgG-AF488	Invitrogen	N/A

Supplemental Table 2.

Probe	Forward	Reverse
Ccl1	AAG ATG GGC TCC TCC TGT CC	TTG AGG CGC AGC TTT CTC TAC
Ccl2	TTA AAA ACC TGG ATC GGA ACC AA	GCA TTA GCT TCA GAT TTA CGG G
Ccl4	TCT TGC TCG TGG CTG CCT	GGG AGG GTC AGA GCC CA
Ccl7	GCT GCT TTC AGC ATC CAA GTG	CCA GGG ACA CCG ACT ACTG
Ccl8	CGC AGT GCT TCT TTG CCT G	TCT GGC CCA GTC AGC TTC TC
Ccl11	TCC ACA GCG CTT CTA TTC CTG	GGA GCC TGG GTG AGC CA
Ccl12	GCT GGA CCA GAT GCG GTG	CCG GAC GTG AAT CTT CTG CT
Ccl17	CAG GGA TGC CAT CGT GTT TC	CAC CAA TCT GAT GGC CTT CTT
Ccl19	ATG CGG AAG ACT GCT GCC	CGG AAG GCT TTC ACG ATG TT
Ccl21	TCC CGG CAA TCC TGT TCT T	CCT TCC TCA GGG TTT GCA CA
Ccl22	TAC ATC CGT CAC CCT CTG CC	CGG TTA TCA AAA CAA CGC CAG
Ccl25	GCC TGG TTG CCT GTT TTG TT	CAG CAG TCT TCA AAG GCA CCT
Cxcl1	CTG GGA TTC ACC TCA AGA ACA TC	CAG GGT CAA GGC AAG CCT C
Cxcl2	CCA ACC ACC AGG CTA CAG G	GCG TCA CAC TCA AGC TCT G
Cxcl5	TGC GTT GTG TTT GCT TAA CCG	AGC TAT GAC TTC CAC CGT AGG
Cxcl7	CTC AGA CCT ACA TCG TCC TGC	GTG GCT ATC ACT TCC ACA TCA G
Cxcl9	AAT GCA CGA TGC TCC TGC A	AGG TCT TTG AGG GAT TTG TAG TGG
Cxcl10	GCC GTC ATT TTC TGC CTC A	CGT CCT TGC GAG AGG GAT C
Cxcl11	AAT TTA CCC GAG TAA CGG CTG	ATT ATG AGG CGA GCT TGC TTG
Cxcl12	AAA CCA GTC AGC CTG AGC TAC C	GGC TCT GGC GAT GTG GC
Cxcl13	CTC TCC AGG CCA CGG TAT TCT	CCG ACA ACA GTT GAA ATC ACT CC
Ccr1	ACC TTC GGC AGC TGT TTC A	TCC ACA GAG AGG AAG GGC AG
Ccr2	TTA AAA ACC TGG ATC GGA ACC AA	GCA TTA GCT TCA GAT TTA CGG G
Cxcr2	ATG CCC TCT ATT CTG CCA GAT	GTG CTC CGG TTG TAT AAG ATG AC
Il1b	ACC TGT CCT GTG TAA TGA AAG ACG	TGG GTA TTG CTT GGG ATC CA