

Figure S1. Identification of M1-like and M2-like macrophages in the rat femurs. **(A-D)** Immunolabeling with anti-Iba1 and CD206 antibodies of the operated femurs. **(B,C,D)** Expanded view: high magnification image of the area within the red rectangle in image A. Anti-Iba1 (Alexa488, turquoise fluorescence), labeling the M1 and M2 macrophages. Anti-CD206 (Alexa568, red fluorescence) labeling the M2 macrophages and satellite cells. Nuclear staining with DAPI (blue fluorescence). Thin arrow: M1-like macrophages; thick arrow: M2-like macrophages.

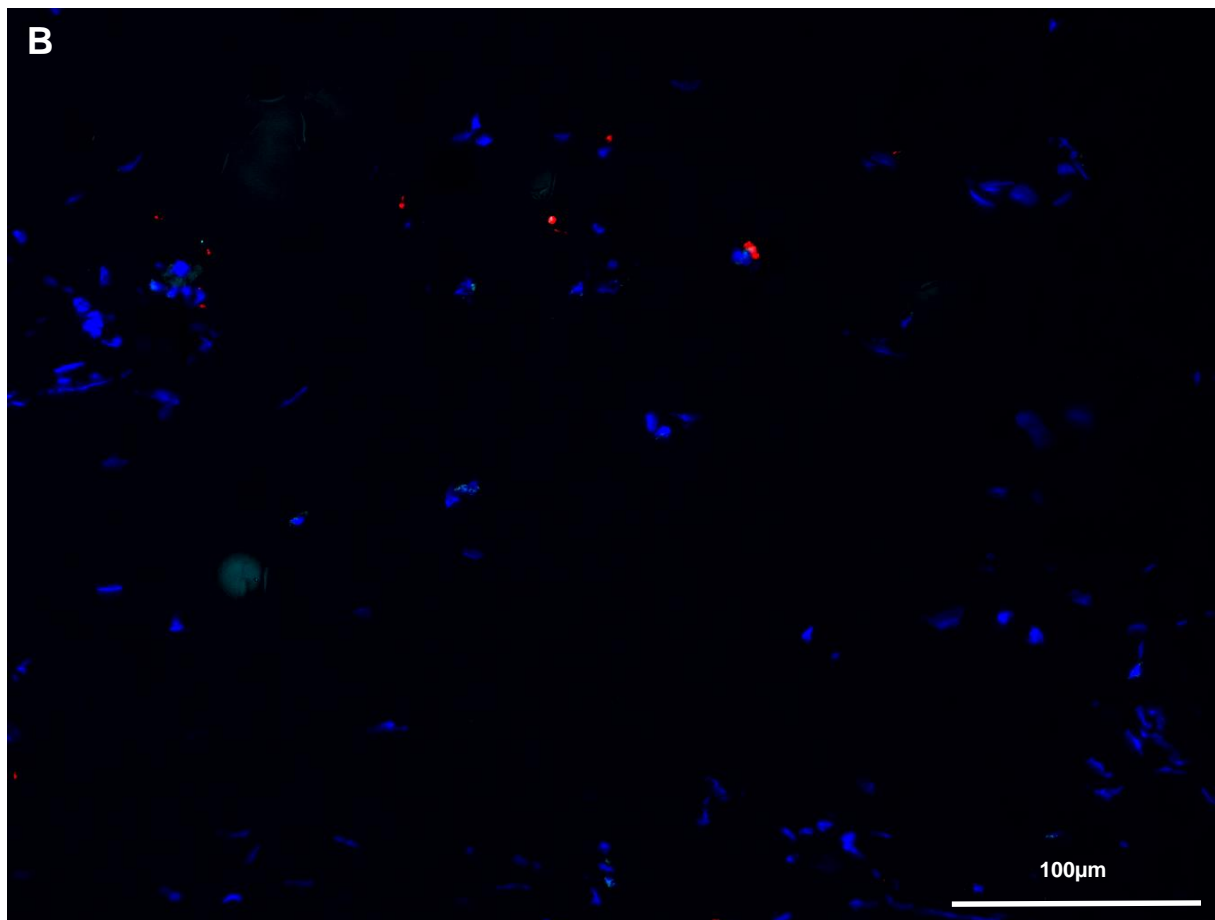
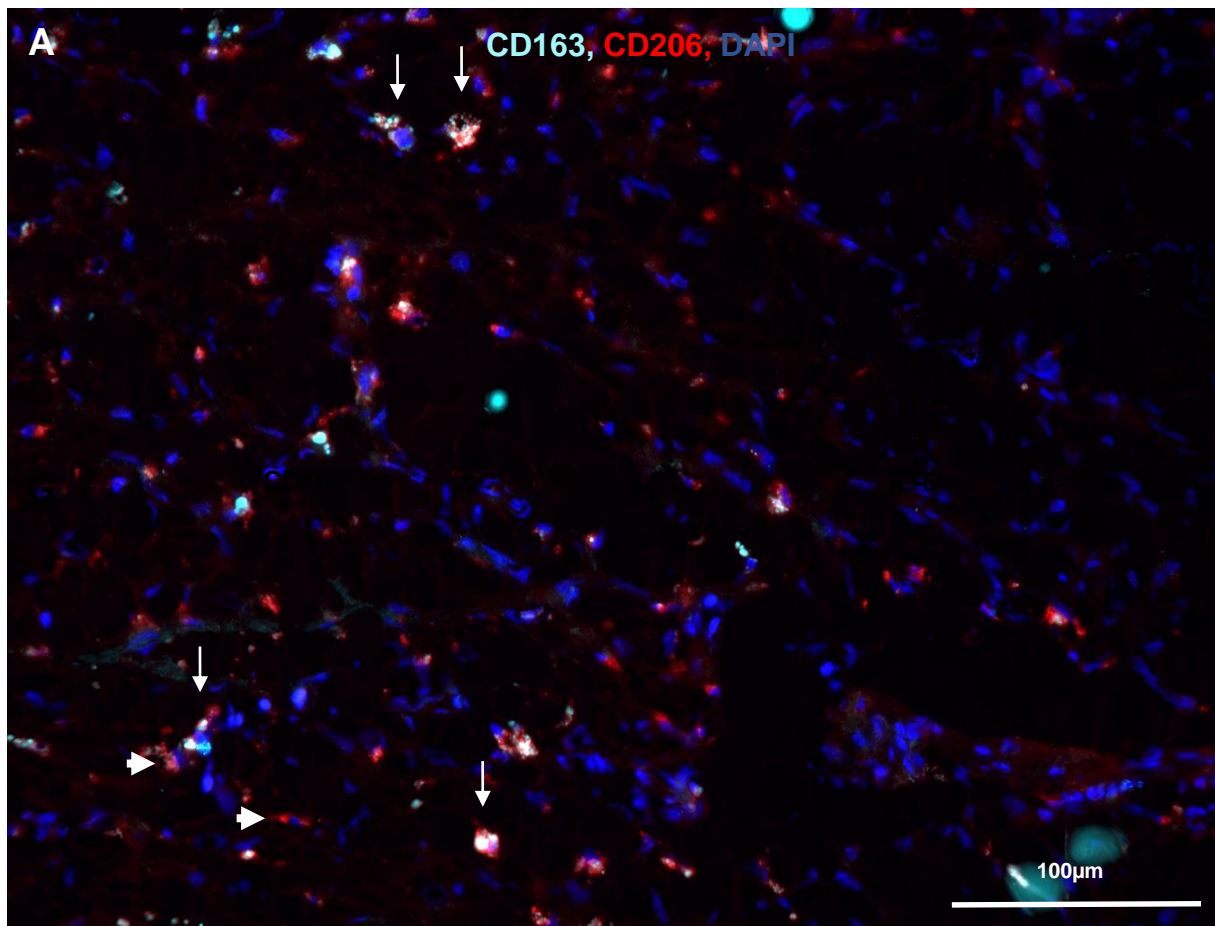


Figure S2. Identification of M2-like macrophages and satellite cells in the rat femurs. **(A)** Immunolabeling with anti-CD163 and CD206 antibodies of the operated femurs. **(B)** Negative control. Anti-CD163 (Alexa488, turquoise fluorescence), labeling the M2-like macrophages. Anti-CD206 (Alexa568, red fluorescence) labeling the M2-like macrophages and satellite cells. Nuclear staining with DAPI (blue fluorescence). Thin arrow: M2-like macrophages; thick arrow: satellite cells.

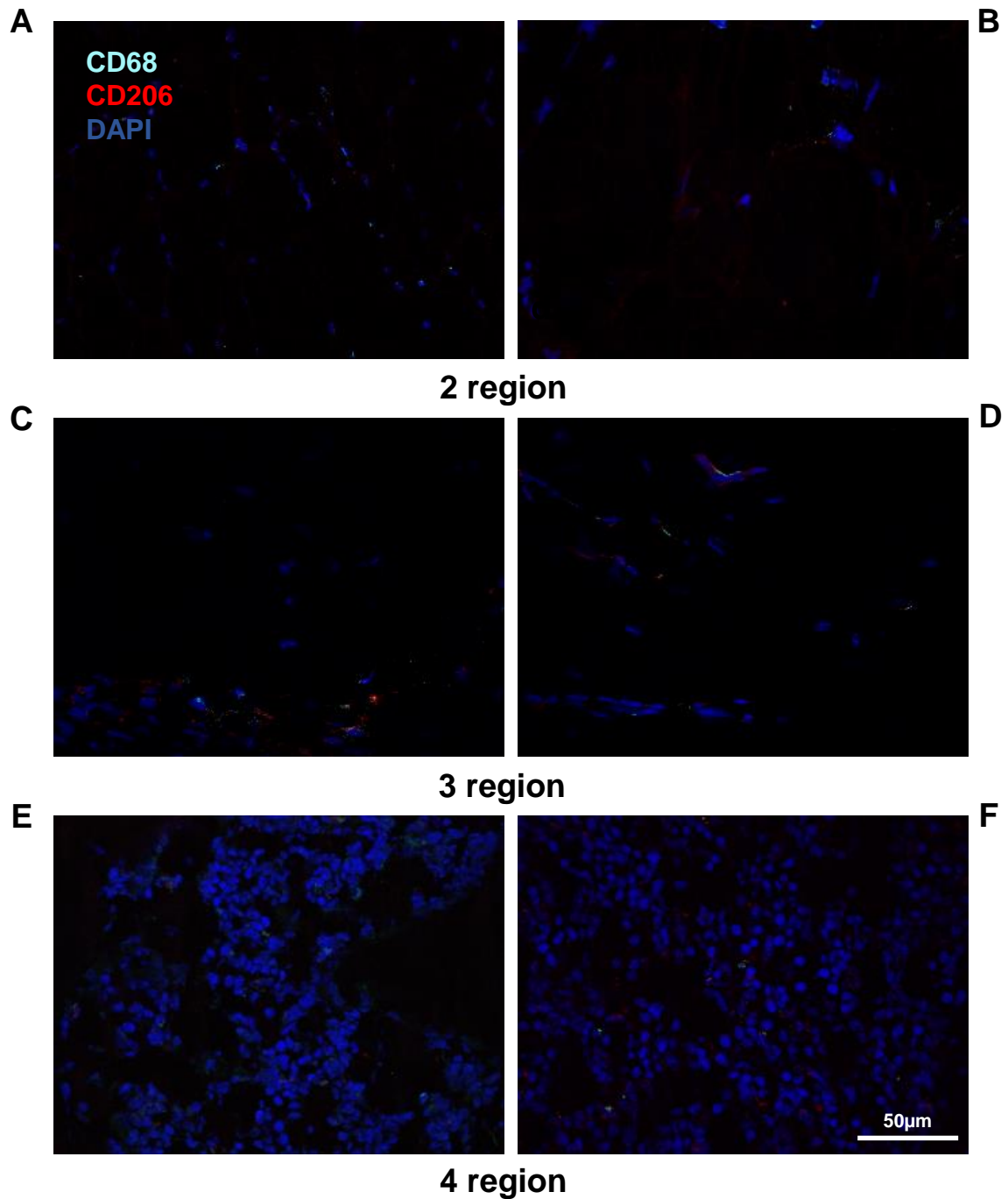


Figure S3. Identification of macrophages M1-like and M2-like in the femurs of the rat. (A) Negative control of Figure 4B; (B) Negative control of Figure 4C; (C) Negative control of Figure 4D; (D) Negative control of Figure 4E; (E) Negative control of Figure 4F; (F) Negative control of Figure 4G. Anti-CD68 (Alexa488, turquoise fluorescence) labeling the M1-like and M2-like macrophages. Anti-CD206 (Alexa568, red fluorescence) labeling the M2-like macrophages and satellite cells. Nuclear staining with DAPI (blue fluorescence).

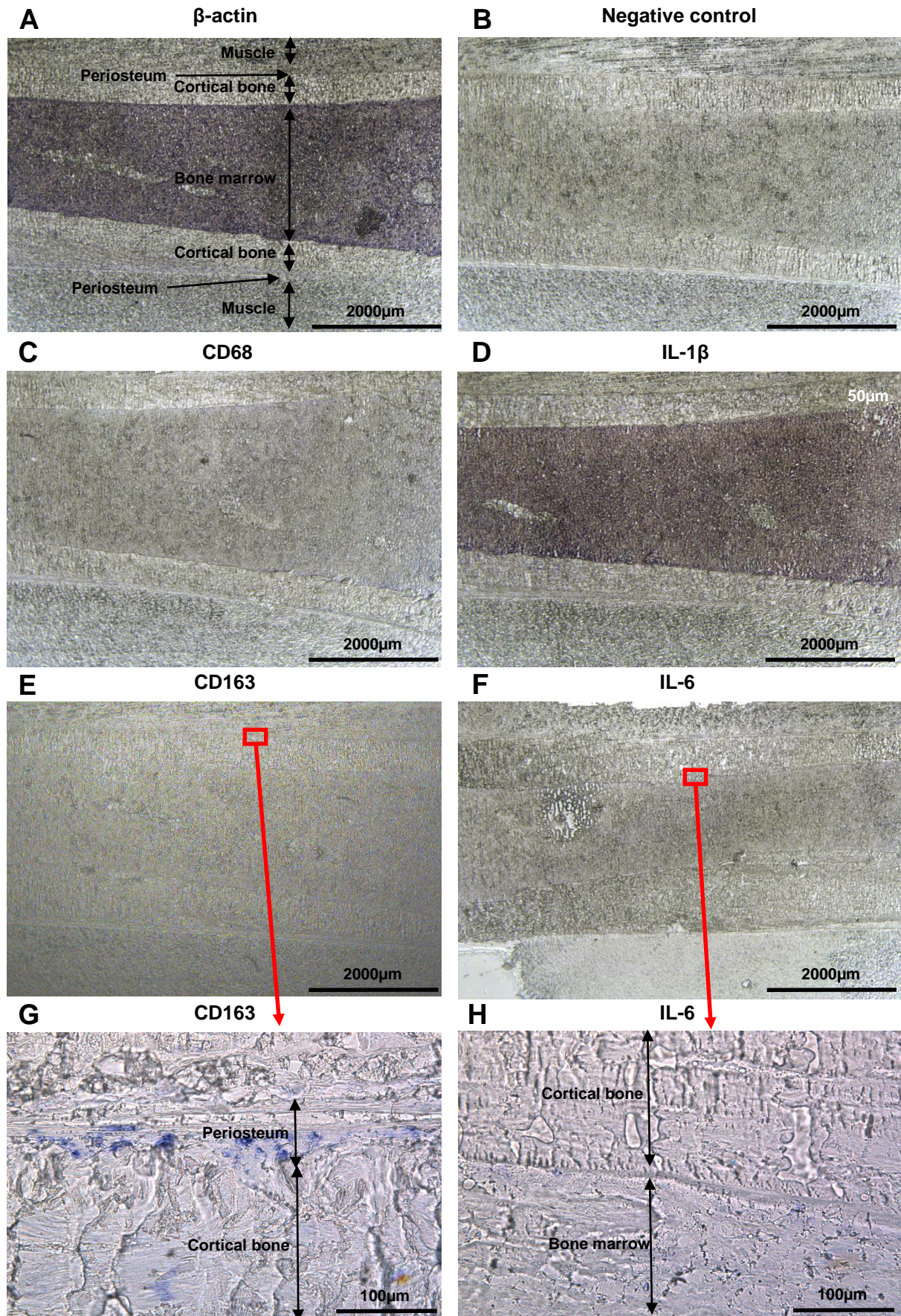


Figure S4. *In situ* hybridization in the non-operated femur of the rat. (A) Expression of β -actin mRNA (positive control); (B) negative control; (C) CD68 mRNA; (D) IL-1 β mRNA; (E) CD163 mRNA; (F) IL-6 mRNA. (G) Expanded view: high magnification image of the area within the red rectangle in image E. (H) Expanded view: high magnification image of the area within the red rectangle in image F.

Oligo name	Gene accession number	Oligo sequence
RT_Rat_CD68_FW	XM_213372.3	CAATTCACCTGGACCTGCTCTC
RT_Rat_CD68_RV	XM_213372.3	AAGAGAAGCATGGCCCGAAG
RT_Rat_CD163_FW	XM_006237352.2	CCTTCTCATTGCCTTCCTCTTGTTG
RT_Rat_CD163_RV	XM_006237352.2	TTCCGAGGATTCAGCAAGTC
RT_Rat_CD206_FW	NM_001106123	TGGTCATCGTGGTCCTTCTGATTG
RT_Rat_CD206_RV	NM_001106123	GATCTTTCGTGTCACTTGTTCCAG
RT_Rat_actin_FW	NM_031144.3	CCTGGAGAAGAGCTATGAGCTG
RT_Rat_actin_RV	NM_031144.3	CAGGATTCCATACCCAGGAAGG
RT_Rib_prot_FW	FQ_211152.1	CTAAAATCTCCAGAGGTACCATTG
RT_Rib_prot_RV	FQ_211152.1	TCCCACCTTGTCTCCAGTCTTTATC
RT_Rat_IL-1 β _FW	NM_031512.1	TCTTTGAAGAAGAGCCCGTCC
RT_Rat_IL-1 β _RV	NM_031512.1	AGCTCATATGGGTCAGACAG
RT_Rat_IL-6_FW	NM_012589.1	GAGGATACCAACCAACAGACC
RT_Rat_IL-6_RV	NM_012589.1	AGTGCATCATCGCTGTTTCATACAA
RT_Rat_TNF_FW	NM_012675.3	CATCTTCTCAAAACTCGAGTGACAA
RT_Rat_TNF_RV	NM_012675.3	TGGGAGTAGATAAGGTACAGCCC
RT_Rat_IL-RA_FW	XM_006233636.3	TCGGAATGTGTTCTTGGGCATC
RT_Rat_IL-RA_RV	XM_006233636.3	TCGGAGCGGATGAAGGTAAAG
RT_Rat_IL-4_FW	NM_201270.1	CTTACGGCAACAAGGAACACC
RT_Rat_IL-4_RV	NM_201270.1	TGAGTTCAGACCGCTGACAC
RT_Rat_IL-10_FW	NM_012854.2	GCAGTGGAGCAGGTGAAGAATG
RT_Rat_IL-10_RV	NM_012854.2	TGAGTGTACGTAGGCTTCTATGC
RT_Rat_TGF- β 1_FW	NM_021578.2	CCGCAACAACGCAATCTATGAC
RT_Rat_TGF- β 1_RV	NM_021578.2	CGTGTGCTCCACAGTTGACTTG
RT_Rat_TGF- β 2_FW	XM_006250448.3	GGCTTCACCACAAAGACAGGAAC
RT_Rat_TGF- β 2_RV	XM_006250448.3	CCTCCAGCTCTTGGCTCTTATTTG
RT_Rat_TGF- β 3_FW	NM_013174.2	AGGAGTGGACAACGAAGATGAC
RT_Rat_TGF- β 3_RV	NM_013174.2	CAGTCGGTGTGGAGGAATCATC

Table S1. Oligos used for RT-qPCR. FW (forward primer), RV (reverse primer).

Oligo name	Gene accession number	Oligo sequence
T3_promoter_primer		GCTACTTGCTGAATTAACCCTCACTAAAGGGA
T7_promoter_primer		AGTCGAATGTAATACGACTCACTATAGGGC
DIG_Rat_actin_FW_T3	NM_031144.3	TGAATTAACCCTCACTAAAGGGACCATTGAACACGGCA TTGTC
DIG_Rat_actin_RV_T7	NM_031144.3	TGTAATACGACTCACTATAGGGCAAACGCAGCTCAGTA ACAGTCC
DIG_Rat_CD68_FW_T3	XM_213372.3	TGAATTAACCCTCACTAAAGGGATGACCTTGCTGGTACT GCTTGTAG
DIG_Rat_CD68_RV_T7	XM_213372.3	TGTAATACGACTCACTATAGGGCTACAGAGTGGACTGG AGCAAATG
DIG_Rat_CD163_FW_T3	XM_006237352.2	TGAATTAACCCTCACTAAAGGGATCTCTGAGGCTGACC AATGAAG
DIG_Rat_CD163_RV_T7	XM_006237352.2	TGTAATACGACTCACTATAGGGCAGATGTAGCTGTGGTC ATCC
DIG_Rat_IL-1 β _FW_T3	NM_031512.1	TGAATTAACCCTCACTAAAGGGAATGACCTGTTCTTTGA GGCTGAC
DIG_Rat_IL-1 β _RV_T7	NM_031512.1	TGTAATACGACTCACTATAGGGCTCAATTCATCCCATAC ACACGGAC
DIG_Rat_IL-6_FW_T3	NM_012589.1	TGAATTAACCCTCACTAAAGGGACACCAGGAACGAAAG TCAACTC
DIG_Rat_IL-6_RV_T7	NM_012589.1	TGTAATACGACTCACTATAGGGCAGAAACCATCTGGCT AGGTAAGAG
HCR_rat_CD163_revcom_fragment1	XM_006237352.2	GAGGAGGGCAGCAAACGGGAAGAGTCTTCCTTTACGAT ATTGCGCAGCGACCACCTCCACCTACCAAGCGGAGTTG ACCACTTGCTATGCAATATAGCATTCTTTCTTGAGGAGG GCAGCAAACGGGAAGAG
HCR_rat_CD163_revcom_fragment2	XM_006237352.2	GAGGAGGGCAGCAAACGGGAAGAGTCTTCCTTTACGAT ATTGTCAGCCTCAGAGACATGAACTCCGAGCAGACAAC ACCTGCATCTTCCTTATATAGCATTCTTTCTTGAGGAGG GCAGCAAACGGGAAGAG
HCR_rat_CD163_revcom_fragment3	XM_006237352.2	GAGGAGGGCAGCAAACGGGAAGAGTCTTCCTTTACGAT ATTCTGTAGTCTTATTTTGTCTCACAGACAATCCAGGA CTCCTGGGAGGGGCATATAGCATTCTTTCTTGAGGAGGG CAGCAAACGGGAAGAG
HCR_rat_CD163_revcom_fragment4	XM_006237352.2	GAGGAGGGCAGCAAACGGGAAGAGTCTTCCTTTACGAT ATTCAAAACCAGGAGTGCAGTGAGGGTTGAATGACCT GTGCCATGCTGTGATATATAGCATTCTTTCTTGAGGAGG GCAGCAAACGGGAAGAG
HCR_rat_CD163_revcom_fragment5	XM_006237352.2	GAGGAGGGCAGCAAACGGGAAGAGTCTTCCTTTACGAT ATTCATTAATAATCATACGAATCATTGGAATTTCCGAGG ATTTCAAGCAAGTCCATATAGCATTCTTTCTTGAGGAGGG CAGCAAACGGGAAGAG
HCR_rat_IL-1 β _revcom_fragment1	NM_031512.1	CCTCGTAAATCCTCATCAATCATCCAGTAAACCGCCAAA AAACCTCCTCACTGTCGAAAGCTGCTATTTACAGTTGAG TTCAGGGACAGTTGAAAAAAGCTCAGTCCATCCTCGT AAATCCTCATCAATCATC
HCR_rat_IL-1 β _revcom_fragment2	NM_031512.1	CCTCGTAAATCCTCATCAATCATCCAGTAAACCGCCAAA AAATGGATGCTCTCATCTGGACAGCCCAAGTCAAGGGC TTGGAAGCAATCCTTAAAAAAGCTCAGTCCATCCTCGT AAATCCTCATCAATCATC
HCR_rat_IL-1 β _revcom_fragment3	NM_031512.1	CCTCGTAAATCCTCATCAATCATCCAGTAAACCGCCAAA AAAGTCATCATCCCACGAGTCACAGAGGACGGGCTCTT CTTCAAAGATGAAGGAAAAAAGCTCAGTCCATCCTCG TAAATCCTCATCAATCATC
HCR_rat_IL-1 β _revcom_fragment4	NM_031512.1	CCTCGTAAATCCTCATCAATCATCCAGTAAACCGCCAAA AAACCTGTACAAAGCTCATGGAGAATACCACTTGTTGG

		CTTATGTTCTGTCCAAAAAAGCTCAGTCCATCCTCGT AAATCCTCATCAATCATC
HCR_rat_IL- 1β_revcom_fragment5	NM_031512.1	CCTCGTAAATCCTCATCAATCATCCAGTAAACCGCCAAA AAAGTATTGTTTGGGATCCACACTCTCCAGCTGCAGGGT GGGTGTGCCGTCCTTAAAAAAGCTCAGTCCATCCTCGTA AATCCTCATCAATCATC
HCR_rat_IL- 6_revcom_fragment1	NM_012589.1	CTCACTCCCAATCTCTATCTACCCTACAAATCCAATAAA AAAGTCCCAAGAAGGCAACTGGCTGGAAGTCTCTTGCG GAGAGAACTTCATATTTTCACTTCATATCACTCACTCC CAATCTCTATCTACCC
HCR_rat_IL- 6_revcom_fragment2	NM_012589.1	CTCACTCCCAATCTCTATCTACCCTACAAATCCAATAAA AAAATTGCCATTGCACAACCTCTTTTCTCATTTCCAAGAT CTCCCTGAGAACAATTTTCACTTCATATCACTCACTCCC AATCTCTATCTACCC
HCR_rat_IL- 6_revcom_fragment3	NM_012589.1	CTCACTCCCAATCTCTATCTACCCTACAAATCCAATAAA AAGGAACTCCAGAAGACCAGAGCAGATTTTCAATAGGC AAATTTCTGGTTAATTTTCACTTCATATCACTCACTCCC AATCTCTATCTACCC
HCR_rat_IL- 6_revcom_fragment4	NM_012589.1	CTCACTCCCAATCTCTATCTACCCTACAAATCCAATAAA AATGGAAGTTGGGGTAGGAAGGACTATTTTATATGAGT CTTTTATCTCTTGATTTTCACTTCATATCACTCACTCCC AATCTCTATCTACCC
HCR_rat_IL- 6_revcom_fragment5	NM_012589.1	CTCACTCCCAATCTCTATCTACCCTACAAATCCAATAAA AAATGCTTAGGCATAGCACACTAGGTTTGCCGAGTAGA CCTCATAGTGACCTATTTTCACTTCATATCACTCACTCCC AATCTCTATCTACCC

Table S2. Oligos used for *in situ* hybridization experiments. T3 (T3 promoter), T7 (T7 promoter), FW (forward primer), RV (reverse primer).