

**Movie 1. Myeloid cell dynamics in the central cornea stroma of a WT;***c-fms-EGFP* **mouse 1 day after injury.** (Related to Figure 4A.) The central cornea of a WT;c-fms-EGFP mouse with myeloid cells expressing GFP was imaged 1 day after injury with 0.1 N NaOH. Images were obtained using *in vivo*, time-lapse confocal microscopy (Nikon C1si spectral confocal laser-scanning microscope). Individual images were taken every 3.22 seconds for 30 minutes.



**Movie 2.** Myeloid cell dynamics in the central cornea stroma of a *Mmp12<sup>-/-</sup>;c-fms-EGFP* mouse 1 day after injury. (Related to Figure 4A.) The central cornea of a Mmp12<sup>-/-</sup>;c-fms-EGFP mouse with myeloid cells expressing GFP was imaged 1 day after injury with 0.1 N NaOH. Images were obtained using in vivo, time-lapse confocal microscopy (Nikon C1si spectral confocal laser-scanning microscope). Individual images were taken every 3.22 seconds for 30 minutes.

Gene	Forward (5' – 3')	<b>Reverse (5' – 3')</b>
<i>MMP12</i>	TGGGCAACTGGACAACTCAACTCT	ACCGCTTCATCCATCTTGACCTCT
CCL2	TTAAAAACCTGGATCGGAACCAA	GCATTAGCTTCAGATTTACGGGT
CCL7	GCTGCTTTCAGCATCCAAGTG	CCAGGGACACCGACTACTG
CCL8	TCTACGCAGTGCTTCTTTGCC	AAGGGGGGATCTTCAGCTTTAGTA
CCL20	GCCTCTCGTACATACAGACGC	CCAGTTCTGCTTTGGATCAGC
VegfA	CCAGACCTCTCACCGGAAAG	CTGTCAACGGTGACGATGATG
VegfB	GAGATGTCCCTGGAAGAACACA	GAGTGGGATGGGTGATGTCAG
Hprt	GCCTAAGATGAGCGCAAGTTG	TACTAGGCAGATGGCCACAGG
Sma	GCAAACAGGAATACGACGAAGC	GCTTTGGGCAGGAATGATTTG
Coll	TGGATTCCCGTTCGAGTACG	ATTAGGCGCAGGAAGGTCAG
Col3	CTGTAACATGGAAACTGGGGAAA	CCATAGCTGAACTGAAAACCACC
Gapdh	AGGTCGGTGTGAACGGATTTG	TGTAGACCATGTAGTTGAGGTCA

Table S1. Real-time PCR Primer sequences