

SUPPLEMENTARY INFORMATION

Table S1. PCR primer sequences.

Fig. S1. Differential gene expression in out-of-field skin of C57BL/6 mice after broadbeam or MRT.

Relative gene expression levels of *Tgfb1*, *Ccl22*, *Tnf*, and *Ccl2*, *Mdm2* and *Trp53* genes were determined using qRT-PCR of RNA isolated from out-of-field mouse skin 24 h (solid) and 96 h (patterned) after 10 or 40 Gy of broadbeam and MRT with radiation targets of $2 \times 2 \text{ mm}^2$ or $8 \times 8 \text{ mm}^2$ for the genes. Controls were from samples 24 h after sham irradiation (black). qRT-PCR was not performed for $2 \times 2 \text{ mm}^2$ samples 96 h after BB. Asterisks indicate significant differences compared to controls ($*P < 0.05$ and $**P < 0.01$). $n \geq 4$. Error bars represent SEM.

Fig. S2. Differential gene expression in targeted skin of C57BL/6 mice after broadbeam or MRT.

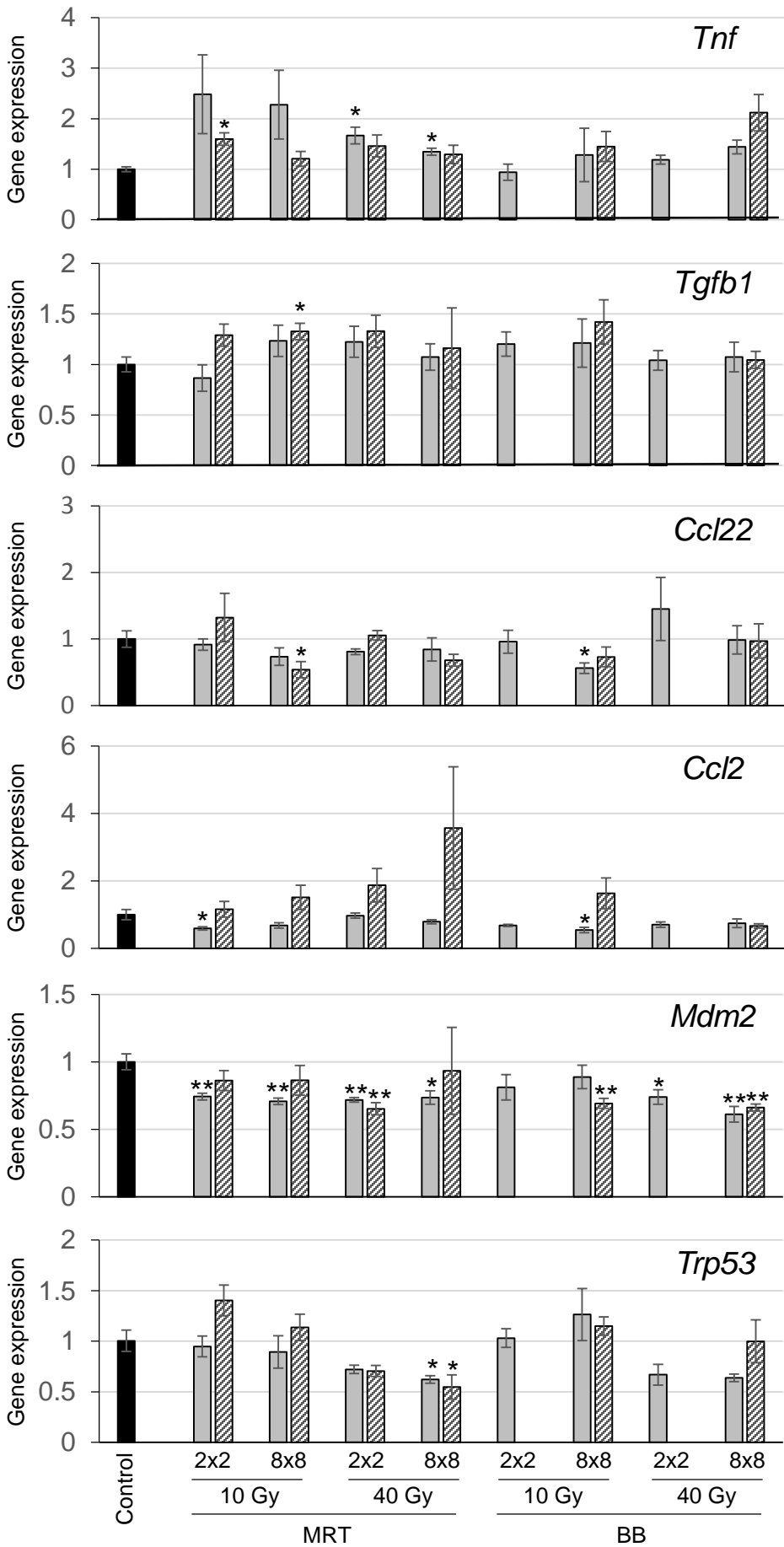
Relative gene expression levels of *Tgfb1*, *Ccl22*, *Tnf*, and *Ccl2*, *Mdm2* and *Trp53* genes were determined using qRT-PCR of RNA isolated from mouse skin at 24 h (solid) and 96 h (patterned) after 10 Gy or 40 Gy of broadbeam and MRT radiation ($8 \times 8 \text{ mm}^2$ targeted area). Controls were from samples 24 h after sham irradiation (black). Note that 10 Gy of broadbeam was not analyzed for *Tnf* expression. Asterisks indicate significant differences compared to sham-irradiated controls ($*P < 0.05$ and $**P < 0.01$). $n \geq 3$. Error bars represent SEM.

Fig. S3. Differential gene expression in targeted skin after 10 Gy MRT in immune-deficient Ccl2 KO and C57BL/6 WT mice.

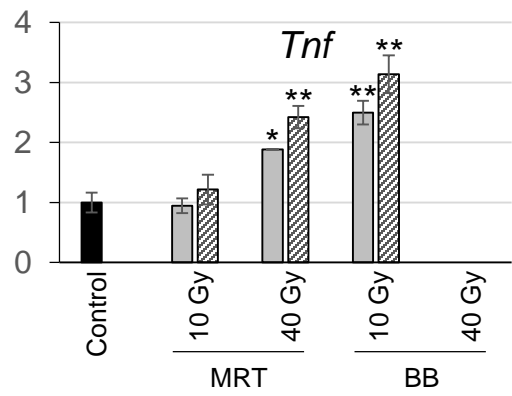
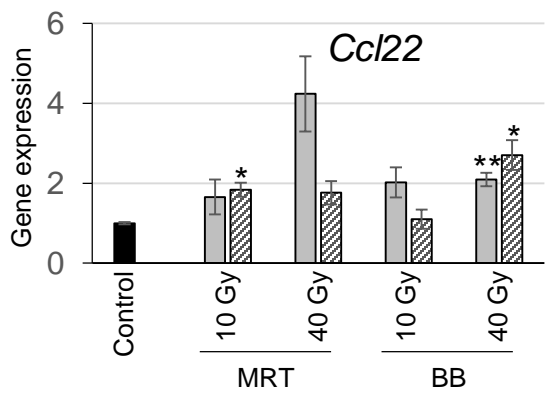
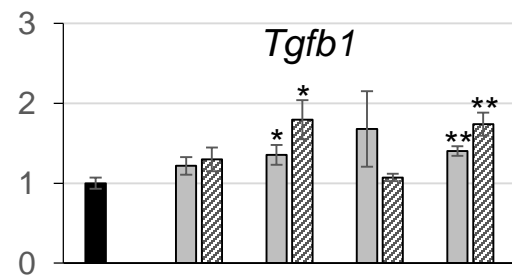
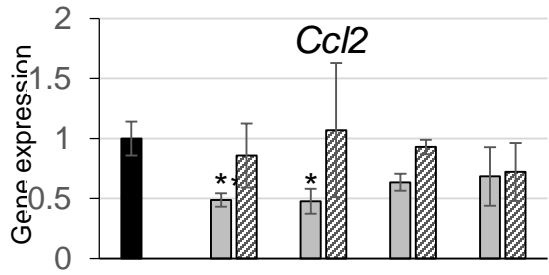
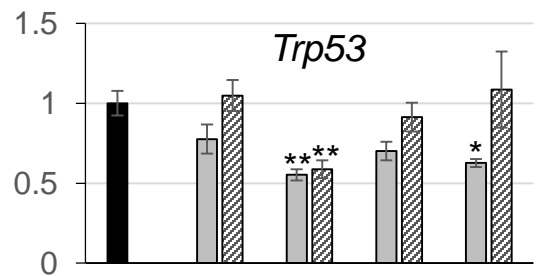
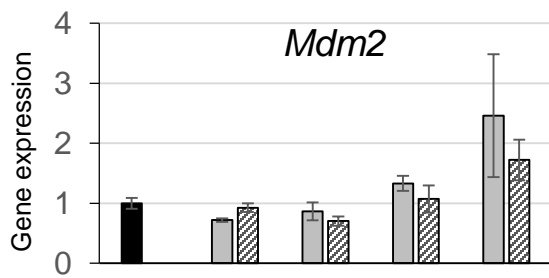
Relative gene expression levels were determined using qRT-PCR of RNA isolated from mouse skin at 24, 72 and 144 h after 10 Gy MRT in C57BL/6 mice (black patterned) or Ccl2 KO mice (gray patterned) compared to relevant sham-irradiated control (solid black for C57BL/6 mice and solid gray for Ccl2 KO mice) for the genes *Tnf*, *Tgfb1*, *Ccl22*, *Ccl2*, *Mdm2* and *Trp53*. Asterisks indicate significant differences compared to the time appropriate sham-irradiated controls (24, 72 and 144 h after sham irradiation) and asterisks above a line indicate significant differences between the C57BL/6 and Ccl2 KO mice ($*P < 0.05$ and $**P < 0.01$). $n \geq 3$. Error bars represent SEM.

Table S1. PCR primer sequences

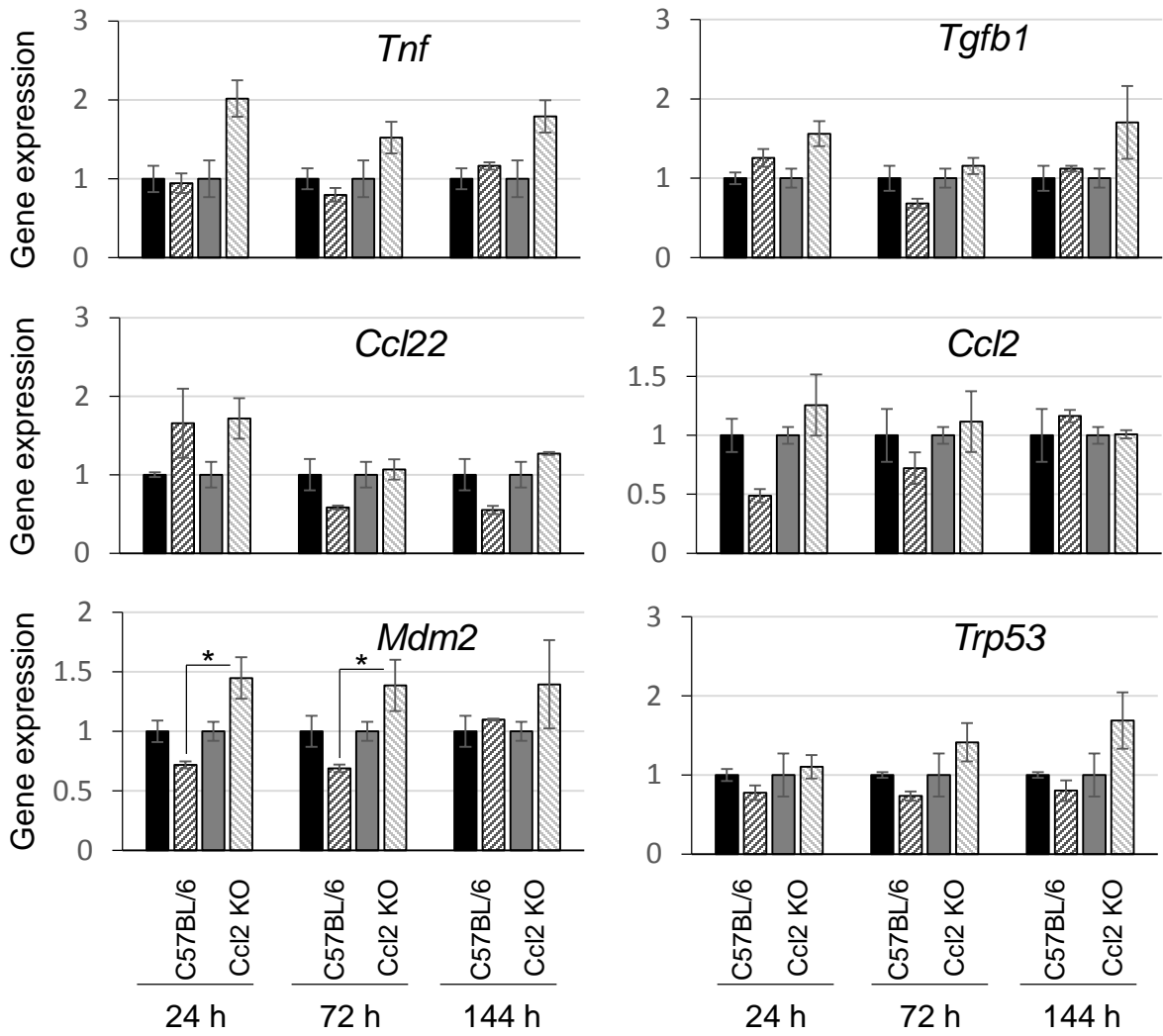
Name	Forward (5'-3')	Reverse (5'-3')
18s	GTAACCCGTTGAACCCCAT	CCATCCAATCGGTAGTAGCG
<i>Ccl2</i>	AGTTAACGCCCACTCACCT	GCTTCTTTGGGACACCTGCTG
<i>Ccl22</i>	CAGGACTACATCCGTCACCC	GGCAGGATTTTGAGGTCCAGA
<i>Mdm2</i>	CTCGAGCTCTGGAGCGACC	CGCATCTCCGACCCTTAC
<i>Tgfb1</i>	ACCAAAGACATCTCACACAGT	TTAATCTCTGCAAGCGCAGC
<i>Tnfa</i>	AGAAGAGGCACTCCCCAAA	GTAGACAGAAGAGCGTGGTGG
<i>Trp53</i>	TTATGAGCCACCCGAGGCCG	GATAGGTCGGCGGTTCATGCC



Sup Fig S1



Sup Fig S2



Sup Fig S3