**Supplementary Materials:**

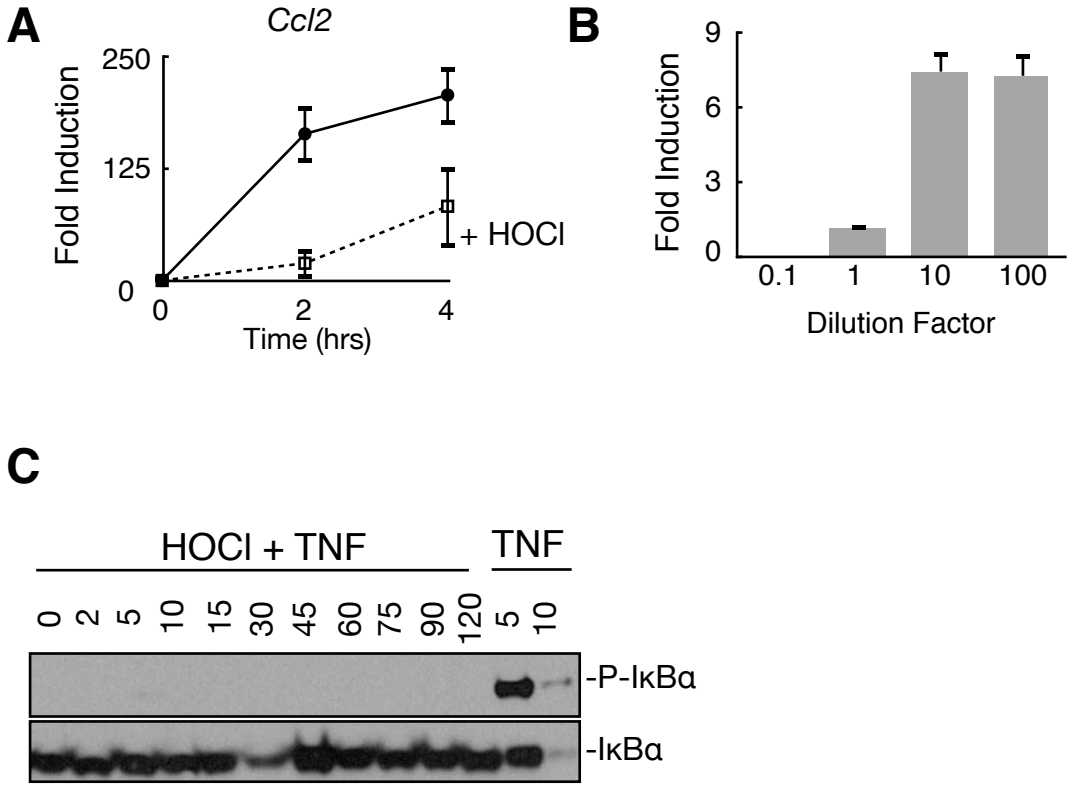


**Figure S1. Hypochlorite inhibits NF-κB signaling in a dose-dependent manner. (A)** Relative mRNA transcript levels of *Ccl2* in TNFα-stimulated mouse wild-type (WT) cells with (dotted line) and without (solid line) hypochlorite (HOCl) pretreatment. **(B)** Relative luciferase levels in TNFα-stimulated transgenic WT cells carrying an integrated NF-κB-reporter gene driving luciferase with serial dilutions of hypochlorite pre-treatment. **(C)** Western blot analysis of IκBα and phospho-IκBα-Ser32 levels in TNFα-stimulated wild-type cells with and without HOCl pretreatment. Data presented as average ± s.e.m.

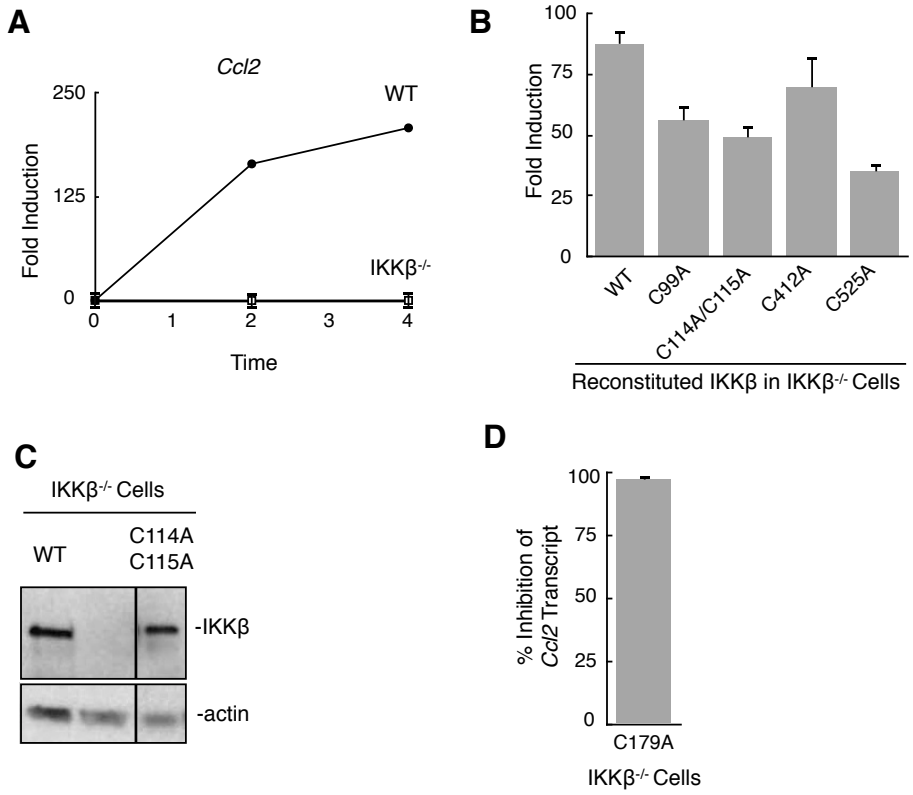


**Figure S2. Rescue of IKKβ$^{-/-}$ with a human IKKβ transgene. (A)** Relative mRNA transcript levels of *Ccl2* in TNFα-stimulated IKKβ-deficient mouse embryonic fibroblasts (MEFs). **(B)** Relative mRNA transcript levels of *Ccl2* in TNFα-stimulated IKKβ-deficient MEFs reconstituted with indicated missense variants of human IKKβ (variants with substitution of cysteine by alanine are denoted as C99A, C114A/C115A, C412A, and C525A. C114A/C115A is a double-mutant.) at 4 hours. **(C)** Western blot analysis of IKKβ protein levels in IKKβ-deficient MEFs reconstituted with human IKKβ (WT) and IKKβ C114A/C115A. Black lines indicate grouping of images from different parts of the same gel. **(D)** Percent inhibition of *Ccl2* mRNA transcript levels in TNFα-stimulated IKKβ-deficient cells complemented with C179A IKKβ transgene. Data presented as average ± s.e.m.

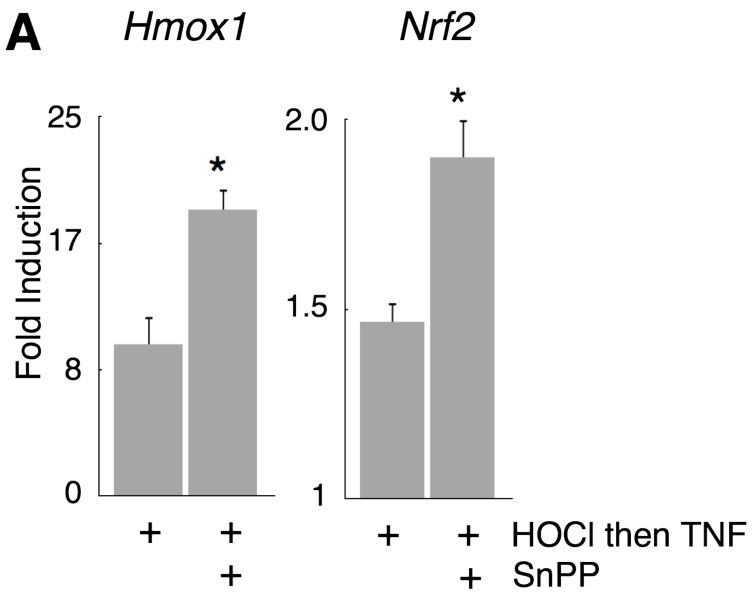


**Figure S3. Tin Protoporphyrin Increases Oxidative Stress in wild-type fibroblasts.** (**A**) Relative mRNA transcript levels of *Hmox1* and *Nrf2* in hypochlorite (HOCl)-pretreated TNFα-stimulated mouse wild-type cells with and without tin protoporphyrin (SnPP). * $P < 0.004$. Data presented as average ± s.e.m.


**Figure S4. Hypochlorite attenuates acute radiation dermatitis. (A)** Low magnification photographs taken of the back skin on days 14, 20, and 30 after start of irradiation. Pictures are representative images from each group.

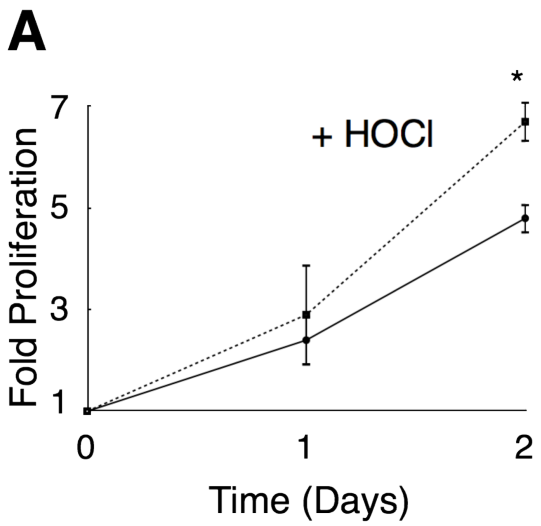


**Figure S5. Hypochlorite Stimulates Proliferation in Human Keratinocytes.** (**A**) Primary human keratinocytes were grown in standard conditions with and without 1-hour daily pulse treatments with hypochlorite (HOCl). * P=0.002. Data presented as average ± s.e.m.

Primer Sequences

Ccl2 F AAGGAATGGGTCCAGACATAC
Ccl2 R CTGAAGACCTTAGGGCAGAT

Gapdh F ACCTGCCAAGTATGATGACATCA
Gapdh R CCCTCAGATGCCTGCTTCAC

Cxcl10 F AGGACGGTCCGCTGCAA
Cxcl10 R CATTCTCACTGGCCCGTCAT