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Supplemental Data

An Oligodeoxynucleotide with AAAG Repeats Significantly Attenuates Burn-Induced Systemic Inflammatory Responses by Inhibiting Interferon Regulatory Factor 5 Pathway

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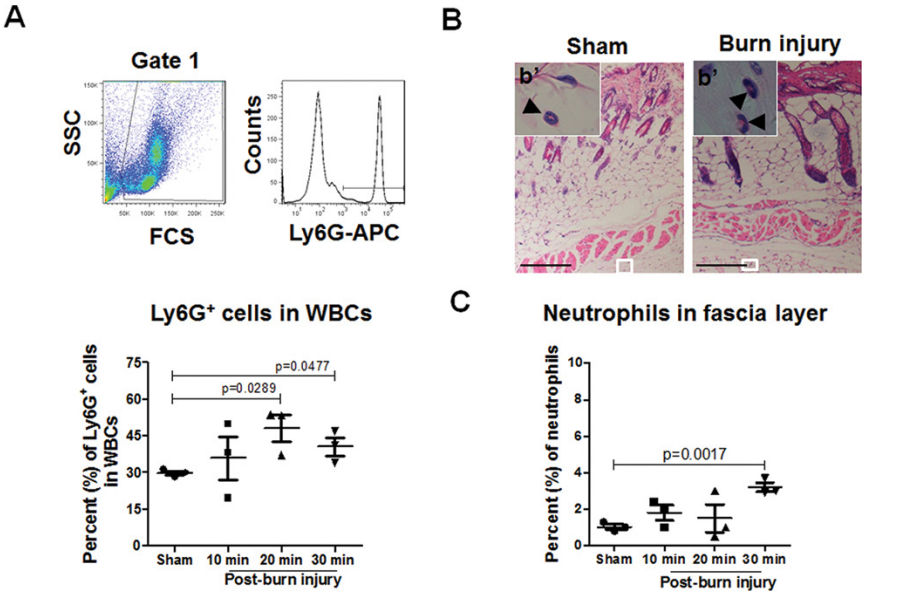
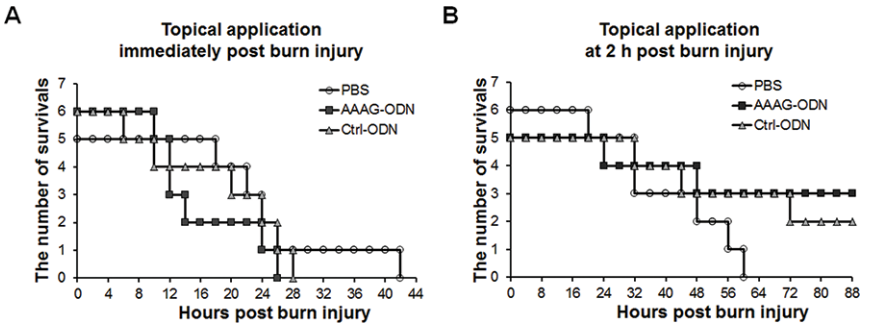
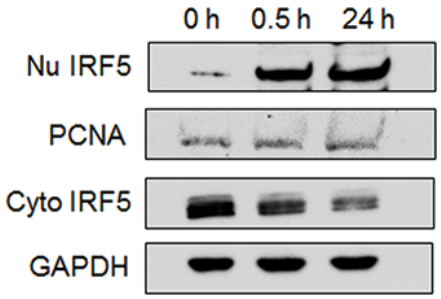


Supplementary Figure S1. The early inflammatory responses in mice post burn injury. WBCs in the peripheral blood and burned skin were collected from the mice at 10, 20 and 30 min post burn. Ly6G$^+$ cells in the WBCs (A) were measured by flow cytometry using APC-labeled mAb of Ly6G. Ly6G$^+$ cells represent the neutrophils. Infiltrated neutrophils in the skin (B) were observed after H&E staining. (b') Higher magnification of the neutrophils (arrowhead) in muscular fascia layers. Scale bars = 200 μm. The percentage of the neutrophils (C) in muscular fascia layers of the burned skin were numerated. Data are represented as mean ± SEM (n = 3 mice/group).



Supplementary Figure S2. Effect of topical application of AAAG ODN on the survivals of burn-injured mice. Burn-injured mice were topically treated with AAAG ODN or Ctrl ODN or PBS and were recorded for their survivals. Survival curves of the mice received 6.25 μg ODNs for 4 times at a 3-h interval, starting immediately after the burn injury (A) or starting at 2 h post burn (B).



Supplementary Figure S3. The kinetic observation on nuclear translocation of IRF5 in cultured cells. The THP-1 cells were cultured with CpG 2006 0h, 0.5 h or 24 h, and then harvested for separating cytoplasmic and nuclear fractions. IRF5 proteins in the fractions were detected by Western blot. Nu IRF5, IRF5 in nucleus; Cyto IRF5, IRF5 in cytoplasm; GAPDH, glyceraldehyde-3-phosphate dehydrogenase; PCNA, proliferating cell nuclear antigen.