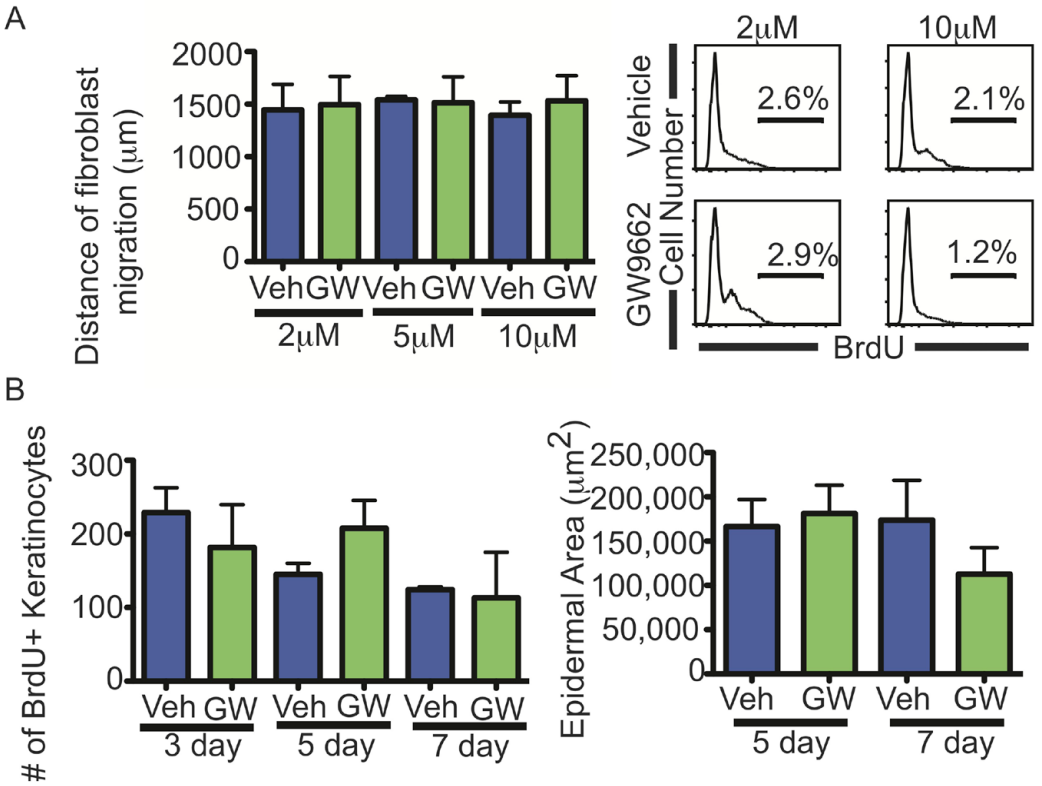

Fig. S1. GW9662 treatment does not directly affect fibroblasts *in vitro* or keratinocytes *in vivo*. (**A**) *In vitro* analysis of primary fibroblasts shows that fibroblast proliferation and migration are the same when cultured with vehicle or GW9662 at the indicated concentrations. (**B**) The number of $BrdU^+$ keratinocytes is the same in GW9662-injected mouse wounds and vehicle-injected controls at 3, 5 or 7 days after wounding. Additionally, the epidermal area is unchanged following GW9662 injection, indicating normal re-epithelialization.

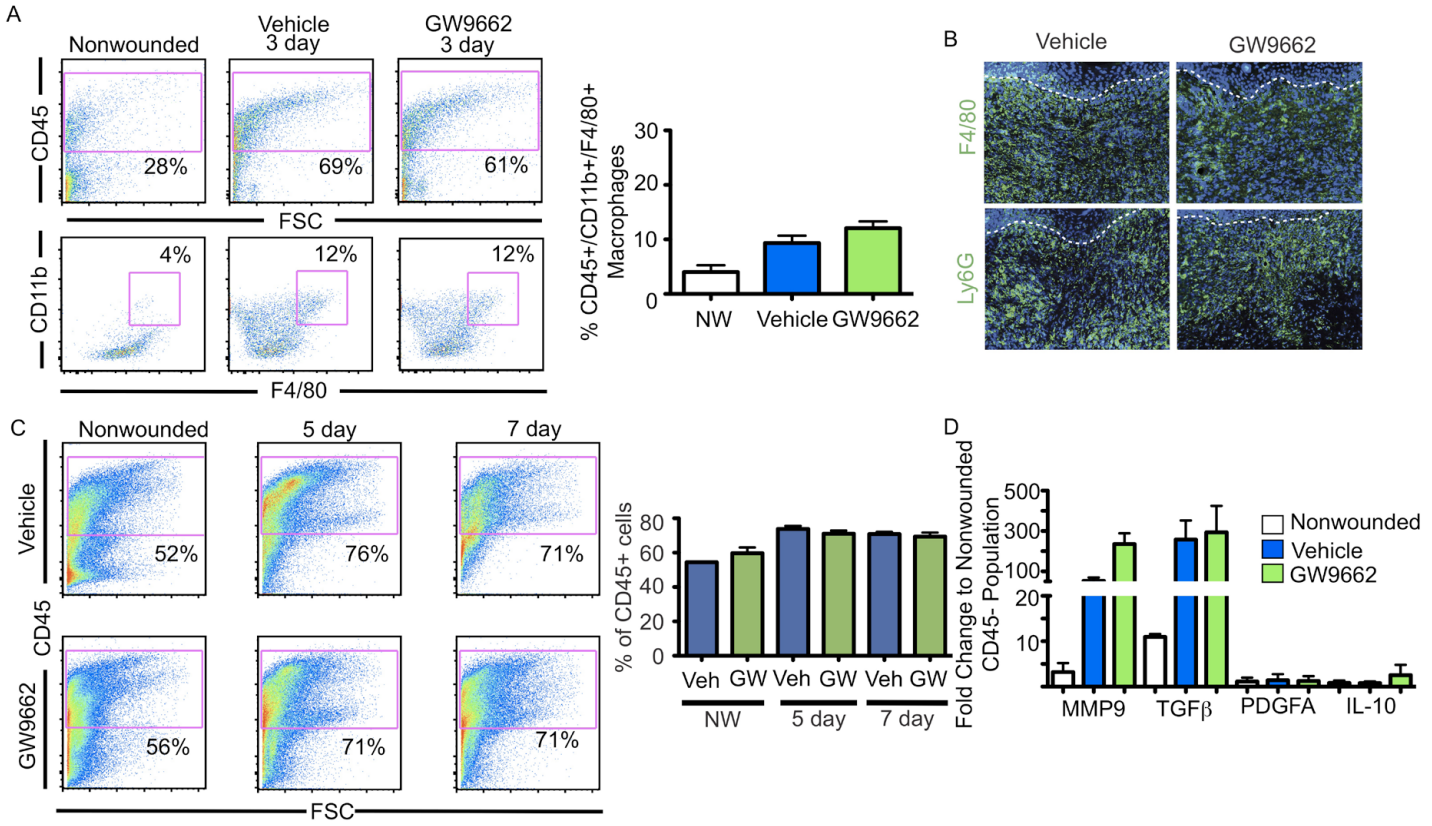

Fig. S2. Analysis of macrophages in GW9662-treated mice after wounding. (**A**) FACS analysis of $CD45^+/CD11b^+/F4/80^+$ macrophages at 3 days after wounding. Percentage of $CD45^+/CD11b^+/F4/80^+$ cells is similar in vehicle-injected and GW9662-injected mouse wounds. (**B**) Immune cell populations are recruited in GW9662-injected wounds compared with vehicle controls at 3 days after wounding. Macrophage populations can be seen in skin sections of both wounds using F4/80, and neutrophils infiltrate wounded skin normally in both samples as seen by LY6G immunostaining. Dotted lines indicate the epidermal-dermal boundary. Asterisk indicates background staining in epidermis. (**C**) FACS analysis of $CD45^+$ cells shows no difference in immune cell percentage of vehicle- and GW9662-injected mouse wounds at 5 or 7 days after wounding. (**D**) Fold changes of mRNA levels of $CD45^+/CD11b^+/F4/80^+$ macrophages compared with non-wounded $CD45^-$ controls isolated from non-wounded skin, vehicle-injected wounds and GW9662-injected wounds are similar for several macrophage-produced cytokines.

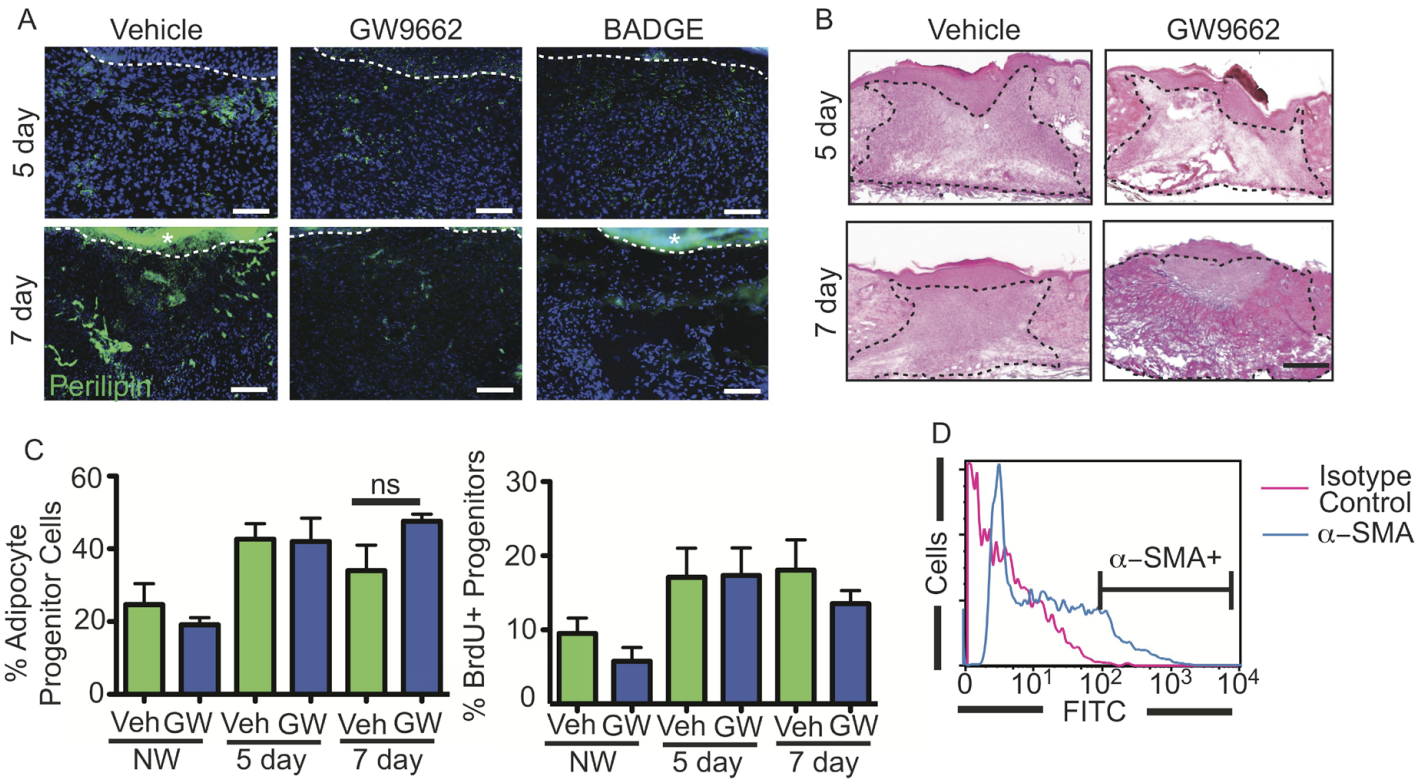

Fig. S3. Effect of GW9662 treatment on adipocyte lineage cells during wounding. (**A**) Lack of perilipin^{+}, mature adipocytes (green) in wounds of GW9662-injected and BADGE-injected mice 5 and 7 days after wounding compared with vehicle-injected mice as indicated. Dotted line indicates epidermal-dermal boundary. Asterisk indicates background staining. Scale bar: 100 μm. (**B**) H&E-stained skin sections of vehicle-injected and GW9662-injected wounds at 5 and 7 days after wounding showing abnormal dermal morphology. Dotted line outlines dermal wound bed. Scale bar: 200 μm. (**C**) The percentage of BrdU^{+} adipocyte progenitor cells is the same in GW9662-injected mice compared with the vehicle-injected control mice at 5 and 7 days after wounding. The percentage of adipocyte progenitor cells within the Lin^{-}, CD34^{+}, CD29^{+} cell population is the same in GW9662-treated mice compared with vehicle-injected controls. (**D**) FACS histogram plots of dermal cells isolated from skin wounds at day 5 stained with IgG2a-FITC (isotype control) or α-SMA-FITC antibodies. Line indicates + gate for α-SMA staining used in Fig. 4C.