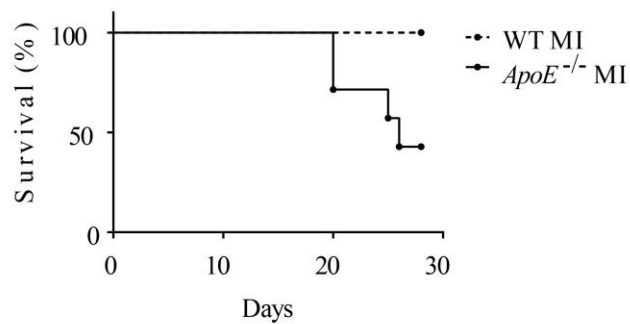
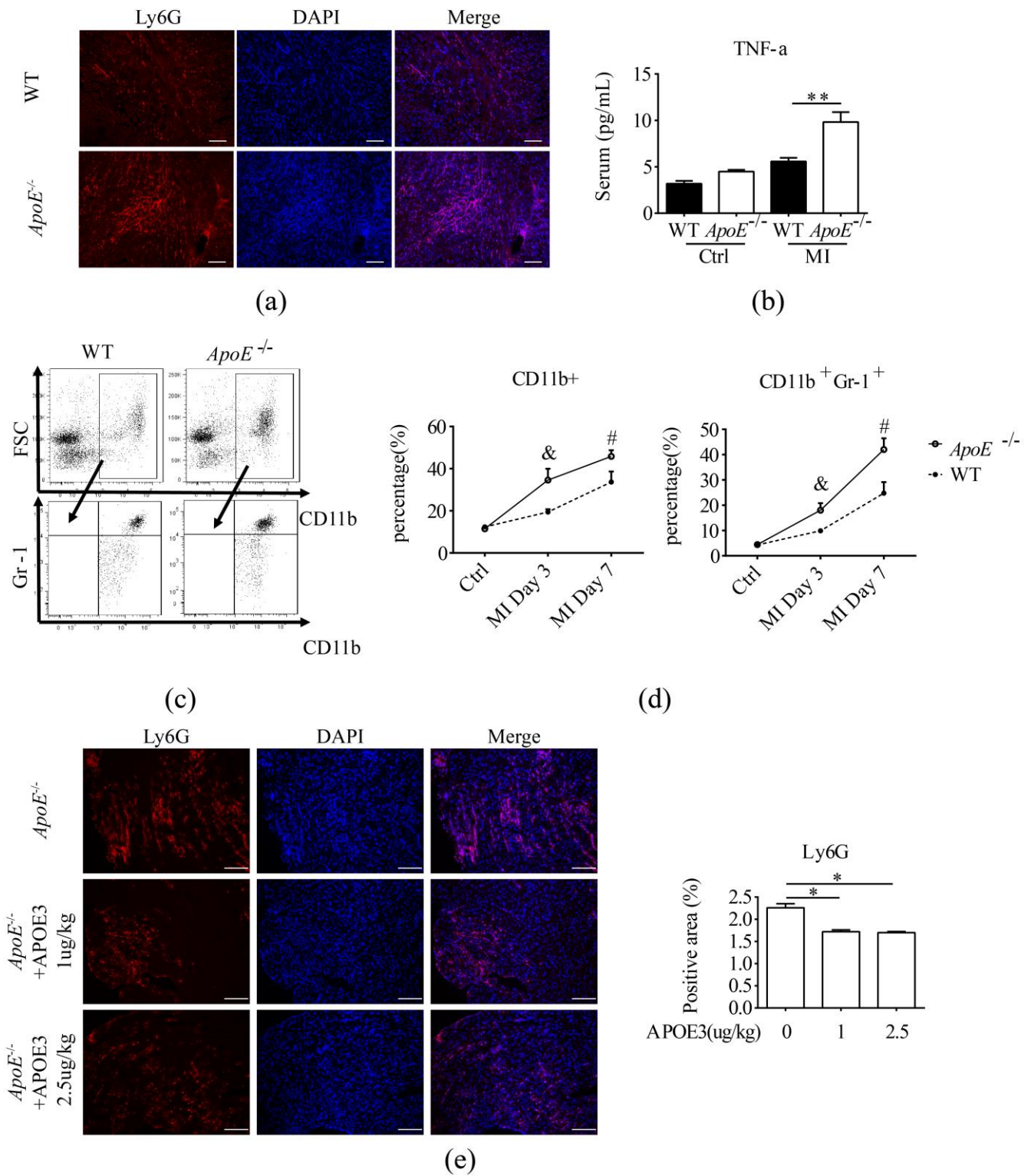


(a)



(b)

Supplementary Figure 1: Heart healing is impaired in *ApoE* deficiency mice after myocardial infarction. (a) Representative Sirius red staining and quantitation of scar size of *ApoE*^{-/-} and WT mice 7 days after ligation. Each group involves data of 6 mice. (b) Survival curve of *ApoE*^{-/-} (solid line) and WT mice (dotted line) after ligation (MI). Each group involves data of 15 mice, $p < 0.05$. Data are shown as mean \pm SEM. Statistical tests include two-tailed Student's t-test (two groups) and Log-rank test (survival curve). ** $p < 0.01$.



Supplementary Figure 2: ApoE deficiency promotes neutrophil infiltration and mobilization after myocardial infarction. (a) Representative immunofluorescent staining of Ly6G within infarcted hearts of WT and *ApoE*^{-/-} mice 1 day after ligation. Scale bars: 100 μm. (b) Serum level of TNF-α of *ApoE*^{-/-} and WT mice without surgery (Ctrl) and 1 day after

infarction (MI). Each group involves 8 mice. (c, d) The Gating strategy of flow cytometry and the percentage of myeloid cells (CD11b⁺) and neutrophils (including monocytes) (CD11b⁺ Cr-1⁺) in the blood of *ApoE*^{-/-} and WT mice without surgery (Ctrl) and 3 days and 7 days after ligation (MI). Each group involves 6 mice. (e) Representative immunofluorescent staining of Ly6G within infarcted hearts of *ApoE*^{-/-} mice with or without APOE3 treatment 1 day after ligation and the percentage of Ly6G positive area of the whole image. Scale bars: 200 μm. Each group involves 6 mice. Data are shown as mean ± SEM. Statistical tests include two-tailed Student's t-test (two groups) and one-way analysis of variance followed by Tukey's multiple comparisons test (b) or by Dunnett's multiple comparisons test (e). **p* < 0.05, ***p* < 0.01, &*p* < 0.05 (*ApoE*^{-/-} vs WT mice 3 days after ligation), #*p* < 0.05 (*ApoE*^{-/-} vs WT mice 7 days after ligation).