YMTHE, Volume 27

Supplemental Information

Anti-inflammatory Activity of MTL-CEBPA, a Small

Activating RNA Drug, in LPS-Stimulated

Monocytes and Humanized Mice

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Supplementary Information

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Figure S1

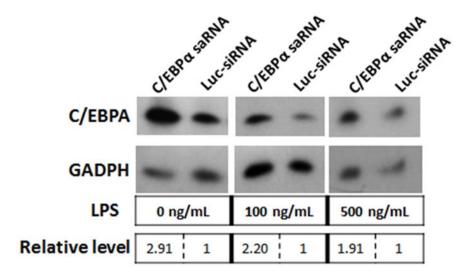


Figure S1: CEBPA-51 induces specific gene activation in THP-1 monocytes. A Western blot panel probed with antibody specific to CEBPA (Abcam: ab40764) showed visible increase in protein expression in THP-1 cells transfected with CEBPA-51. GAPDH expression was used as protein loading control across each of the lanes. Semi-quantitative analysis was conducted by using GelQuant.Net from triplicated blots.



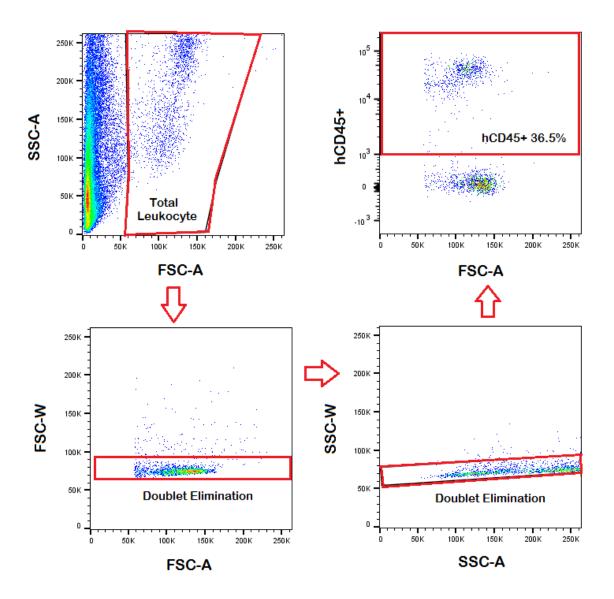
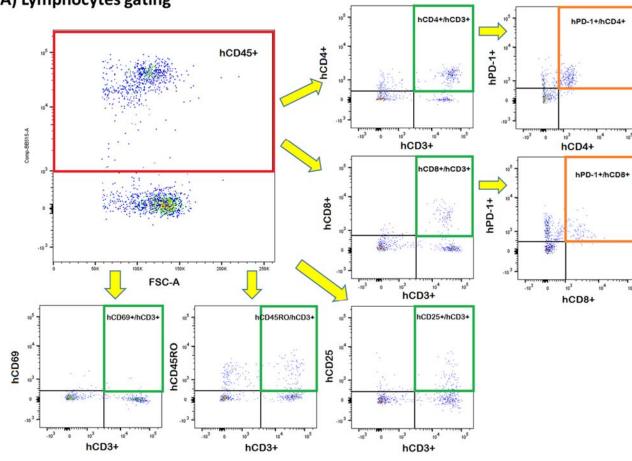


Figure S2: **Flow cytometric analysis and gating strategy of human CD45**+ **cell population**. Flow cytometry was conducted to assess the human CD45+ cell population in peripheral blood of NSG mice at 10 to 12 weeks post-transplantation with fetal-liver-derived CD34+ HSCs. Representative graphs show the gating strategy. Mouse peripheral blood cells are isolated and stained with anti-human CD45+ antibody. Total leukocytes population is gated from initial dot plot, followed by doublet elimination from forward scattering and side scattering. The percentage of hCD45+ cells are calculated by gating the positive cells from the total peripheral leukocytes. Hu-NSG mice typically present 25-75% hCD45+ engraftment.

Figure S3



A) Lymphocytes gating

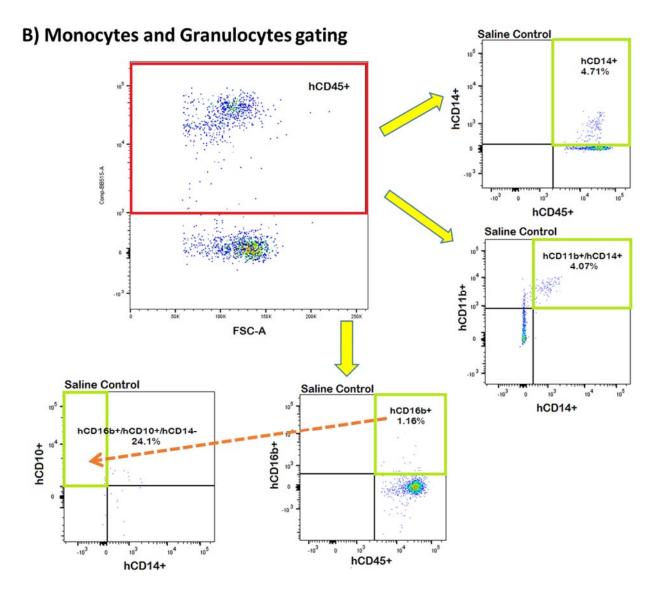


Figure S3: Flow cytometric analysis and gating strategy of human immune cell subsets. Flow cytometry was conducted to assess various human immune cells subsets before or after LPS injection. Representative graphs show the grating strategy. **A)** Lymphocytes gating. The percentage of hCD4+/hCD3+, hCD8+/hCD3+, hCD45RO+/hCD3+, hCD25+/hCD3+, or hCD69+/hCD3+ population, is gated from the hCD45+ cells, respectively. The percentage of hPD-1+ subsets is gated from the hCD4+/hCD3+ or hCD8+/hCD3+ subsets, respectively. **B)** Monocytes and Granulocytes gating. The percentage of hCD14+, hCD11b+/hCD14+, or hCD16b+ population, is gated from the hCD45+ cells, respectively. The percentage of hCD16b+/hCD14+, subset is gated from the hCD45+ cells, respectively.