**Supplemental Figure 3.** Phenotypic and functional characterization of CAR-iMacs.

(A) Surface marker expression profile by flow cytometric analyses (n=2-3). (B) Basic phagocytic activity against E. coli-coupled particles as shown by flow cytometry (n=5).

(C) Flow cytometric analyses of percentages (%) of mCherry-positive Raji cells inside the eGFP⁺ macrophages (eGFP⁺ /CAR-iMacs) after co-culture with target cells at different effector to target ratios (E/T) for 4 h, statistical significance was calculated for E:T (ratios 1:1, and 1:10) with two-way ANOVA using multiple comparisons (n=2-3).

(D) Additional representative plot of flow cytometric analyses of CD19 expression on leukemia target cells.

(E) IL-6 secretion measured by ELISA after co-culture of CAR-iMacs or eGFP iMacs with CD19⁺ cells (Raji, Daudi) or CD19 low cells (K562) for 4 h. (n=3-4). All data are represented as the mean ± SD.