

**Supplemental Figure 5.** CAR-iMacs show anti-viral immune response after co-culture with CD19<sup>+</sup> target cells. **(A)** Top 15 differentially-expressed genes of CAR-macrophage population after co-culture with Raji or ALL cells compared to eGFP macrophage population. **(B)** Top GO terms enriched in CAR and eGFP iMacs upon co-culture with CD19<sup>+</sup> Raji cells. **(C)** UMAP plots illustrating the phenotypic distinction of eGFP iMacs and CAR-iMacs after co-culture with CD19<sup>+</sup> Raji or ALL cells, colored according to gene expression.