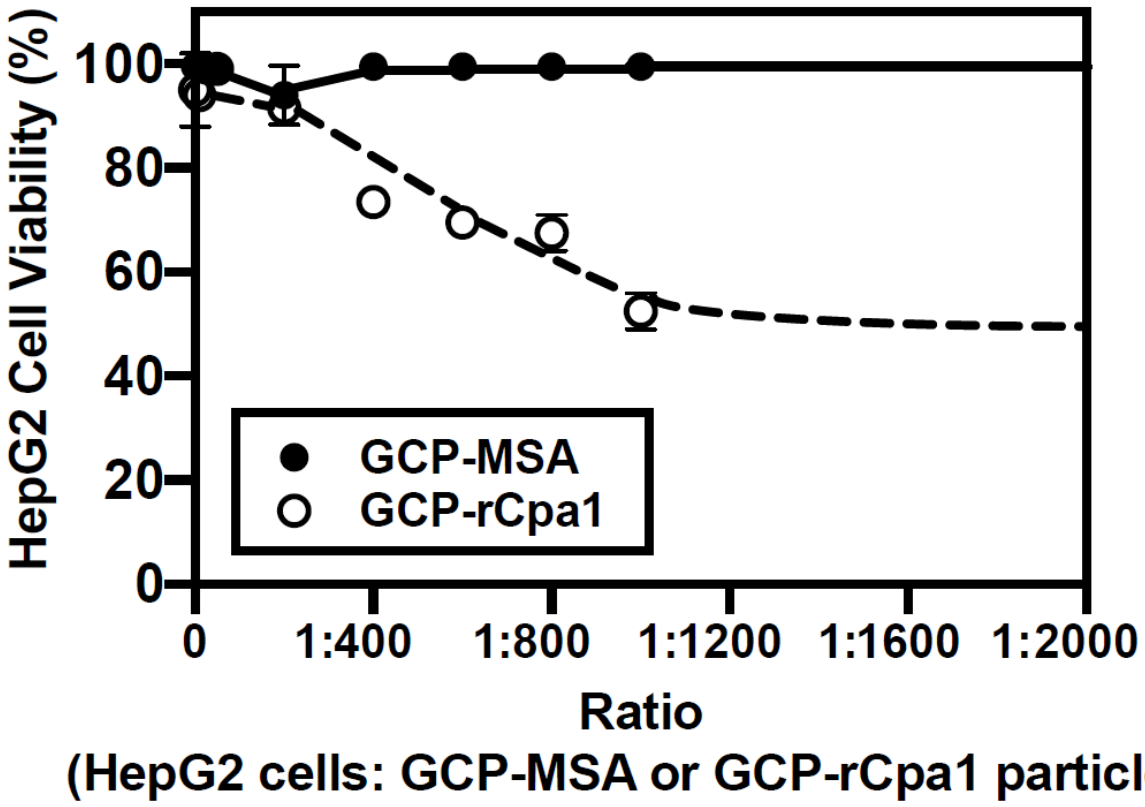
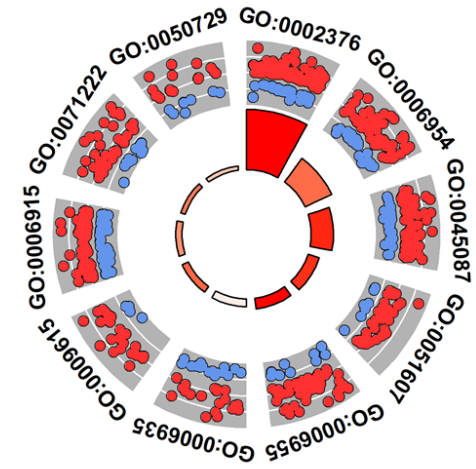


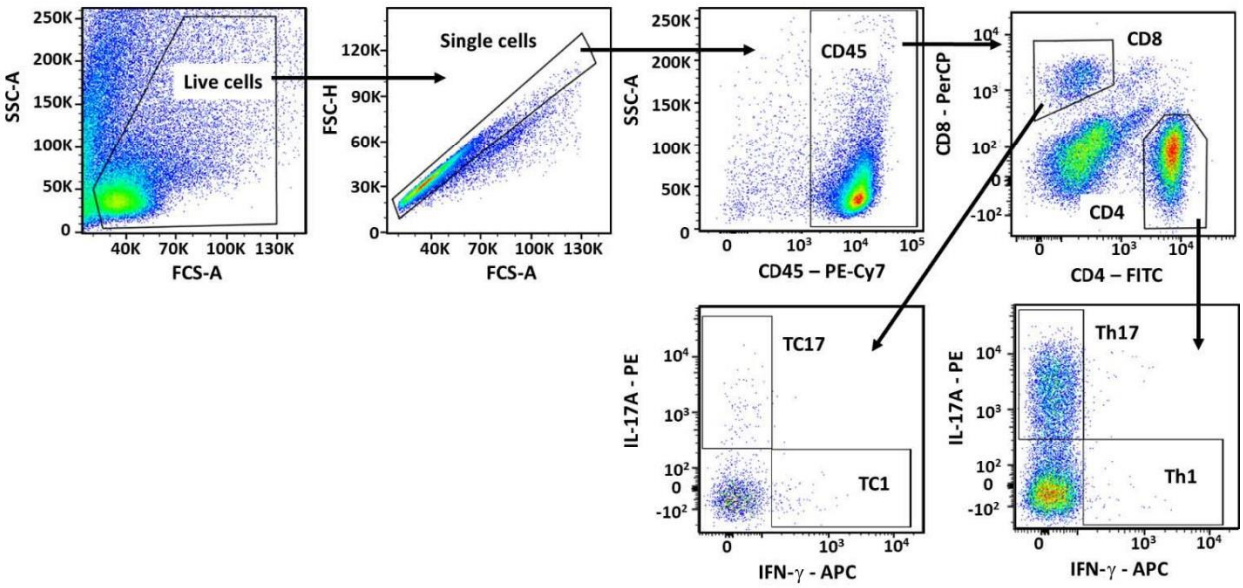
Supplement Fig. 1. Cytotoxicity analysis of GCP-rCpa1 vaccine. Human hepatocellular carcinoma (Hep2G) cells (ATCC#HB-8065) were maintained in minimum essential medium (MEM) enriched with 10% FBS, 1 mM sodium pyruvate, and 1x MEM amino acid solution. Once cells reached complete confluence, cells were detached using 1x Trypsin/EDTA solution and resuspended in the enriched MEM medium at a final concentration of 5 x 10^5 cells/mL and seeded 100 µL per well in a 96-well plate. GCP-rCpa1was added at a range of 1:1 to 1:1000 (Hep2G to particles) ratio. GCP loaded with murine serum albumin was also evaluated. The untreated Hep2G cells in culture medium was incubated with equal volume of PBS as a control of 100 % viability. All samples were in quadruplicate. Plates were incubated for 24 h at 37°C with CO_2 and cytotoxicity was determined using PrestoBlue cell viability assay. Viability curves were assessed using dose-response curves determined in SigmaPlot V11. CC_{50} was defined as ratio of Hep2G cells to particles leading to 50% cell death and was calculated to be 1150 for GCP-rCpa1.



GO Term ID	Description
0002376	Immune system process
0006954	Inflammatory response
0045087	Innate immune response
0051607	Defense response to virus
0006955	Immune response
0006935	Chemotaxis
0009615	Response to virus
0006915	Apoptotic process
0071222	Cellular response to lipopolysaccharide
0050729	Positive regulation of inflammatory response

$$\text{Z-score} = \frac{(up - down)}{\sqrt{Count}}$$

Supplement Fig. 2. **The top 10 Gene ontology (GO) terms derived from macrophages treated with GCP adjuvant**. GOCircle plot displays blue and red scatter plots in outer gray circle, representing enriched GO terms with downregulated or upregulated genes, respectively. The inner red ring corresponds to a bar plot, the height of the bar indicates the significance of the GO term (FDR *p*-Value), and the color corresponds to the z-score. The table lists the top GO term with its designated description. The inflammatory response (GO:0006954) had the greatest enriched z-score value.



Supplement Fig. 3. Gating strategy for Th and Tc cell subsets. Isolated total pulmonary leukocytes from vaccinated or nonvaccinated mice were challenged with *Coccidioides* spores and analyzed by conducting fluorescence-activated cell sorting (FACS) using FACSCalibur flow cytometer. T helper $CD4^+$ T cells show the production of IL-17A and IFN-γ. Cytotoxic $CD8^+$ T cell subsets also analyzed intracellular flow for IL-17A and IFN-γ.