

SUPPLEMENTARY FIGURES

Title: The role of nanoparticle format and route of administration on self-amplifying mRNA vaccine potency

Authors: Giulia Anderluzzi^{1,2†}, Gustavo Lou^{1,2†}, Stuart Woods¹, Signe Tandrup Schmidt^{1,4}, Simona Gallorini², Michela Brazzoli², Russell Johnson³, Craig W. Roberts¹, Derek T. O'Hagan³, Barbara C. Baudner^{2*} and Yvonne Perrie^{1*}

¹Strathclyde Institute of Pharmacy and Biomedical Sciences, University of Strathclyde, 161 Cathedral St., G4 0RE Glasgow, Scotland.

²GSK, Siena, Italy.

³GSK, Rockville, MD 9911, USA.

⁴Department of Infectious Disease Immunology, Center for Vaccine Research, Statens Serum Institut, Artillerivej 5, 2300 Copenhagen S, Denmark.

†These authors contributed equally.

*Corresponding authors

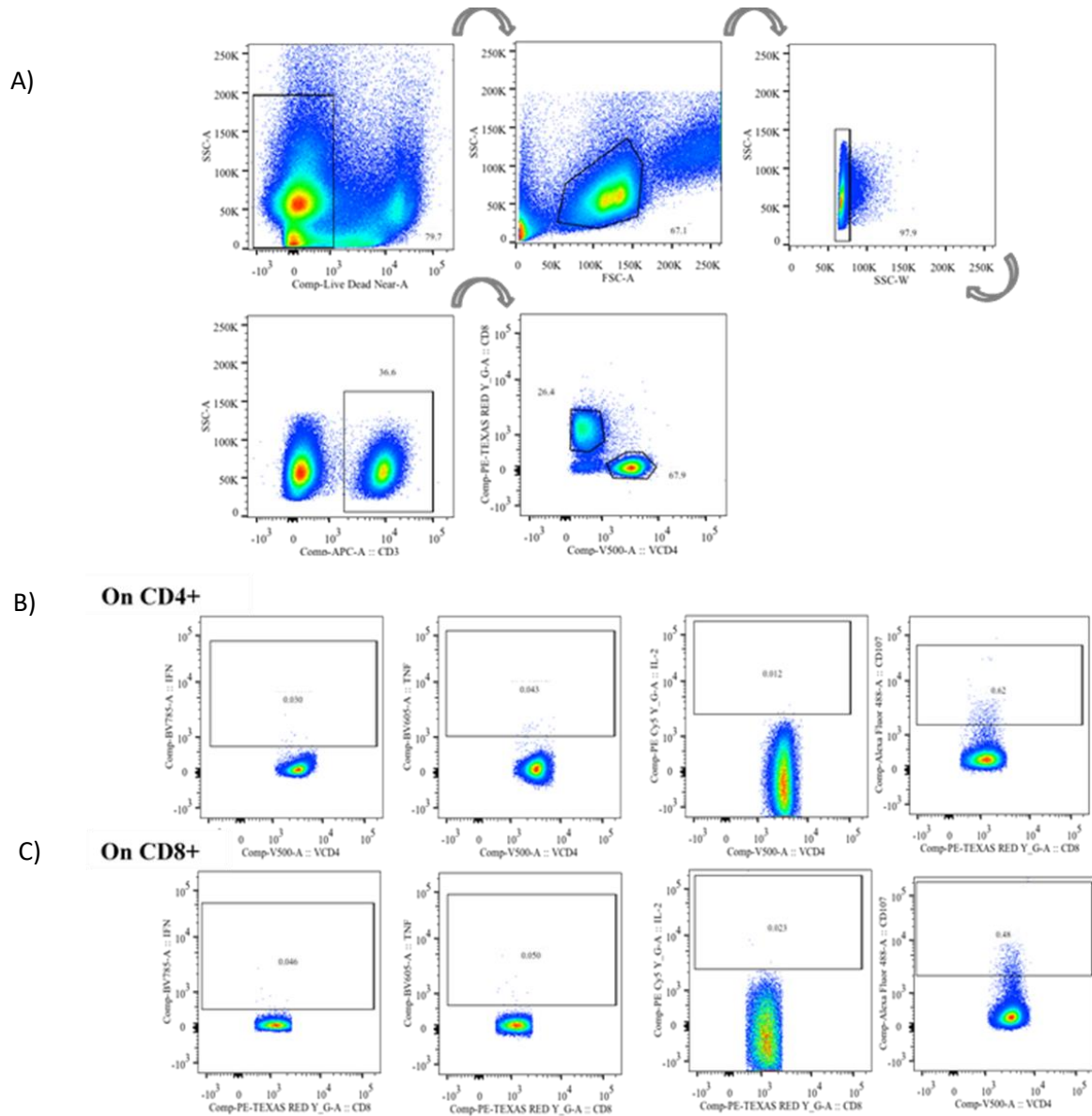


Figure S1. Gating strategy and representative dot plots for the identification of antigen-specific T cells upon re-stimulation in splenocytes. A) Gating on CD4+ and CD8+ T cells. B) CD4+ T cell cytokines. C) CD8+ T cell cytokines and CD107a. TNF- α +, IL2+ and IFN- γ + cells were analyzed in combination with Boolean gates. CD107a+ cells were analyzed separately.

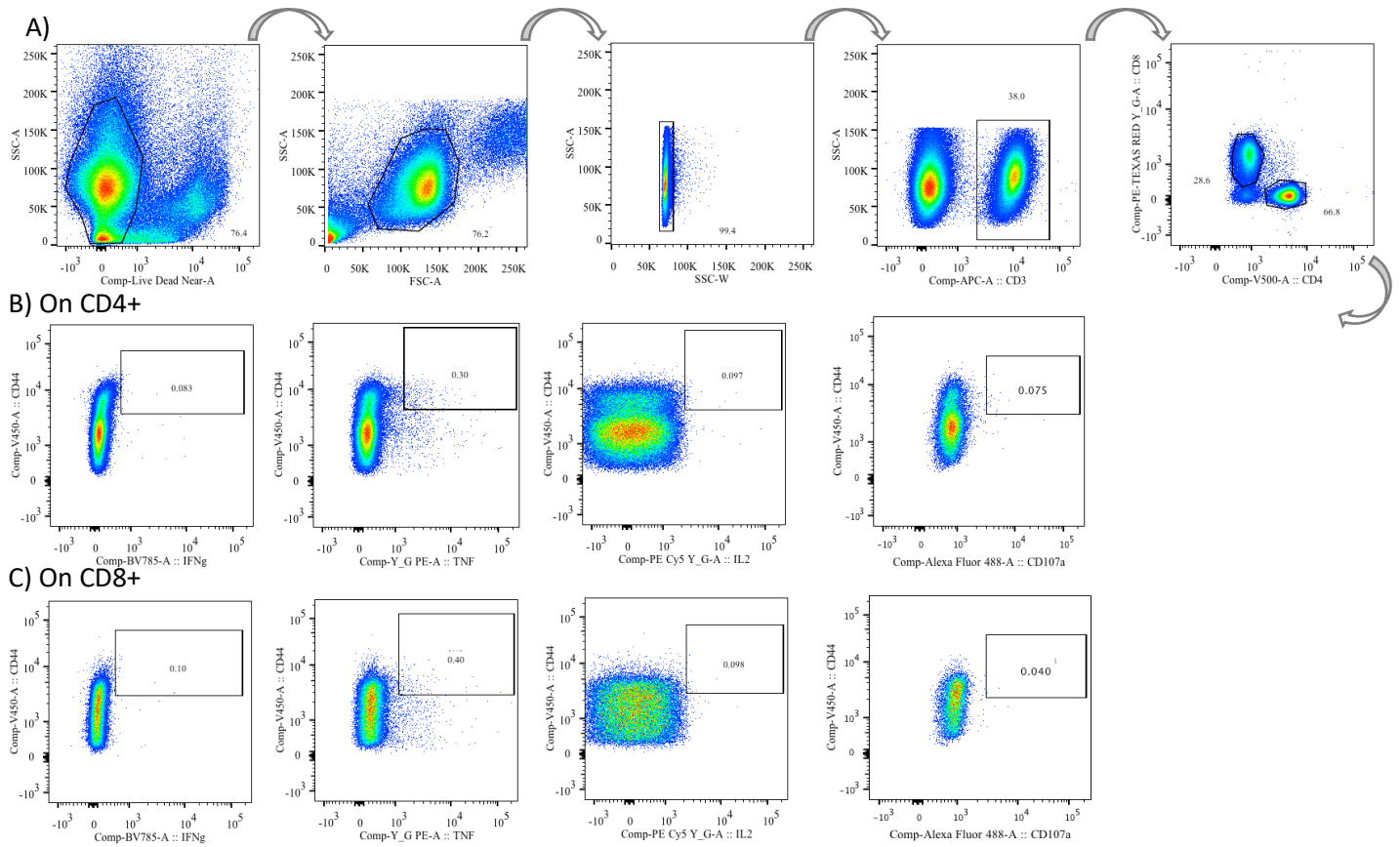


Figure S2. Gating strategy and representative dot plots used for the identification of antigen-specific T cells upon re-stimulation in lung cells. A) Gating on CD4+ and CD8+ T cells. B) CD44+ CD4+ T cell expressing cytokines. C) CD44+ CD8+ T cell expressing cytokines and CD107a. TNF- α +, IL-2+ and IFN- γ + cells were analyzed in combination with Boolean gates. CD107a+ cells were analyzed separately.