

Suppl. Figure 6. Rationale and design of antibody-coated LNPs to target PV FR-β+ TAMs in ADT-treated Myc-CaP tumors. (A) Schematic illustration of the methodology used to generate antibody-coated LNPs containing either inactive or active cGAMP. Abbreviations used: MC3, D-Lin-MC3-DMA. DSPC, 1,2-distearoyl-sn-glycero-3-phosphocholine. Chol, cholesterol, DSPE-PEG2000, 1,2- distearoyl-sn-glycero-3-phosphoethanolamine-N-[methoxy(polyethylene glycol)-2000]. OG488-DHPE, Oregon Green 488 conjugated 1,2-dihexadecanoyl-sn-glycero-3-phosphoethanolamine, DSPE-PEG2000-DBCO,1,2-distearoyl-sn-glycero-3-phosphoethanolamine-N-[dibenzocyclooctyl (polyethylene glycol)-2000] DBCO, dibenzocyclooctyne. cGAMP, 2'3'-cvclic quanosine monophosphate-adenosine monophosphate. LNP, lipid nanoparticle. N3, azide. FRβ, folate receptor beta. UDP-GalNAz, UDP-N-azidoacetylgalactosamine. (B) Flow cytometry showing the expression of FRα but not FRβ by Myc-CaP cells *in vitro*. (C) Representative fluorescence images of (left panel) FR α + cancer cells (green) and FR β staining (red) on separate cell populations. TCI = tumor cell islands. FRβ staining of F4/80+ TAMs (yellow in right panel). ***p < 0.001. Magnification bar = 50µm. (D,E) Growth curves for M-C-CaP tumors administered: (D) PBS alone (no ADT) followed by FRβ antibody-coated LNPs containing either c-GAMP or cGAMP Ctrl, or (E) ADT followed by control IgG-coated LNPs containing either active cGAMP or cGAMP Ctrl. Data are presented as means \pm SEMs. *p < 0.001 (comparing tumor sizes at sacrifice).