

An Ex Vivo 3D Tumor Microenvironment-Mimicry Culture to Study TAM Modulation of Cancer Immunotherapy

Yan-Ruide Li, Yanqi Yu, Adam Kramer, Ryan Hon, Matthew Wilson, James Brown, and Lili Yang

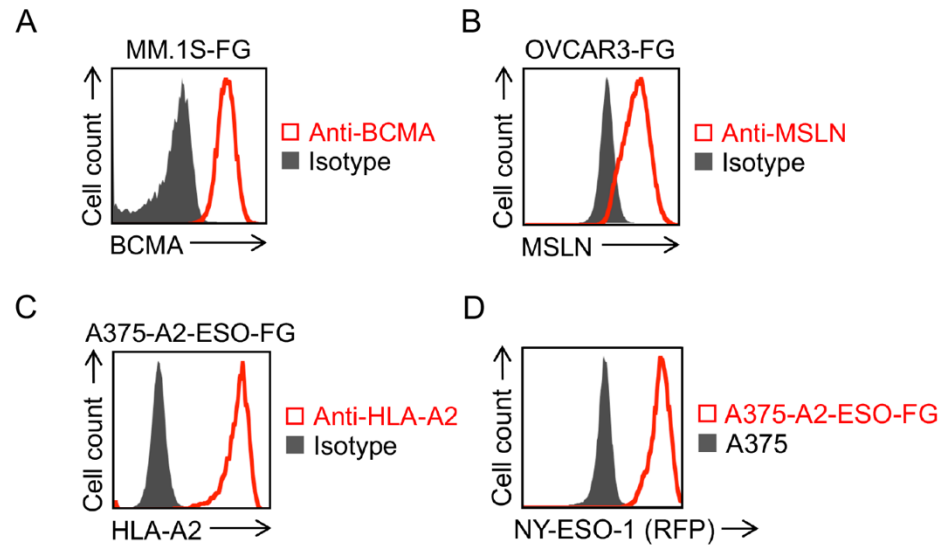


Figure S1. Generation of three tumor cell lines. Related to Figure 3.

- (A) FACS plots showing the detection of BCMA on MM.1S-FG cells.
(B) FACS plots showing the detection of mesothelin on OVCAR3-FG cells. MSLN, mesothelin.
(C) FACS plots showing the detection of HLA-A2 on A375-A2-ESO-FG cells.
(D) FACS plots showing the detection of NY-ESO-1 tumor antigen (indicated by RFP) on A375-A2-ESO-FG cells. The parental A375 cells were included as a staining control.

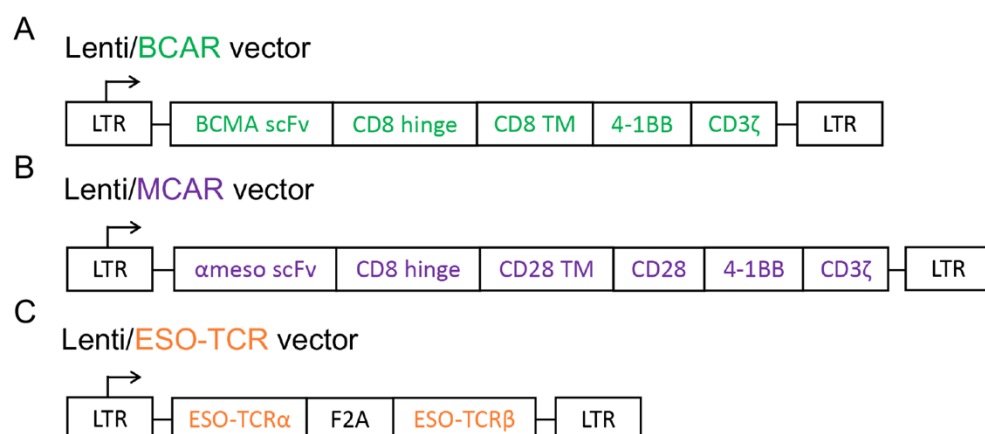


Figure S2. Schematic of Lenti/BCAR (A), Lenti/MCAR (B), and Lenti/ESO-TCR (C) vectors. Related to Figure 3.

Lenti/BCAR, lentiviral vector encoding a BCMA CAR gene; Lenti/MCAR, lentiviral vector encoding a mesothelin CAR gene; Lenti/ESO-TCR, lentiviral vector encoding HLA-A2-restricted, NY-ESO-1 tumor antigen-specific human CD8 TCR gene; LTR, long terminal repeat; BCMA, B-cell maturation antigen; scFv, single-chain variable fragment; TM, transmembrane.

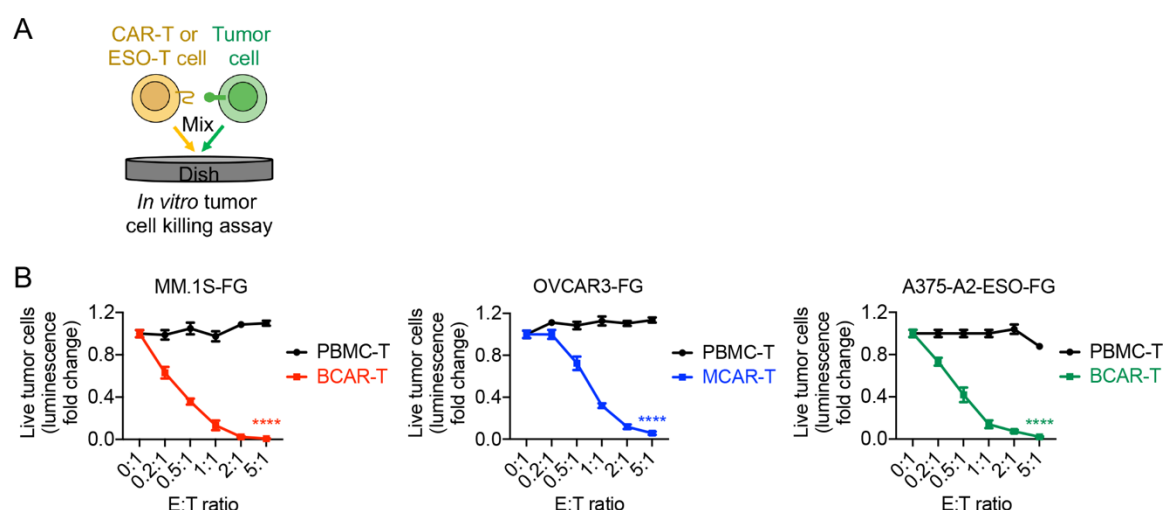


Figure S3. *In vitro* antitumor efficacy of CAR-T and ESO-T cells. Related to Figure 3.

(A) Experimental design.

(B) Tumor killing data at 24 h (n = 4).

Representative of 3 experiments. Data are presented as the mean \pm SEM. ****p < 0.0001 by Student's *t* test.