Supplemental Information

A PD-L1-Based Cancer Vaccine Elicits

Antitumor Immunity in a Mouse Melanoma Model

Zhibing Lin, Yan Zhang, Huaman Cai, Fuqiang Zhou, Hongjun Gao, Li Deng, and Rongxiu Li

Supplemental Information

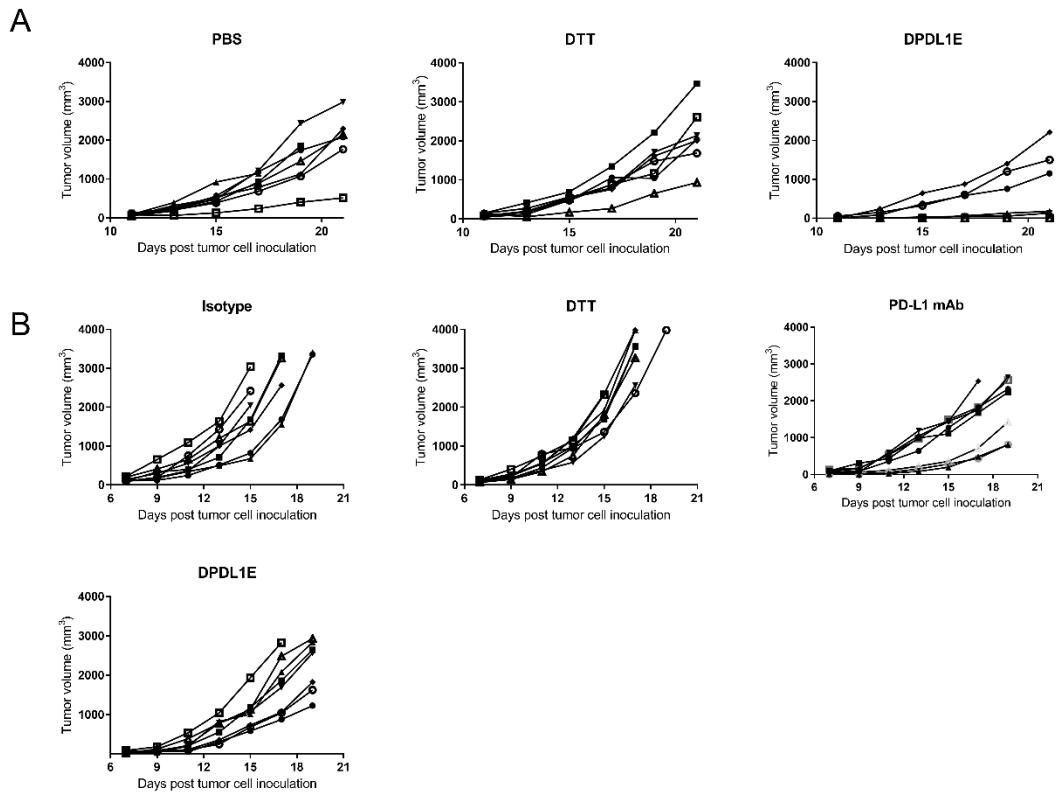**Supplemental Figures and Legends**

Figure S1. Tumor growth curves of mice in preventive and therapeutic model

(A) Tumor growth curve of individual mouse in preventive model. (B) Tumor growth curve of individual mouse in therapeutic model.
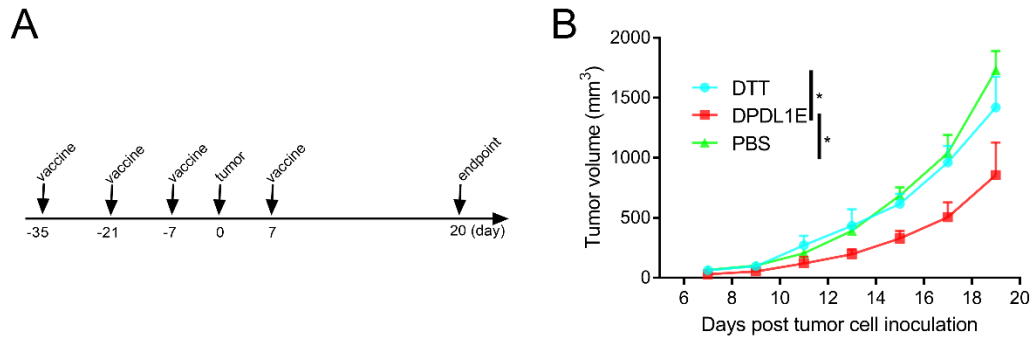
Figure S2. DPDL1 inhibited tumor growth in CT26 colon cancer mouse model

(A) The vaccination and tumor challenge schedule. (B) The tumor growth curve. Statistically significant differences were determined using log-rank test. * indicates $P < 0.05$
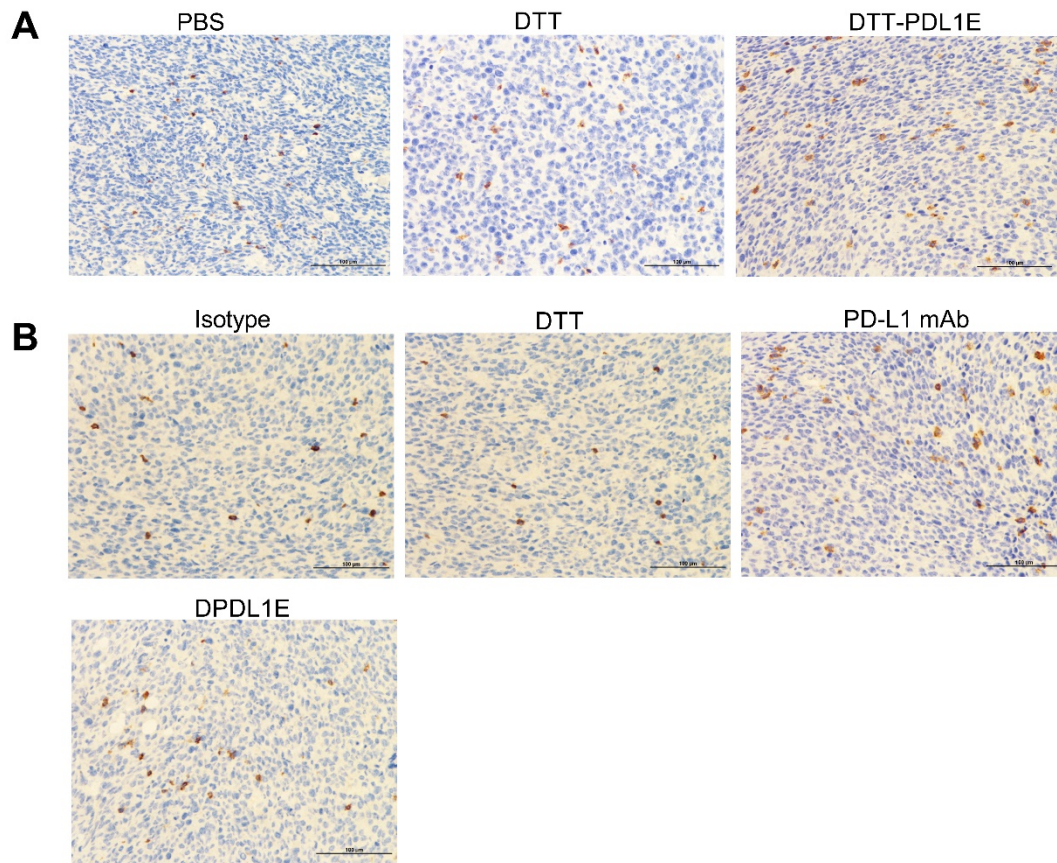
Figure S3. DPDL1E vaccination increased CD8+ T cell infiltration in tumors.

(A) Tumor tissues were isolated from mice in the preventive model and stained with anti-CD8α antibody. (B) Tumor tissues were isolated from mice in the therapeutic model and stained with anti-CD8α antibody.
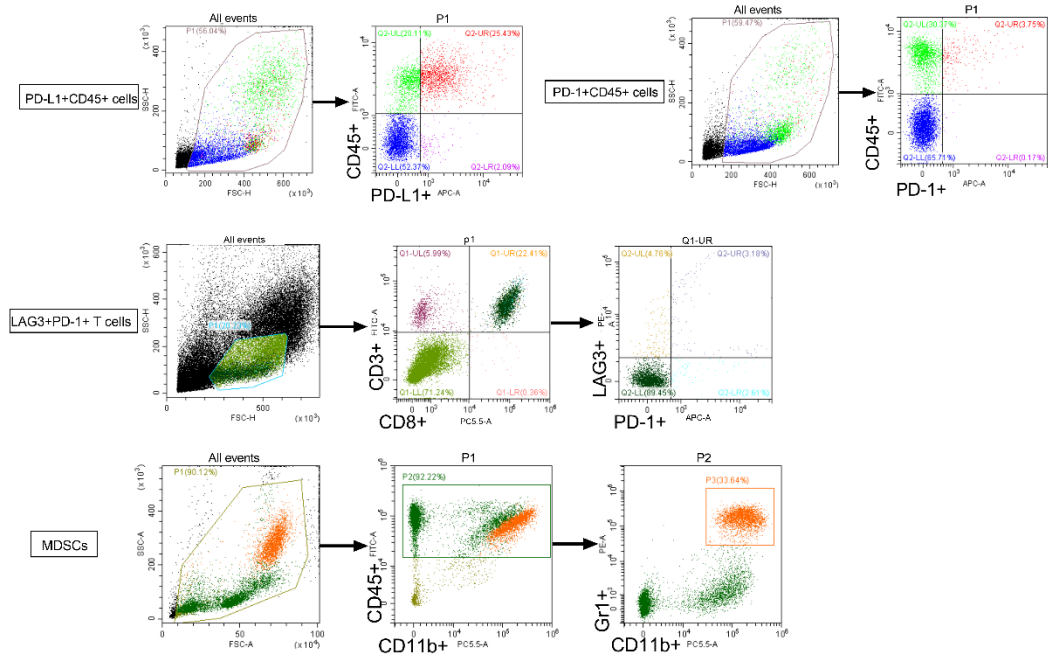
Figure S4. The gating strategy for the frequency analyses of PD-L1+CD45+, PD-1+CD45+, LAG3+PD-1+ and MDSCs.
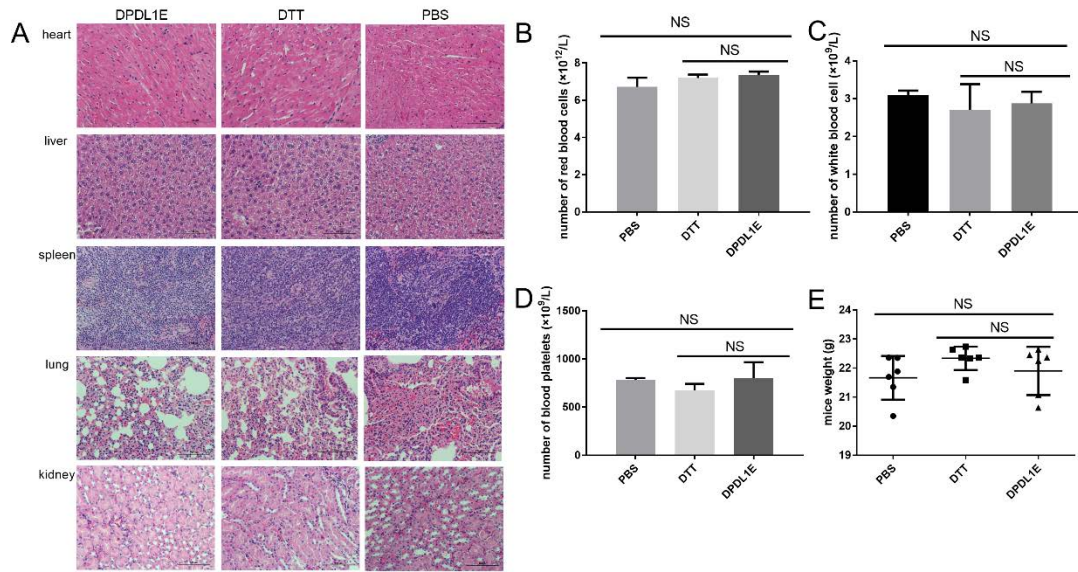
Figure S5. The safety evaluation of DTT-PDL1E vaccine.

(A) Mice were immunized with DTT-PDL1E, DTT or PBS three times at 2-week interval. 90 days after the third immunization, the tissue samples of heart, liver, spleen, lung, and kidney were stained with H&E. PBMC were analyzed using Auto Hematology Analyzer. The counts of red blood cells (B), white blood cells (C) and blood platelets (D) were determined. (E) The body weights of mice were measured, and the statistic difference between groups were determined by Student's t-test. NS stands for not significant.

Supplemental Tables

Table S1: The primers for mouse PD-L1 ORF amplification

Name	Length (bp)	Tm (℃)	Sequence (5'→3')
M-PDL1-P1	22	59	CAGTCTCCTCGCCTGCAGATAG
M-PDL1-P2	21	58.5	GTGCAAGGACCAGCTGCTAAG
M-PDL1-P3	23	59.1	GTCTCCTCGCCTGCAGATAGTTC
M-PDL1-P4	22	58.5	CAAGCTGCCAATCGACGATCAG

Table S2: The primers for DPDL1E amplication

Name	Length (bp)	Tm (℃）	Sequence (5'→3')
DPDL1E-P1	27	57.6	CCGAATTCCTTGATTGGGATG
DPDL1E-P2	38	68	CTTTGGAGCCGTGATAGTAAACGAACCACCA CCACCCG
DPDL1E-P3	38	68	CGGGTGGTGGTGGTTCGTTTACTATCACGGCT CCAAAG
DPDL1E-P4	29	65.1	GGCTCGAGTTACAGTTCTGGGATGATCAGCTC