



## Supplementary Figure S6.

**A**, Tumor weight of shCtrl and shDhx9 RPP tumors (n = 6), collected on day 32 post-inoculation. **B**, Body weight changes of mice, injected with shCtrl and shDhx9 RPP tumors (n = 6). C, Gating strategy used to analyze CD8<sup>+</sup> and CD4<sup>+</sup> T cells, infiltrated in shCtrl and shDhx9 RPP tumors. First, single cells were selected in FSC-A vs FSC-H plot, followed by gating of Propidium Iodide negative population. CD45 positive cells were selected in PE-CD45 vs SSC-A plot. Then, CD3 positive cells were selected in FL-NK-1.1 vs PE/Cy7-CD3 plot. Lastly, CD4-positive and CD8positive populations were analyzed in the CD45<sup>+</sup>/CD3<sup>+</sup> cells. The compensation was set using single-stained compensation controls. Compensation settings used in this assay was summarized in Supplementary Table S6. D, Tumor growth curves of shCtrl and shDhx9 RPP tumors in NSG mice (n = 6). E, Tumor growth curves of shCtrl and shDhx9 RPP tumors in C57BL/6 mice, treated with anti-CD8a antibody, anti-NK1.1 antibody or isotype control (n = 6). F, Immunoblot (IB) of DHX9 expression in shCtrl and shDhx9 RP cells treated with DOX. G, Tumor growth curves of shCtrl and shDhx9 RP tumors treated with isotype control or anti-PD-1 antibody (n = 10). H, Survival curves for mice in (G). I, Flow cytometry quantification of infiltrating CD8<sup>+</sup> T cells and  $CD4^+$  T cells of  $CD45^+CD3^+$  cells in shCtrl and shDhx9 RP tumors (n = 6). J, Representative IHC images of indicated infiltrating immune cells in shCtrl and shDhx9 RPP tumors (left) and quantification (n = 5) (right). Scale bar = 100 µm.

Data represent mean  $\pm$  SEM. ns, not significant; \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001, \*\*\*\*p < 0.0001 by unpaired Student's t test (A, B, D, I and J), two-way ANOVA followed by Tukey's multiple comparisons test (E and G) and log-rank test (H).