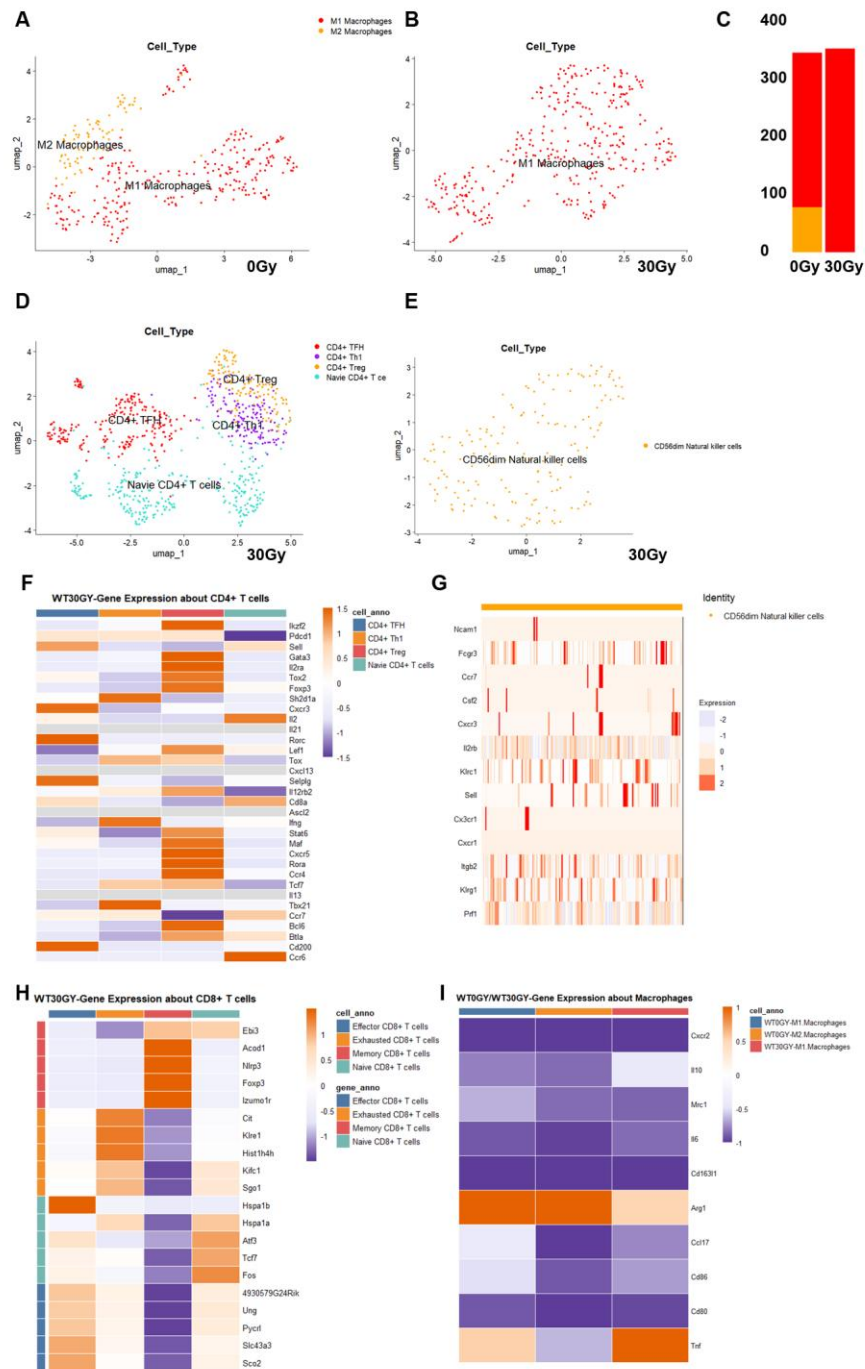
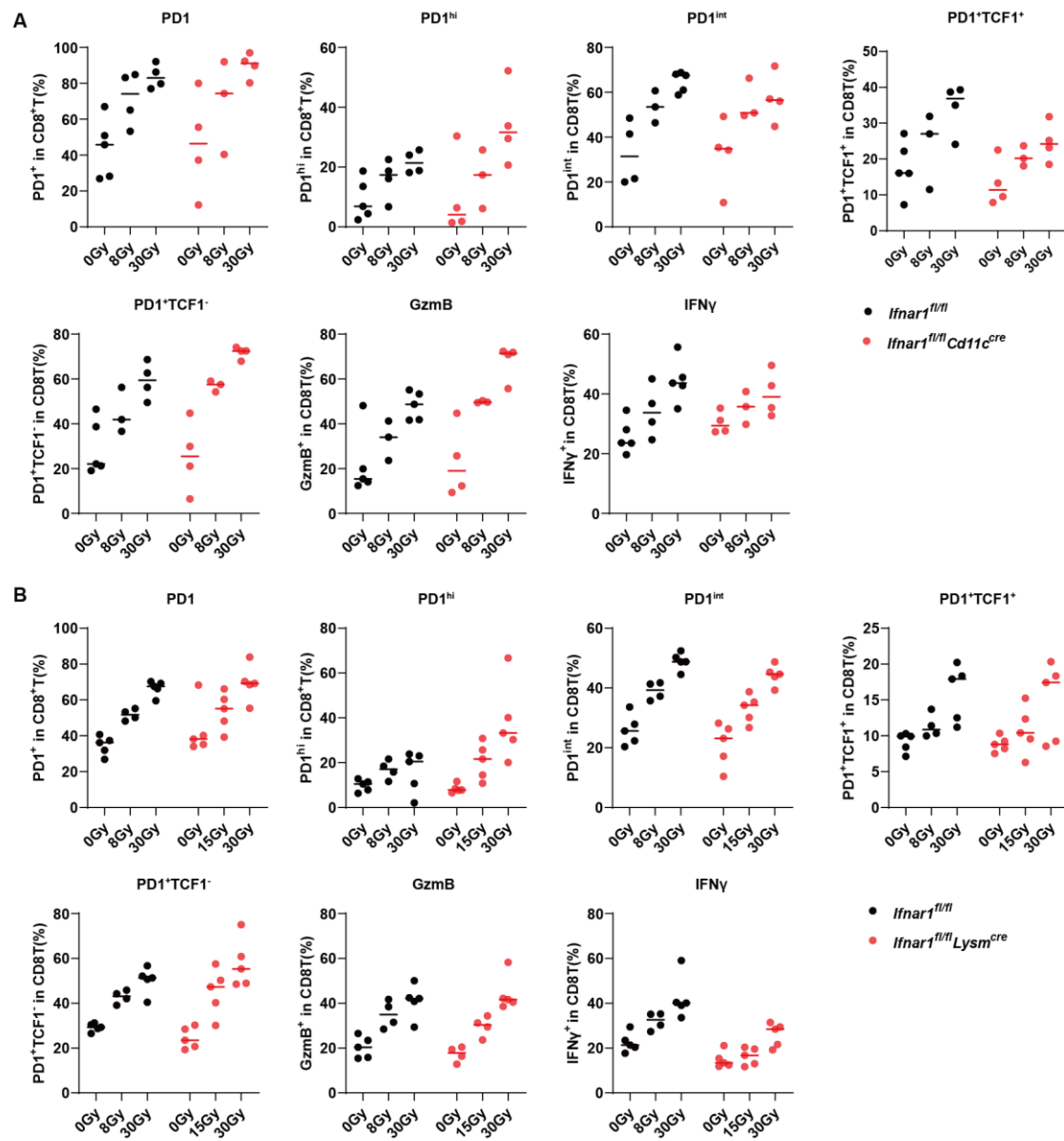


Supplementary Figures



Supplementary Figure 1. RT modulated immune cells infiltration inTIME. (A, B) UMAP visualization of the scRNA-seq clusters of macrophages in tumors from 0 Gy (A) or 30 Gy (B) radiated mice. (C) Percentages of M1 or M2-like tumor-associated macrophages in tumors from 0 Gy or 30 Gy radiated mice analyzed by scRNA-seq data. (D) UMAP visualization of the scRNA-seq clusters of CD4⁺ T cells in tumors from 30 Gy radiated mice. (E) UMAP visualization of the scRNA-seq clusters of NK cells in tumors from 30 Gy radiated mice. (F) Heatmaps showing relative expression in different subpopulations of CD4⁺ T cells in 30 Gy radiated tumors. (G) Heatmaps showing relative expression in CD56^{dim} NK cells in 30 Gy radiated tumors. (H) Heatmaps showing

relative expression in different subpopulations of CD8⁺ T cells in 30 Gy radiated tumors. **(I)**
Heatmaps showing relative expression in different subpopulations of macrophages in 0 Gy or 30 Gy radiated tumors.



Supplementary Figure 2. T cell-intrinsic IFN-I signaling mediated radiation induced CD8⁺ T cell exhaustion. (A) Flow cytometry analysis of percentages of exhausted CD8⁺ T cells in 0 Gy, 8 Gy and 30 Gy radiated tumors isolated from *Ifnar1^{fl/fl}* or *Ifnar1^{fl/fl}CD11c^{cre}* mice (n=3~5 per group). (B) Flow cytometry analysis of percentages of exhausted CD8⁺ T cells in 0 Gy, 8 Gy and 30 Gy radiated tumors isolated from *Ifnar1^{fl/fl}* or *Ifnar1^{fl/fl}Lysm^{cre}* mice (n=4~5 per group).

Uncropped images of gels

Figure 5F

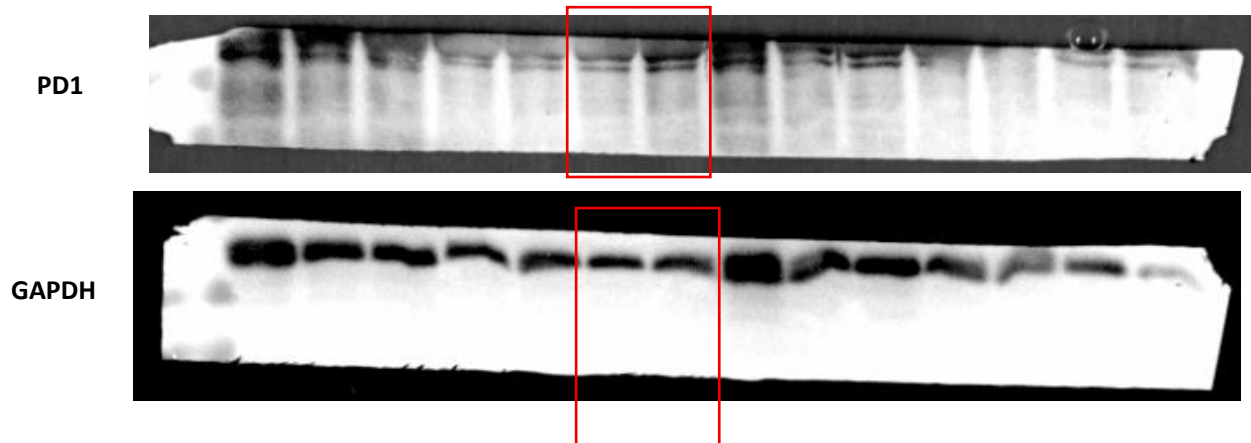


Figure 5G

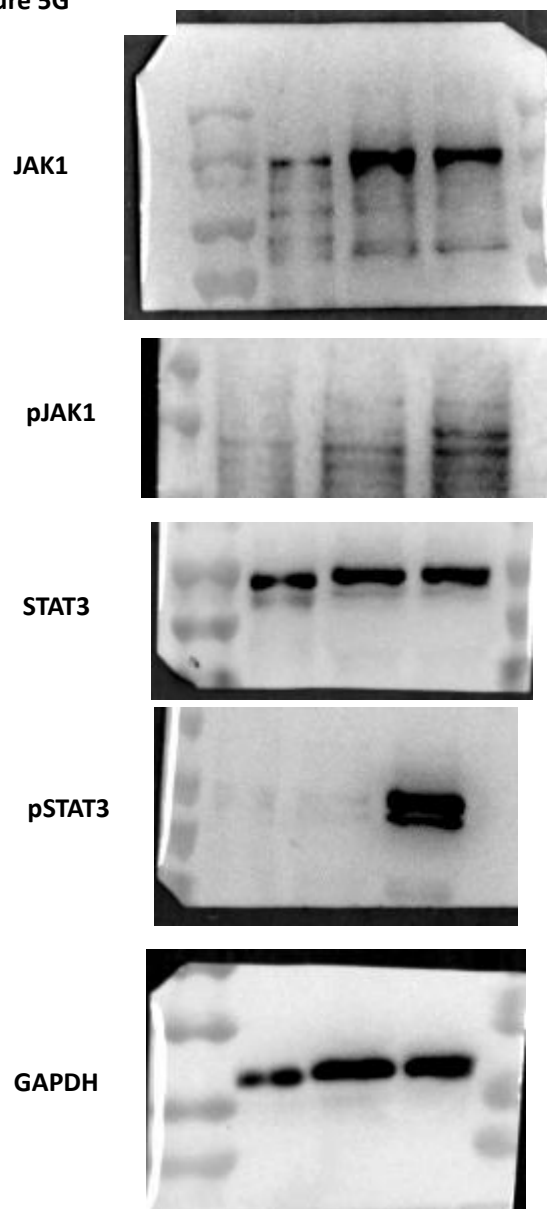


Figure 5I

