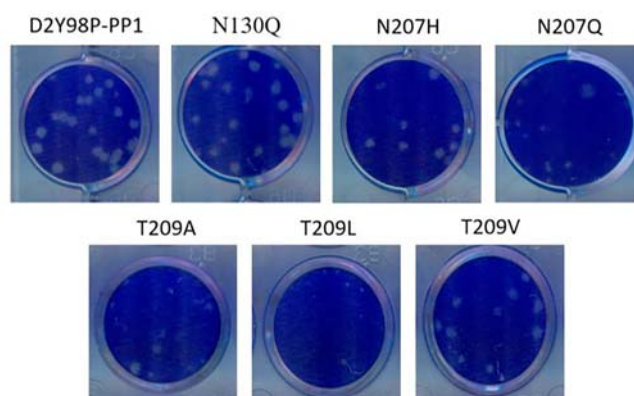
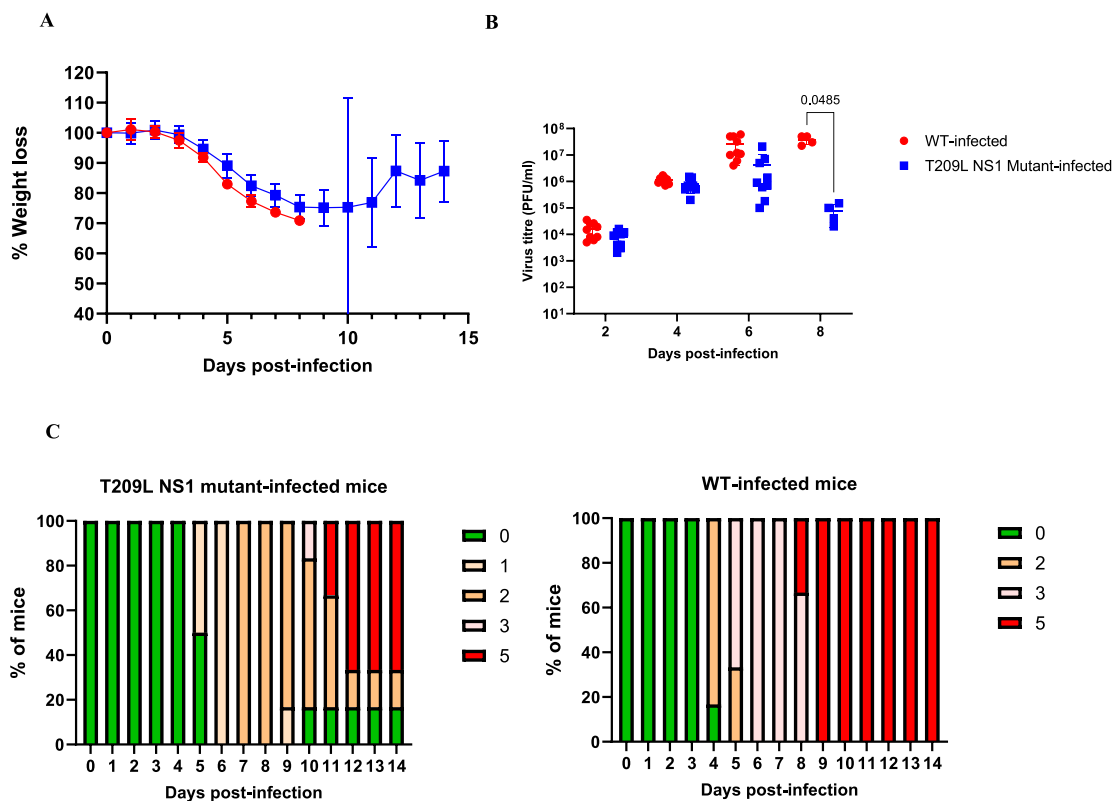


## Expanded View Figures



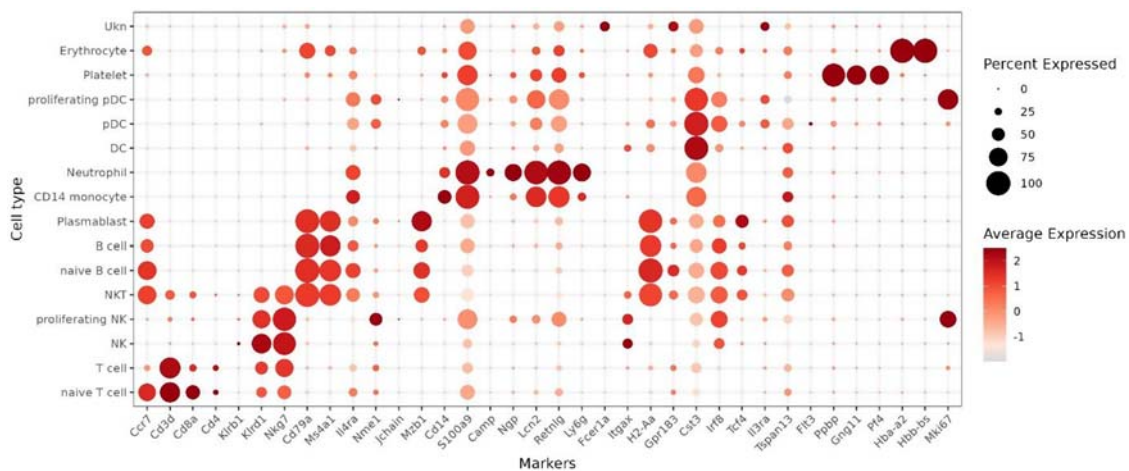
**Figure EV1. Plaque morphology of WT and de-glycosylated NS1 DENV mutants.**

The viruses were amplified in C6/36 cells and plaqued on BHK-21 cells. Data shown are representative of at least 2 independent biological repeats.

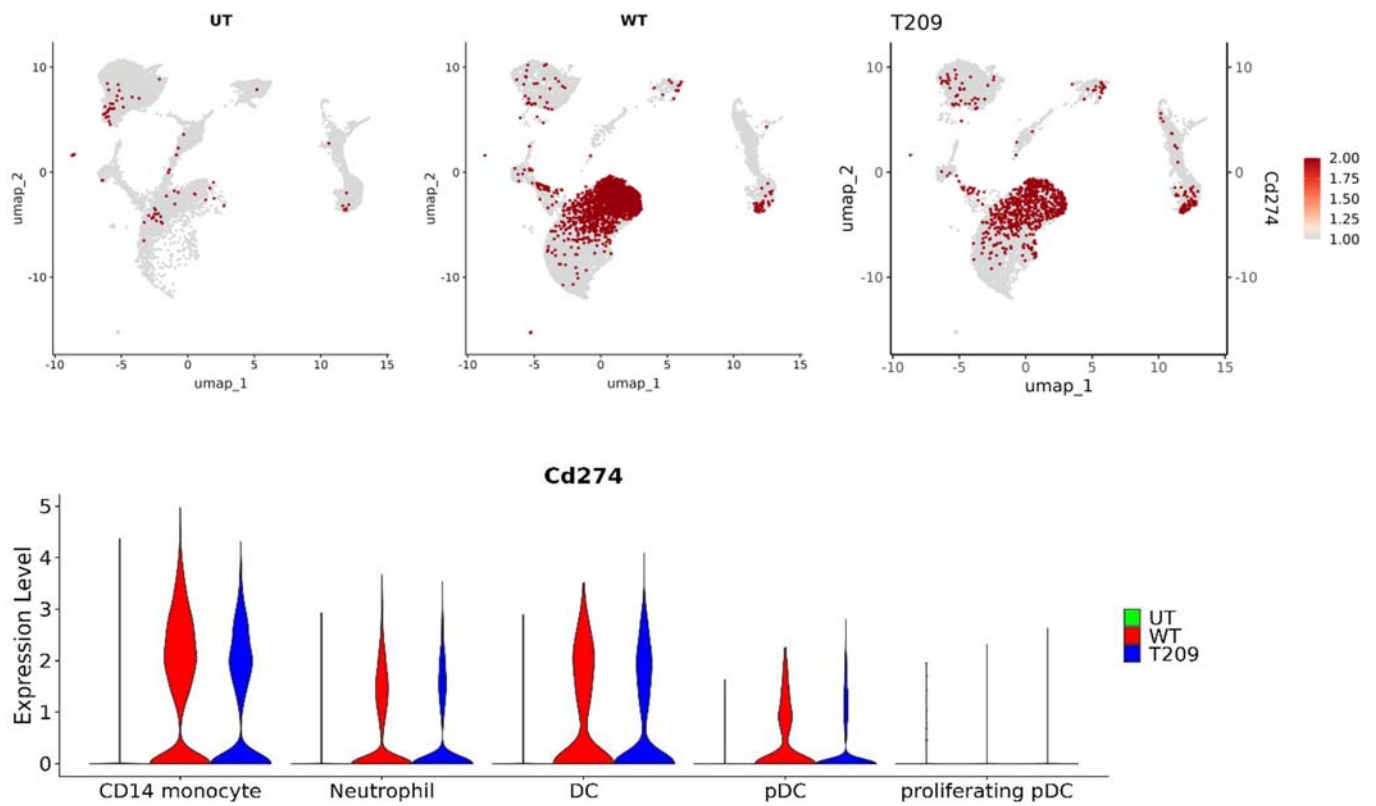


**Figure EV2. Infection profile of WT and T209L DENV in IFNAR-muMT mice.**

(A) Body weight profile ( $n = 9$ ). (B) Viremia titers were determined by plaque assay ( $n = 4-9$ ). (C) Clinical scores as described in the legend of Fig. 1 ( $n = 9$ ). Data shown are a combination of 2 independent repeats. All graphs were expressed as mean  $\pm$  SD. Data analysis were performed using two-way ANOVA Sidak's multiple comparisons test (B).



**Figure EV3.** Relative abundance of markers of immune cell clusters used for single cell RNAseq data analysis.



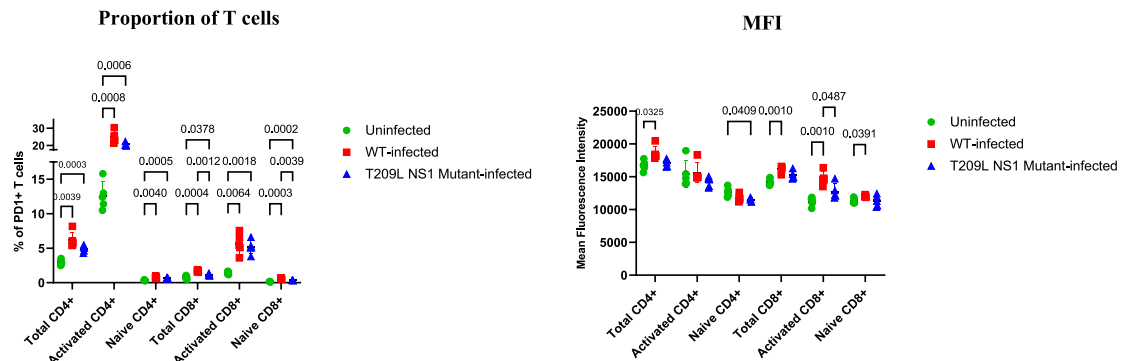
**Figure EV4. PD-L1 (CD274) gene expression in neutrophils, monocytes and dendritic cells in DENV-infected mice.**

The expression of PD-L1 gene in monocytes, neutrophils and dendritic cell subsets in WT- and T209L DENV-infected IFNAR<sup>-/-</sup> mice was determined by single cell RNAseq.

## MFI



## MFI



Flow cytometry analysis of circulating and splenic T cells harvested at day 3 p.i. from WT- or T209L NS1 DENV-infected IFNAR<sup>-/-</sup> mice ( $n = 5$ ). Percentages of PD-1<sup>+</sup> T cells and mean fluorescence intensity (MFI) of PD-1 expression on T cells. Data shown are from one biological repeat. All graphs were expressed as mean  $\pm$  SD. Data analysis were performed using two-way ANOVA Tukey's multiple comparisons test.