

Fig S5. T403A/T403A mice are highly susceptible to virus infection.

- a. Primary MEFs were pre-treated with 10 IU/ml IFN- β for 2 h, then infected with VSV-GFP (MOI=1) for 2 h. Cells were monitored with a fluorescence microscope at 12 h post infection. Scale bar=50 μ m.
- b. HME cells expressing wild-type, T404A, or T404E STAT2 were seeded at 8000 cells/well. The cells were exposed to VSV-GFP for 2 h, with or without pre-treatment with IFN- β (100 IU/ml). After 20 h, the expression of GFP was analyzed by fluorescence microscopy. Scale bar=50 μ m.
- c. Photos of WT/WT and T403A/T403A mice after VSV infection.
- d. WT/WT and T403A/T403A mice (n=4) were infected with VSV for 8 h and the induction of *IFNB* in different tissues was analyzed by qRT-PCR.
- e. WT/WT, T403A/WT and T403A/T403A mice (n=4) were infected with VSV for 5 days, the VSV genomic RNA in different organs was measured by qRT-PCR.
- f. Differential pathology of WT/WT and T403A/T403A mice in response to VSV. Hematoxylin and eosin staining of different tissues from the mice in (e). Scale bar=100 μ m.
- g. WT or STAT2 T403A mice were injected intravenously with 1×10^7 PFU of VSV or buffer. Four days post-infection (dpi), the brains were excised and the cells were analyzed by flow cytometry.
- h. Plasma from experiment (g) were analyzed by ELISA.

Data are shown as means $\pm$ SEM from two independent experiments. P-values were calculated using the paired ratio t-test (* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$, NS, not significant).

