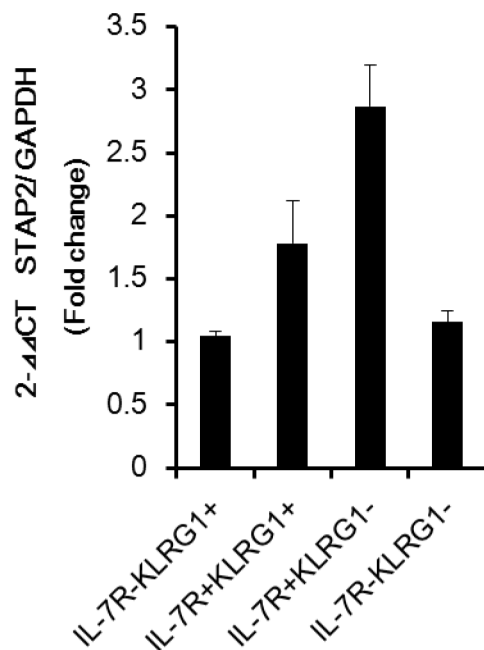
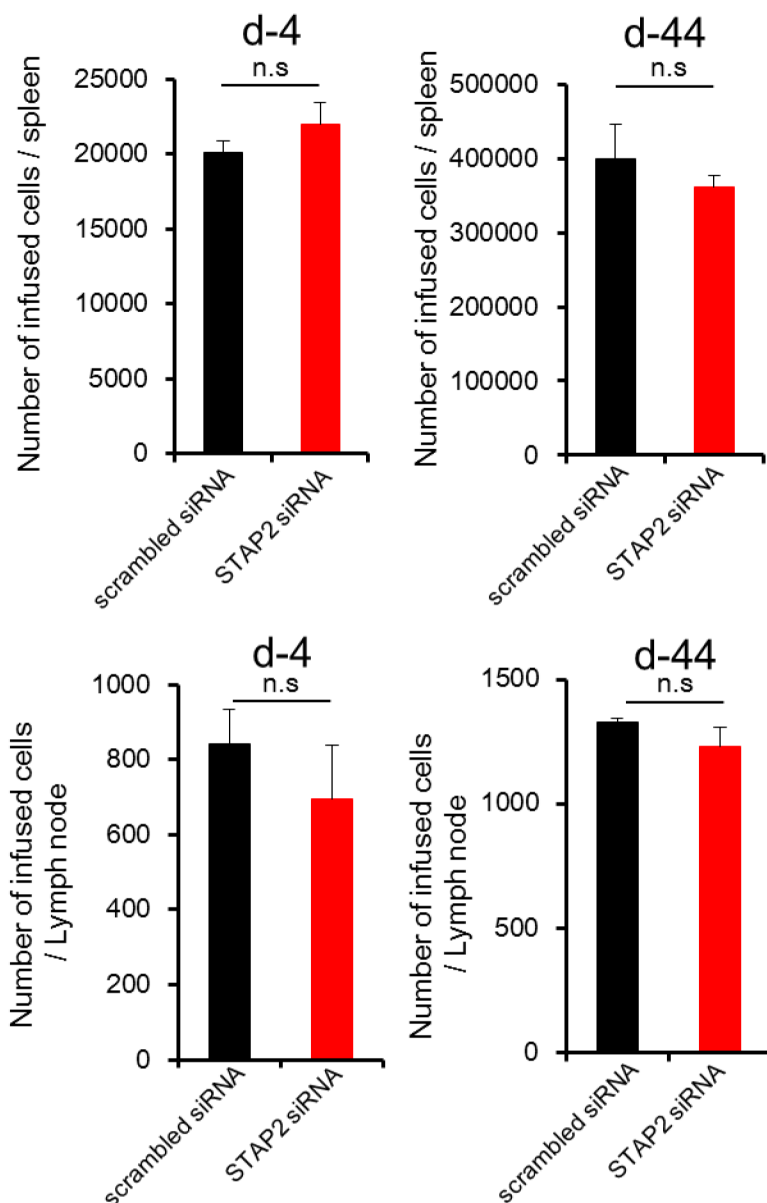


Signal-transducing adaptor protein-2 promotes generation of functional long-term memory CD8⁺ T cells by preventing terminal effector differentiation

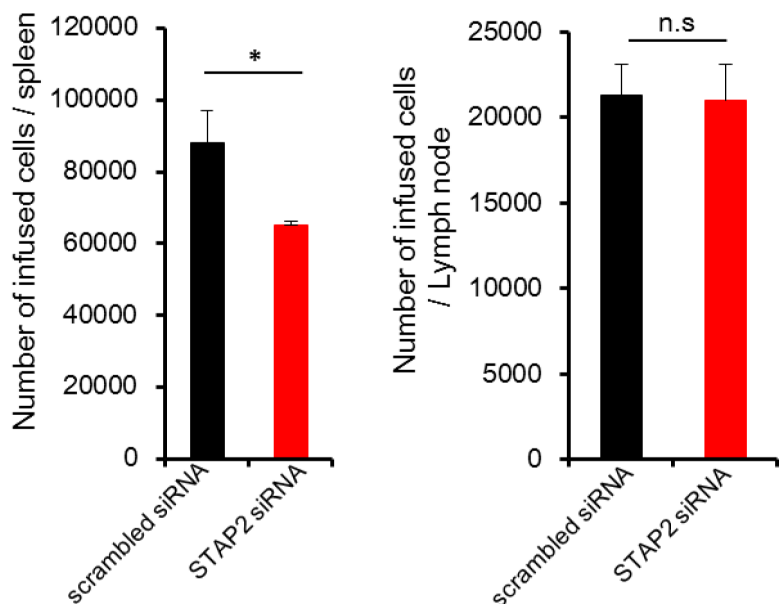
Supplementary Material



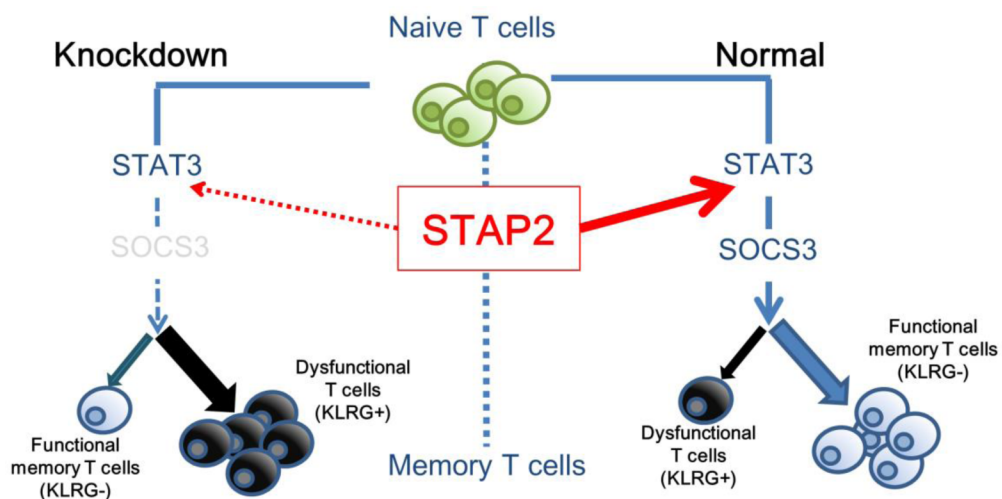
Supplementary Figure S1: Splenocytes derived from DUC18 mice were stimulated with mERK2 peptide for 3 days and then cultured in rIL-2 (10 IU/ml)-containing medium for 4 days. STAP2 expression in cultured cells was measured by RT-PCR.



Supplementary Figure S2: Splenocytes derived from DUC18 mice were stimulated with mERK2 peptide for 3 days, transduced with STAP2-specific siRNA or scrambled control siRNA by electroporation, and injected into BALB/c mice. At 4 or 44 days after infusion, the number of infused cells was examined. The results are representative of two to four experiments. Data are expressed as the mean \pm SD. * $p < 0.05$ is considered significant.



Supplementary Figure S3: Naïve CD8⁺ cells derived from DUC18 mice were transduced with STAP2-specific siRNA or scrambled control siRNA by electroporation, and injected into BALB/c mice. These BALB/c mice were then immunized with plasmids encoding mERK2 using a gene gun. At 44 days after vaccination, the number of infused cells was examined. The results are representative of two to four experiments. Data are expressed as the mean \pm SD. * $p < 0.05$ is considered significant.



Supplementary Figure S4: In normal T cells, enhancement of STAT3/SOCS3 signals by STAP2 leads the generation of functional memory CTLs. In contrast, STAP2 KD T cells result in the differentiation of dysfunctional CTLs in association with the attenuated STAT3/ SOCS3 signals.