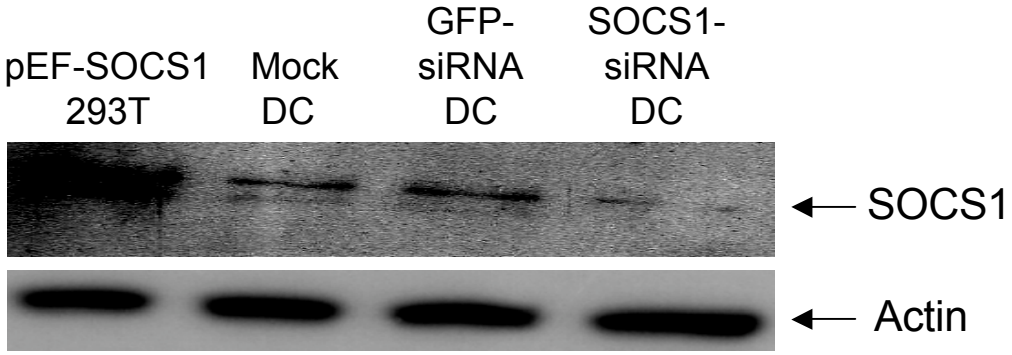
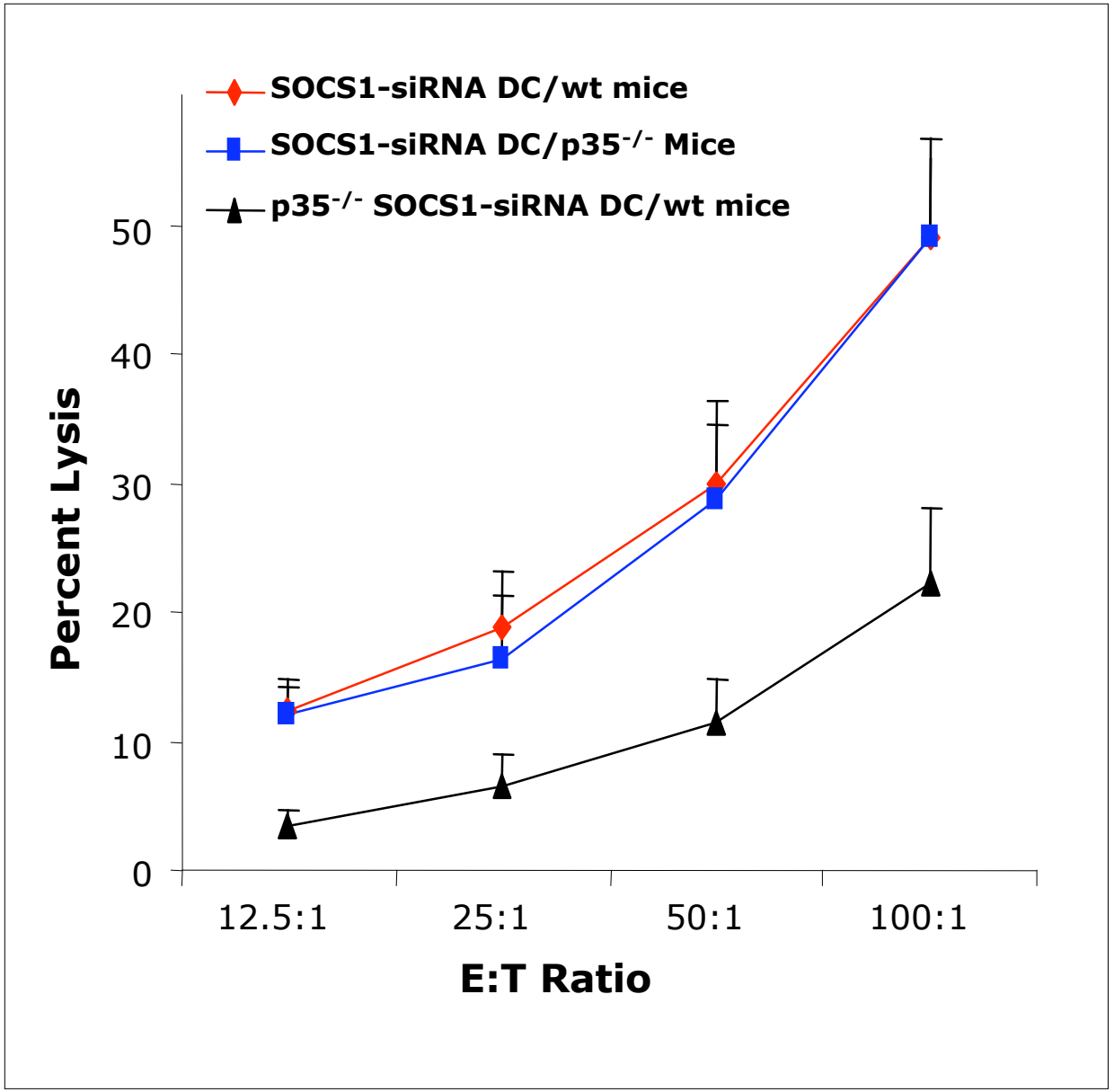
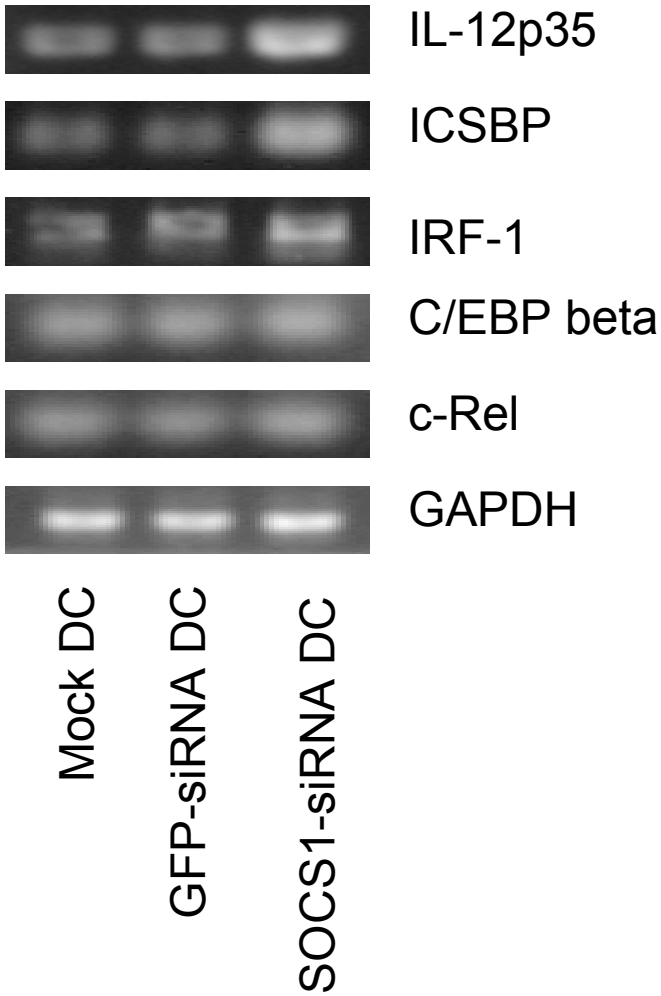
Supplemental Data



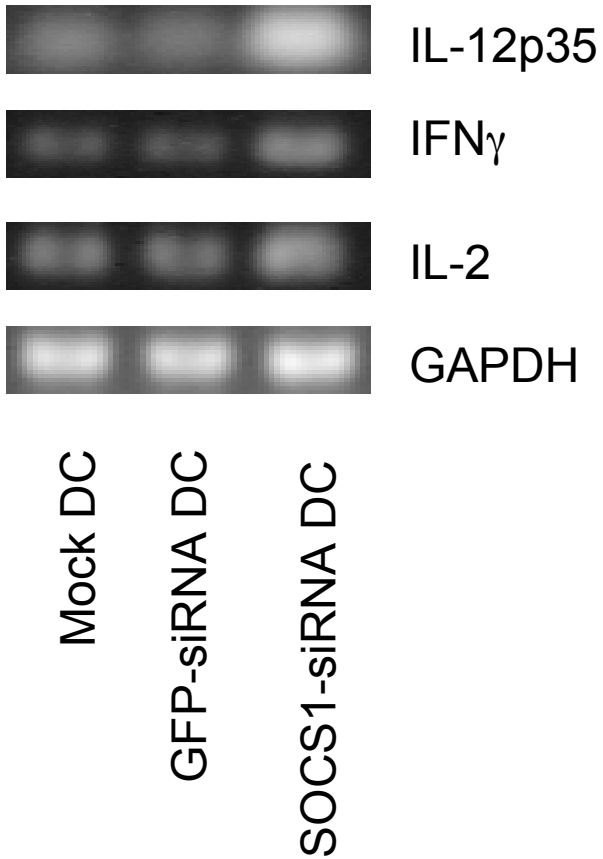
Supplemental figure 1



Supplemental figure 2



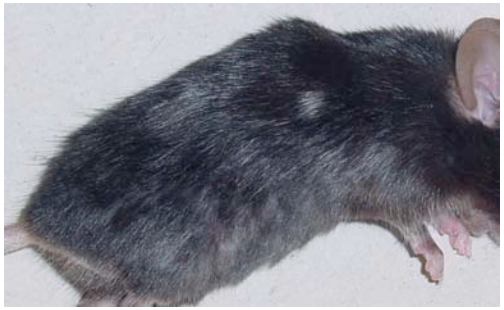
Supplemental figure 3



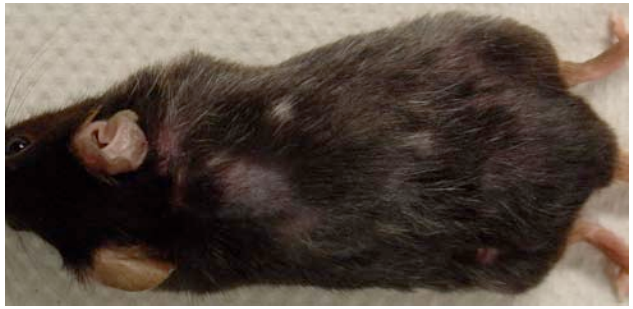
Supplemental figure 4

Vitiligo in SOCS1-siRNA DC mice with *in vivo* IL-12

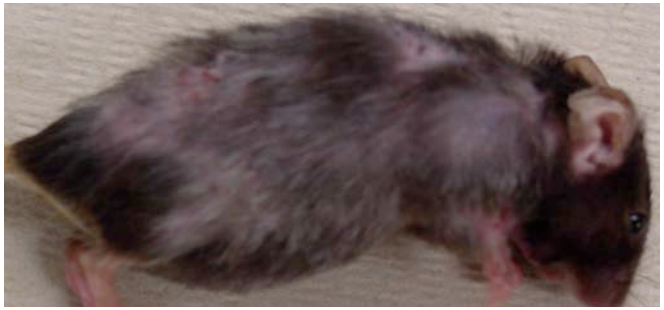
6 wks



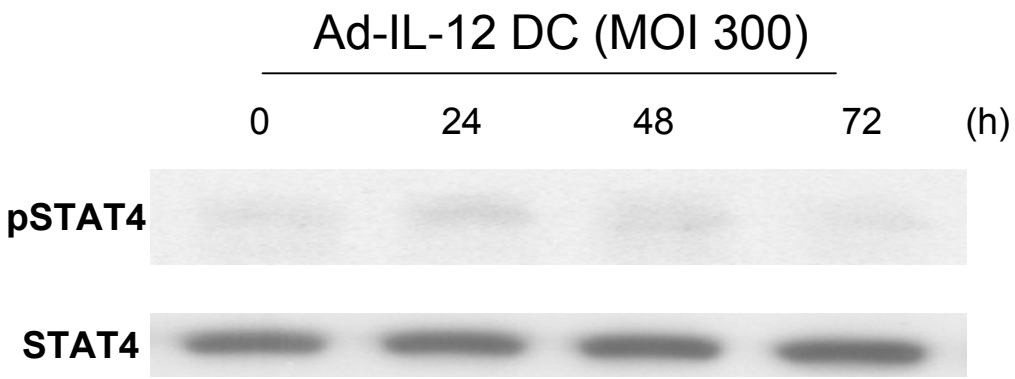
12 wks



20 wks



Supplemental figure 5



Supplemental figure 6

Legends for Supplemental Figures

Supplemental Figure 1. Western blotting of SOCS1 protein in transduced LV-SOCS1-siRNA DCs, LV-GFP-siRNA DCs or mock-transduced DCs after 6 hr stimulation with LPS (100 ng/ml) and anti-CD40. Lysate of 293T cells transfected with pEF-SOCS1-FLAG plasmid (kindly provided by D.J. Hilton) was used as positive control. Western blotting was performed using monoclonal anti-SOCS1 antibody (4H1) from MBL International Corp.

Supplemental Figure 2. Reduced potency to induce CTL activities by IL-12p35 KO DCs. IL-12p35 KO or wild-type C57BL/6 mice were immunized once with matured, LV-transduced wt or IL-12p35 KO DCs ($1.5x10^6$/mouse) pulsed with TRP2 peptide (50 μg/ml) and matured with LPS *ex vivo* (100 ng/ml). Two weeks later, splenocytes pooled from 2 or 3 immunized mice from each group were subjected to CTL assays. Cytotoxicities against $TRP2^+$ B16 of splenocytes pooled from groups of immunized mice were determined after *in vitro* restimulation with TRP2 peptide (50 μg/ml) for 5 days.

Supplemental Figure 3. IL-12 and related gene expression in SOCS1-siRNA DCs in vitro. BM-DCs were transduced with lentiviral vectors, and stimulated with LPS and anti-CD40 for 6h. mRNA levels of IL-12p35, ICSBP, IRF-1, C/EBP-beta and c-Rel in these DCs were examined by RT-PCR. GAPDH was used as internal control. Experiments were repeated twice with similar

results.

Supplemental Figure 4. Cytokine expression in DCs of immunized mice. Groups of mice were immunized with transduced DCs matured with LPS, followed by in vivo LPS (30 mg/mouse) stimulation once. mRNA levels of IL-12p35, IL-2 and IFNγ in CD11c+ DCs isolated from the draining lymph nodes of immunized mice were examined by RT-PCR. GAPDH was used as internal control. Experiments were repeated twice with similar results.

Supplemental Figure 5. Development of autoimmune vitiligo at different days after immunization with SOCS1-siRNA DC plus *in vivo* stimulation with a low dose of IL-12 3 times.

Supplemental Figure 6. Western blotting of Stat4 and phosphorylated Stat4 (pStat4) in Ad-IL-12-transfected BM-DCs (MOI 300, $1x10^6$ cells/ml) for 0, 24, 48 or 72 hours after transfection. BM-DCs were cultured in the presence of GM-CSF and IL-4.