

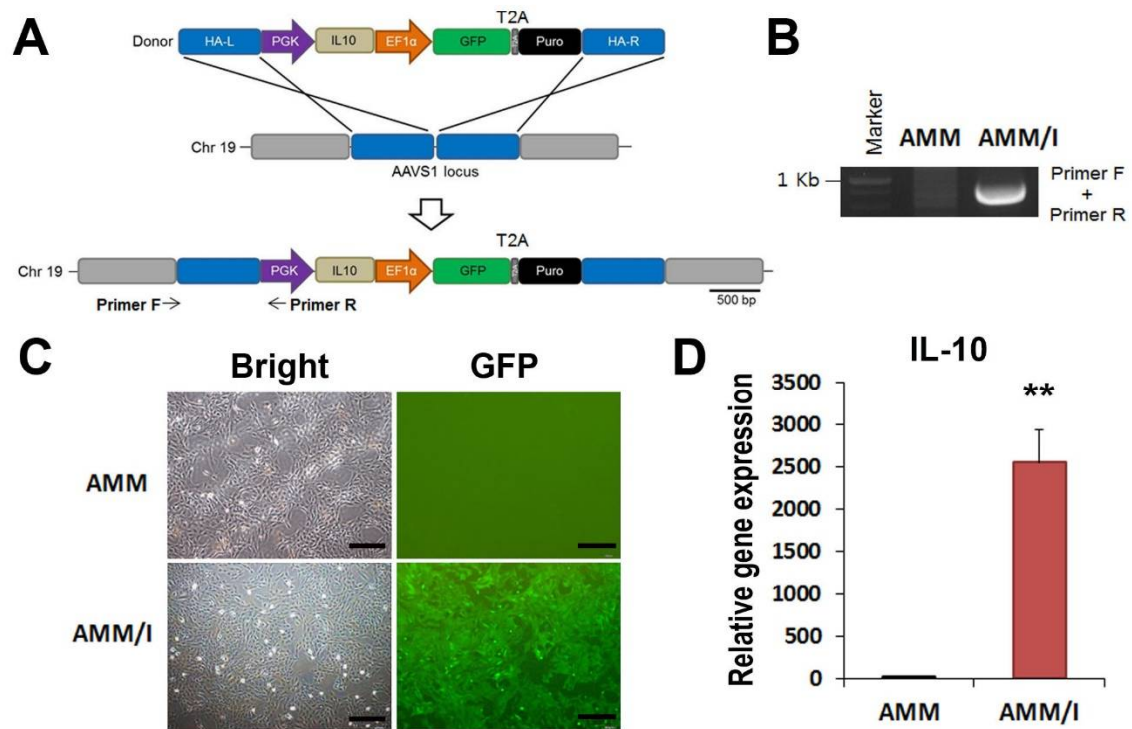
Supplementary Data

Supplementary materials and methods

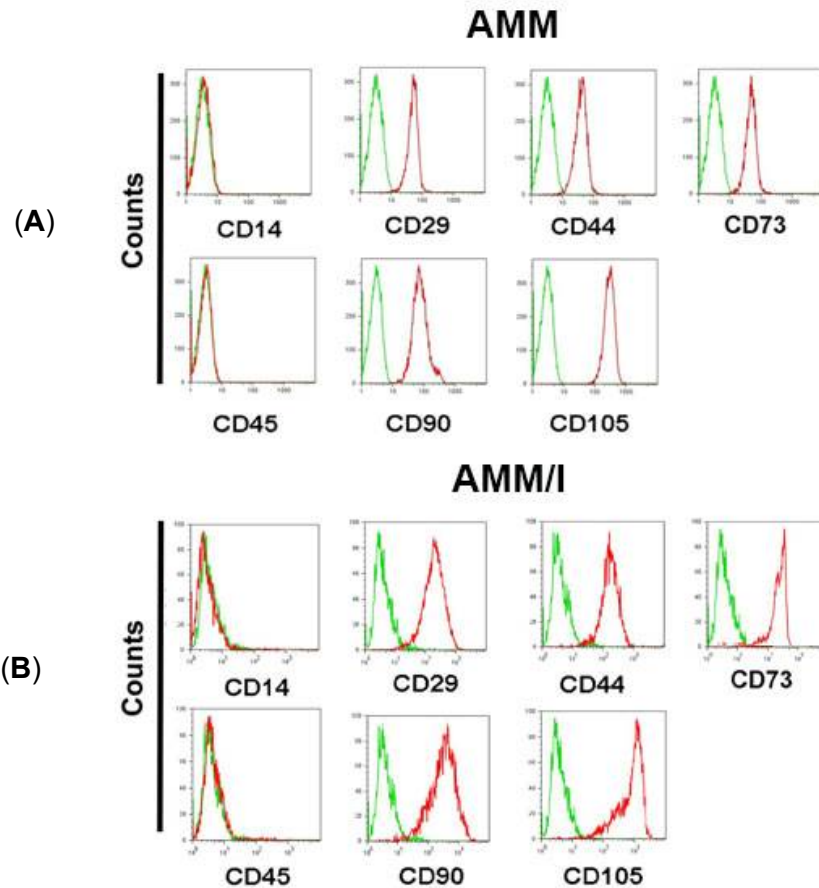
Cell proliferation assays

Mouse CD3⁺ splenocytes were isolated using MACS (Miltenyi Biotec, Bergisch Gladbach, Germany) and plated in triplicate in 96-well plates at 2×10^3 cells per well. The cells were starved with 0.1 % FBS for 24 h and then treated with three kinds of culture medium, AMM, AMM/I, or 10 % serum (control). After treatment, the cell proliferation was measured using a CCK-8 assay kit (Dojindo, Japan). The CCK-8 assay kit was treated with DMEM, and then 100 μ l was added to each well and they were incubated for 18 h at 37 °C. The absorbance was measured at 450 nm with a spectrometer.

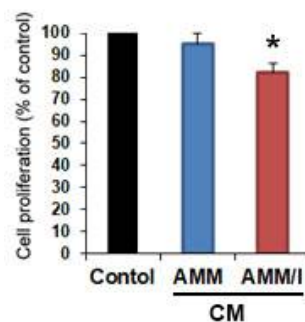
Supplementary Figure Legend



Supplementary Figure S1. The generation of an AMM/I cell line using TALEN gene editing. (A) A schematic diagram of the donor vector carrying IL-10 donor plasmid DNA. The expression cassette containing the PGK promoter-driven IL-10 and EF1α promoter-driven GFP-T2A-puromycin was inserted into the AAVS1 site via homology-directed repair (HR). The locations of the primers for junction detection are indicated (primers F and R). Abbreviations: HA-L, left homology arm; HA-R, right homology arm; PGK, phosphoglycerate kinase promoter; EF1α, elongation factor-1 alpha promoter; Puro, puromycin. (B) The success of the insertion of the donor plasmid was confirmed in the control AMM and AMM/I using a junction PCR technique. (C) A GFP expressing AMM/I. The transfected cells were selected based on puromycin, followed by FACS sorting. Bars = 500 μm. (D) The expression levels of IL-10 were examined using qRT-PCR. ** $p < 0.01$, $n = 4$.



Supplementary Figure S2. The characteristics of AMM/I. (A) A microscopic view of AMM/I (passage 3) (bar: 200 μ m). (B) Representative FACS surface markers of the AMM exhibiting MSC-specific cell surface markers. A FACS analysis showed that the AMM minimally expressed hematopoietic cell markers (CD14 and CD45) and MHC class II molecules (HLA-DR), but expressed high levels of the MSC-specific markers CD29, CD44, CD73, CD90, and CD105. The green color represents the isotype control, and the red color represents the specific monoclonal antibody.



Supplementary Figure S3. T cell proliferation assay. The effects of AMM/I on CD3+ T cells

proliferation are shown. T cells treated with 10 % fetal bovine serum (FBS) were used as the control. Cell counts were conducted after one day of culture. *p <0.05, n = 5 per group.