

Supplementary Information

Efficient Generation, Purification, and Expansion of CD34⁺ Hematopoietic Progenitor Cells from Nonhuman Primate Induced Pluripotent Stem Cells

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Inventory of Supplementary Information

Supplemental Methods

- There are two Supplemental Methods

Supplemental Data/Ordering relationships as follows:

Figure 5, related to Figure S1

Supplemental Data

- Supplemental Figure

There is 1 Supplemental Figure which is linked the main figures and related to the main figures as described below.

SUPPLEMENTAL METHODS

Isolation and culture of macaque peripheral blood CD4⁺ T lymphocytes

Blood from pigtail macaque donors was layered on Lymphocyte Separation Medium (Cellgro), and mononuclear cells isolated according to the manufacturer's instructions. CD4⁺ cells were isolated with the NHP CD4 micro-bead kit and MACS magnetic cell sorting according to the manufacturer's instructions (Miltenyi) and cultured in RPMI (Life Technologies) with 10% FBS, 25 mM HEPES, 50 μ M 2-mercaptoethanol, 1% each of non-essential amino acids, L-glutamine, sodium pyruvate and penicillin/streptomycin, IL-2 (100 U/mL) and IL-7 (5 ng/mL).

Macrophage-type cell culture

MniPSC myeloid cells were collected from methylcellulose and were replated in DMEM (Life Technologies) containing 20% FBS and G-CSF (10 ng/mL).

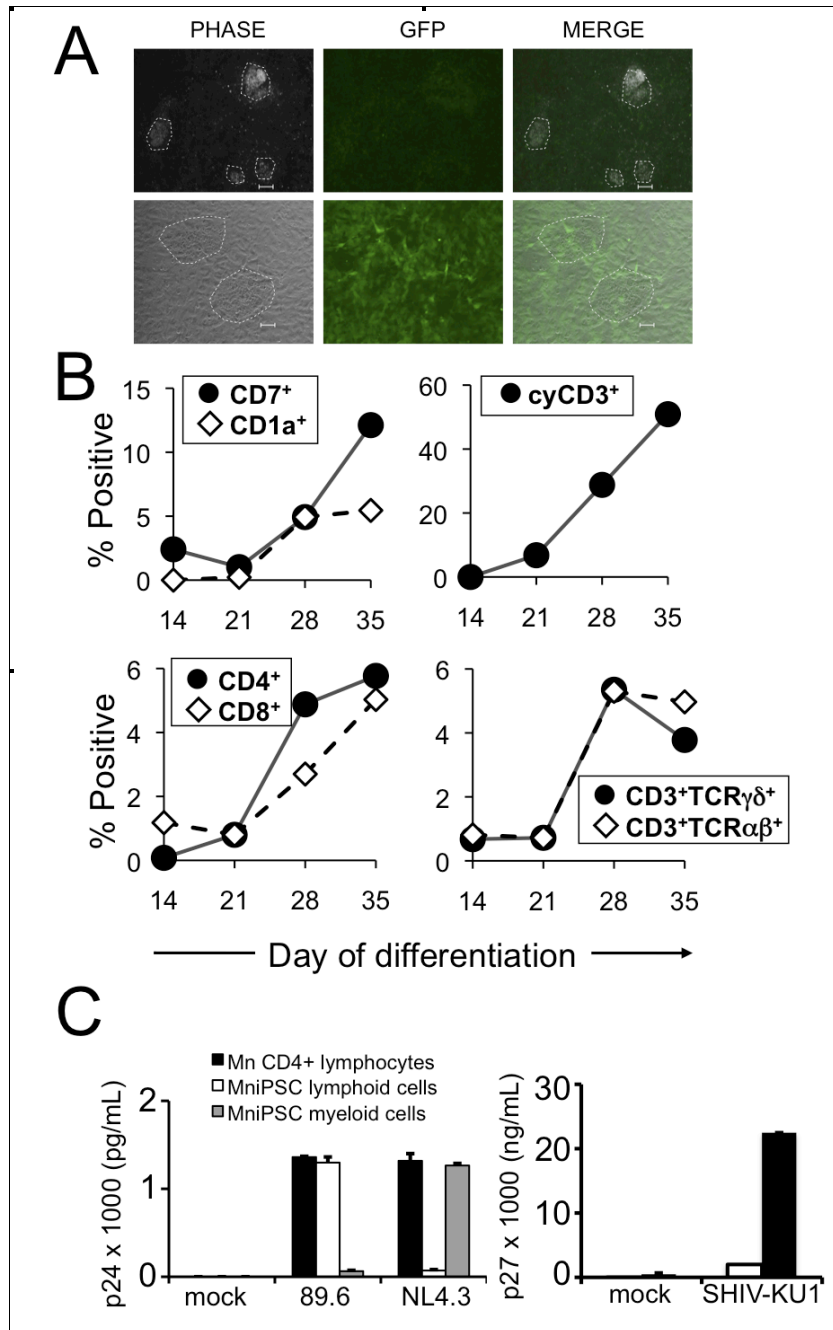


Figure S1. Lymphoid differentiation of CD34⁺ cells generated from MniPSCs (Related to Figure 5). **(A)** MniPSC-derived GFP⁺ lymphoid colonies on OP9DL1GFP stromal cells. **(B)** Detection of T lymphocyte phenotype markers by flow cytometry in MniPSC lymphoid cultures over the course of differentiation. The time points are relative to plating of the MniPSC derived CD34⁺ cells in OP9DL1GFP co-culture. **(C)** Quantification of *Left Panel*: p24 HIV-1 viral antigen released into culture media of HIV-1 89.6 and NL4.3 infected cells. *Right Panel*: Quantification of p27 SIV viral antigen released into culture media of SHIV infected cells. Values represent mean ± SD from quadruplicate samples.