

Supplemental Information

Engineering of human induced pluripotent stem cells via human artificial chromosome vectors for cell therapy and disease modeling

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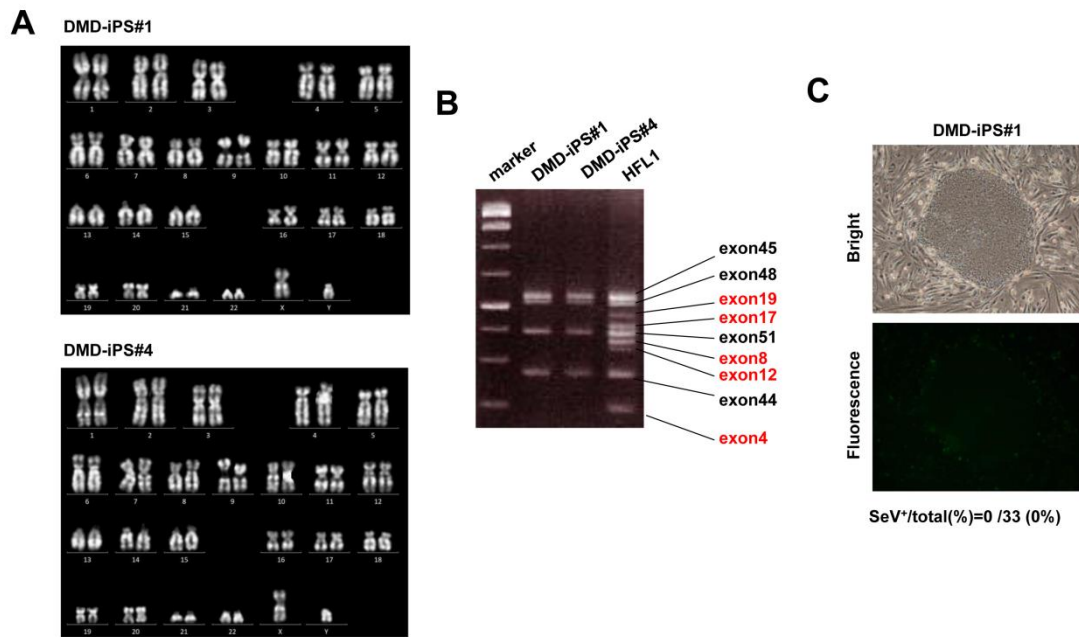


Figure S1 Characterization of DMD-iPSCs induced by a Sendai virus vector with Yamanaka factors.

(A) QH staining of DMD-iPSC lines. (B) Multiplex PCR analysis of DMD-iPSC lines and normal human fibroblasts (HFL1). (C) Immunofluorescence staining using an anti-SeV polyclonal antibody in the DMD-iPSC line.

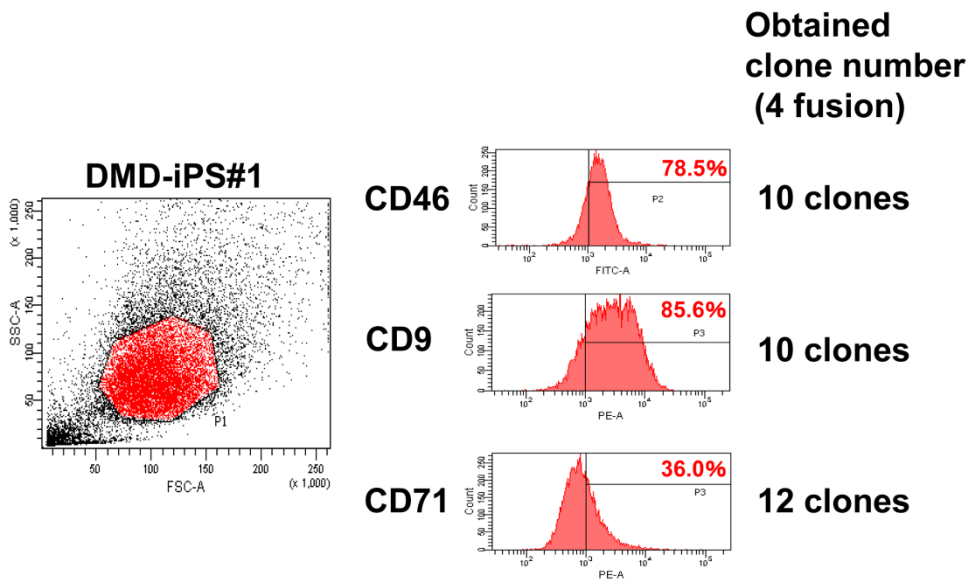


Figure S2 Transfer of DYS-HAC2 into DMD-iPSCs via MV-MMCT using three types of MV-H protein (CD46, CD9, and CD71).

DMD-iPS DYS-HAC2-derived HiDEMs

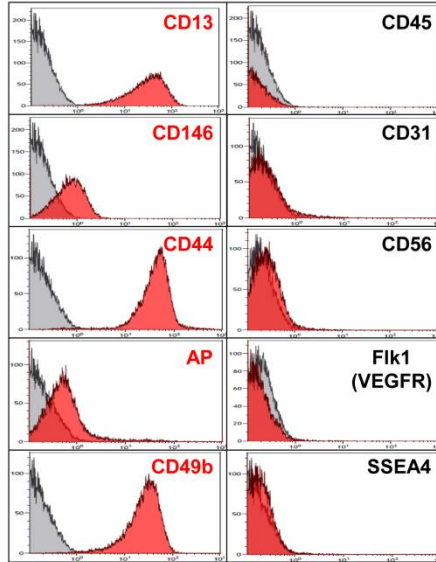


Figure S3 Characterization of DMD-iPS DYS-HAC2-derived HiDEMs by FCM.

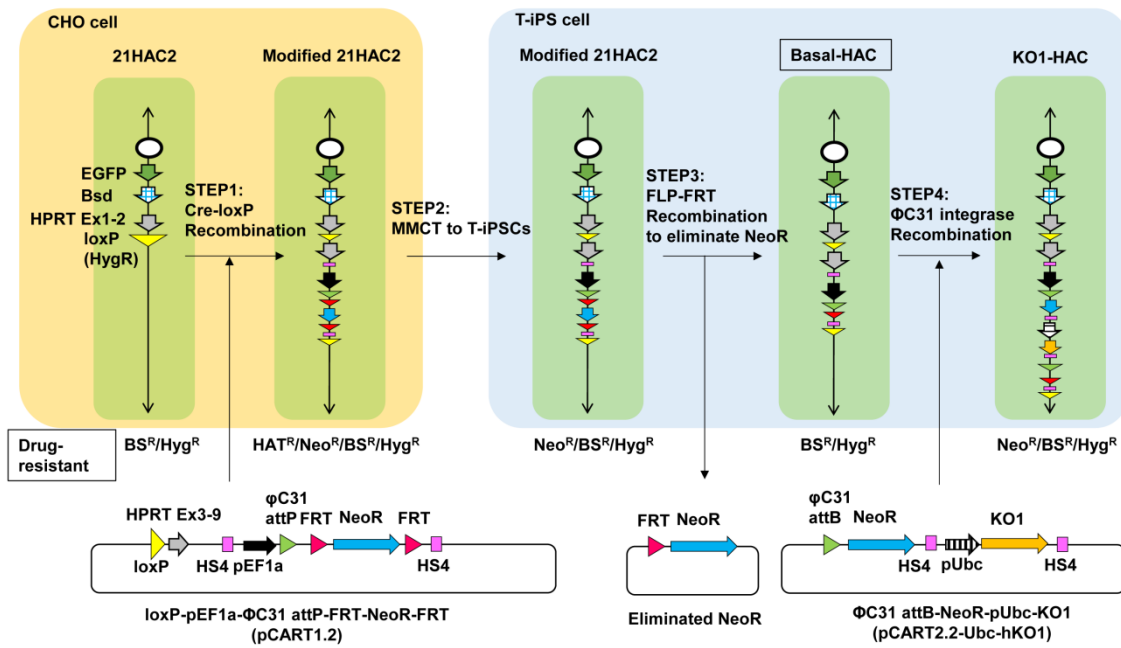


Figure S4 Schematic diagram of the generation of versatile T-iPSCs with the basal-HAC.

Table S1 Summary for type of MV-H and PCR results in DMD-iPS (DYS-HAC) clones obtained via MV-MMCT

Clone No.	Type of MV-H	NeoF/DloxP3L
1	CD9	+
2	CD9	+
3	CD9	-
4	CD9	+
5	CD46	+
6	CD46	+
7	CD46	+
8	CD46	+
9	CD71	+
10	CD71	-
11	CD71	-
12	CD71	-
13	CD71	+
14	CD9	-
15	CD9	+
16	CD9	-
17	CD9	+
18	CD9	+
20	CD46	-
21	CD46	+
23	CD46	-
26	CD71	-
27	CD71	-
29	CD71	-
30	CD71	-
31	CD71	+
32	CD46	-

Table S2 Summary for PCR results in T-iPS clones with KO1 (Kusabira Orange 1)

T-iPS clone No.	EF1a Fw/NeoR Rv
KO1	+
KO2	+
KO3	+
KO4	+
KO5	+
KO6	+
KO7	+
Basal-HAC	-
modified 21HAC2	-