

Title: Repeated human deciduous tooth-derived dental pulp cell reprogramming factor transfection yields multipotent intermediate cells with enhanced iPS cell formation capability

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## Supplementary Figure Legends:

**Figure S1:** (i) Typical iPSC morphology of the HDDPC-derived iPSC colony derived from one of 12 lines generated after quadruple transfections. (ii), (iii) Morphology of the HDDPC-derived iPSCs derived from the other two of 12 lines generated after quadruple transfections. These two lines failed to show typical iPSC morphology. Bar = 500  $\mu\text{m}$ .

**Figure S2:** RT-PCR analysis of mRNA expression for endogenous *OCT3/4* and *SOX2*. Lanes ① Primary HDDPCs, ② HDDPCs after the single transfection, ③ HDDPCs after the double transfection, ④ HDDPCs after the triple transfection, ⑤ no template control (designated as –RT), and ⑥ iPSCs established from HDDPCs in our laboratory<sup>11</sup> (used as positive control). PCR primers are listed in Supplementary Table 1. M, 100-bp ladder markers.

**Figure S3:** RT-PCR analysis of mRNA expression for endogenous *NANOG* and *KLF4*. Lanes ① Primary HDDPCs, ② HDDPCs after the single transfection, ③ HDDPCs after the double transfection, ④ HDDPCs after the triple transfection, ⑤ no template control (designated as –RT), and ⑥ iPSCs established from HDDPCs in our laboratory<sup>11</sup> (used as positive control). PCR primers are listed in Supplementary Table 1. M, 100-bp ladder markers.

**Figure S4:** RT-PCR analysis of mRNA expression for endogenous *TNSALP* and *GAPDH*. Lanes ① Primary HDDPCs, ② HDDPCs after the single transfection, ③ HDDPCs after the double transfection, ④ HDDPCs after the triple transfection, ⑤ no template control (designated as –RT), and ⑥ iPSCs established from HDDPCs in our laboratory<sup>11</sup> (used as positive control). PCR primers are listed in Supplementary Table 1. M, 100-bp ladder markers.

## Supplementary Table Legend:

**Table S1:** Primer sets used for RT-PCR analysis.

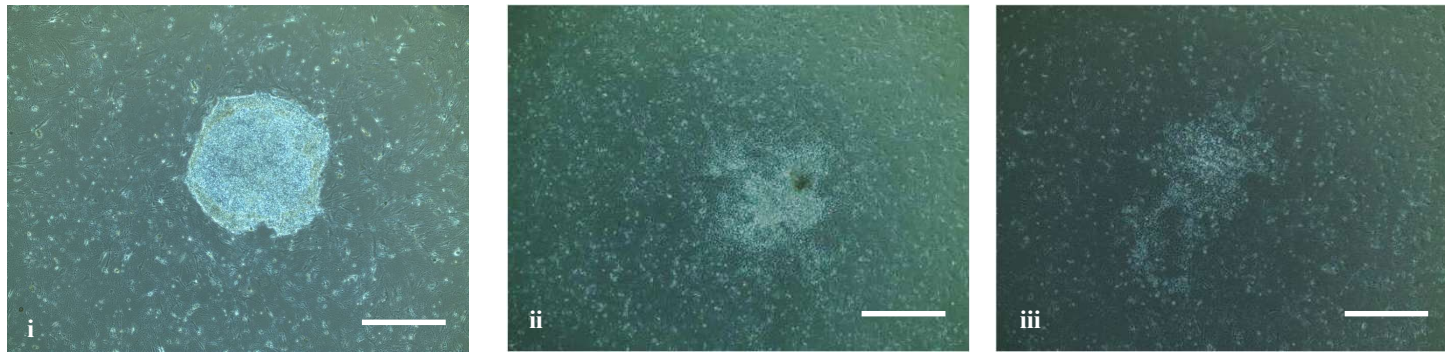


Figure S1

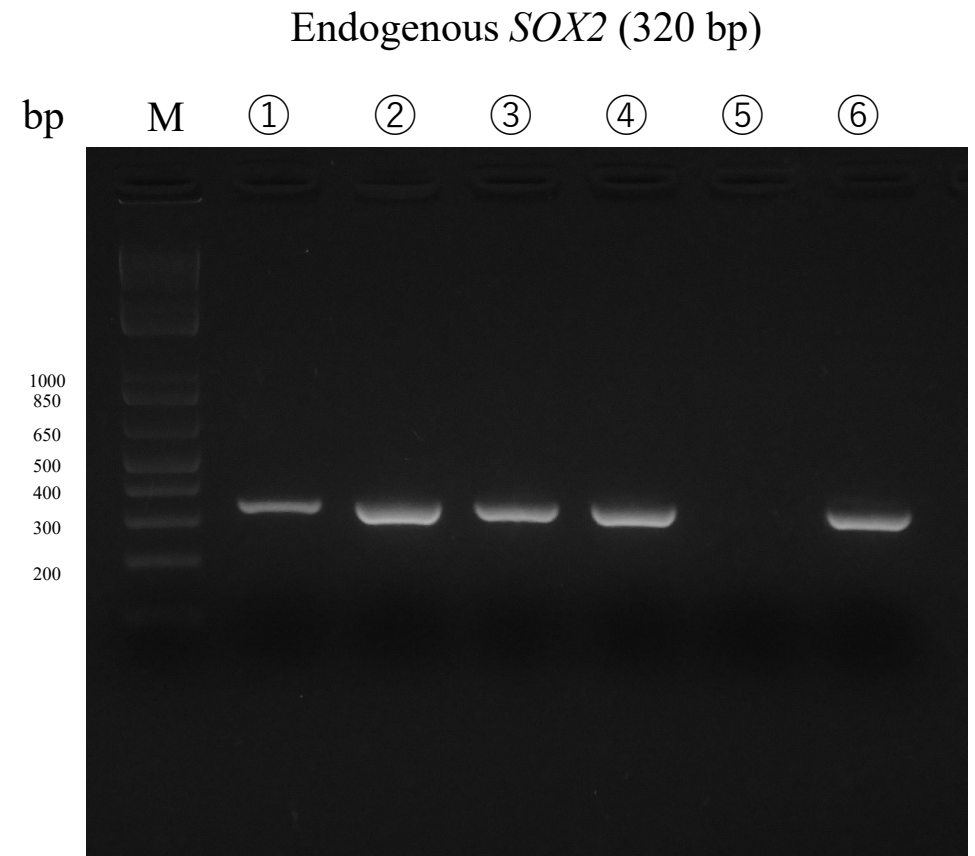
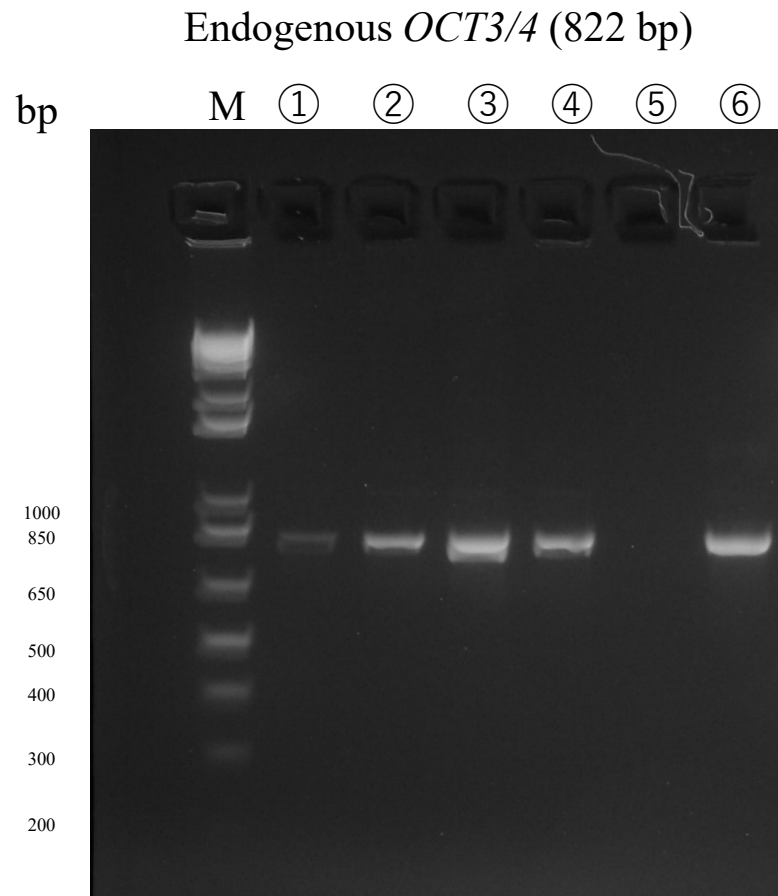


Figure S2

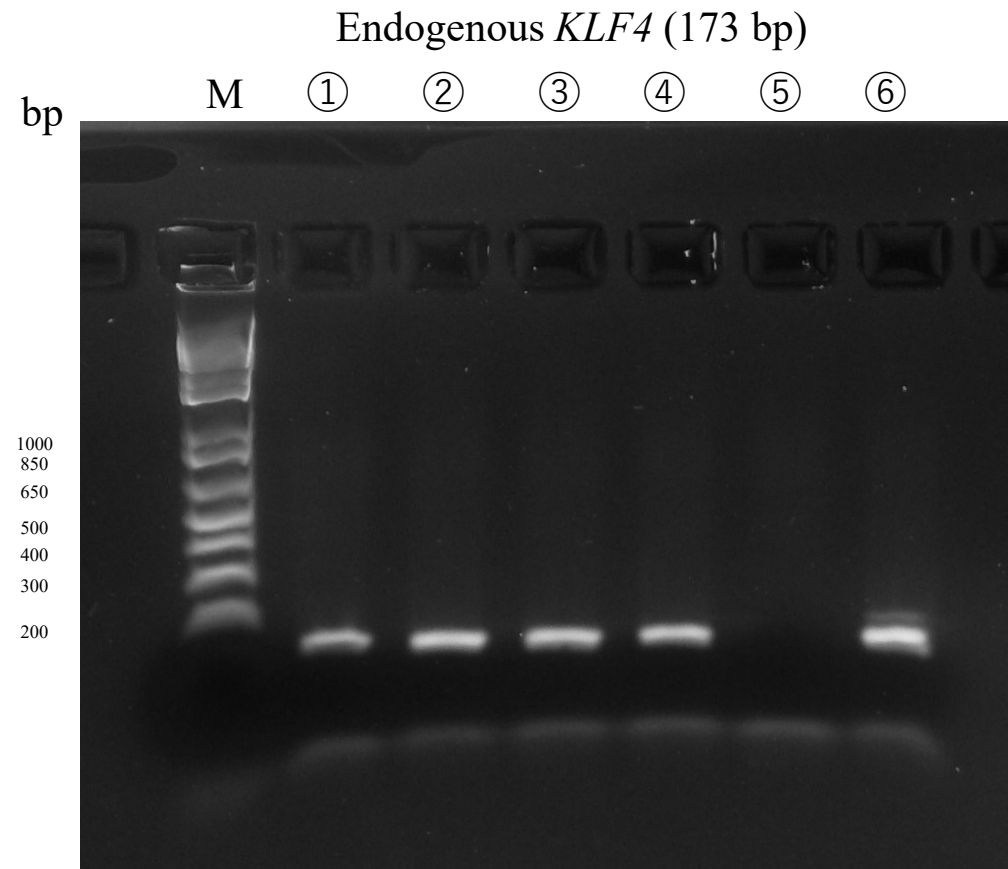
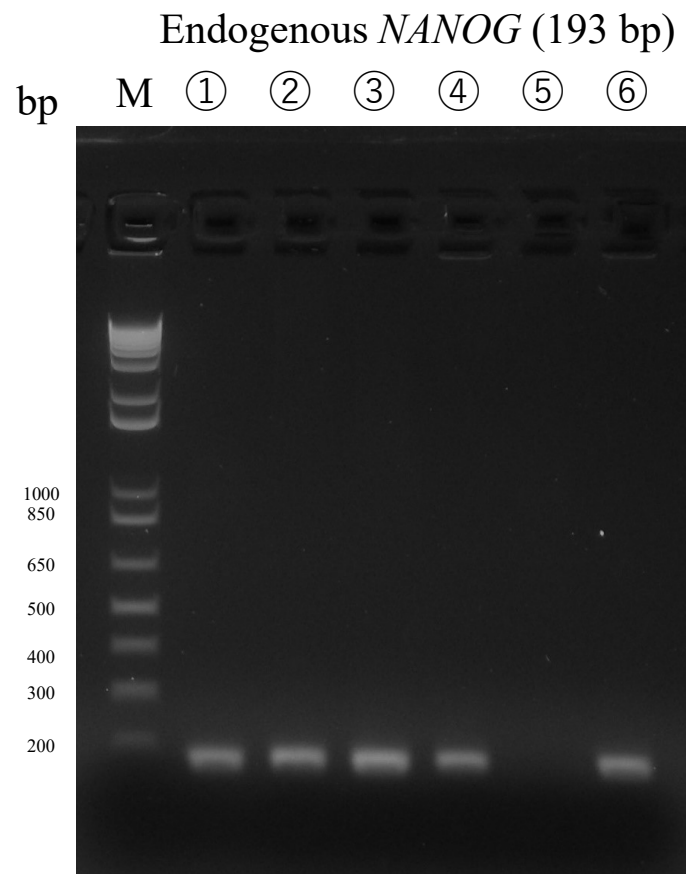


Figure S3

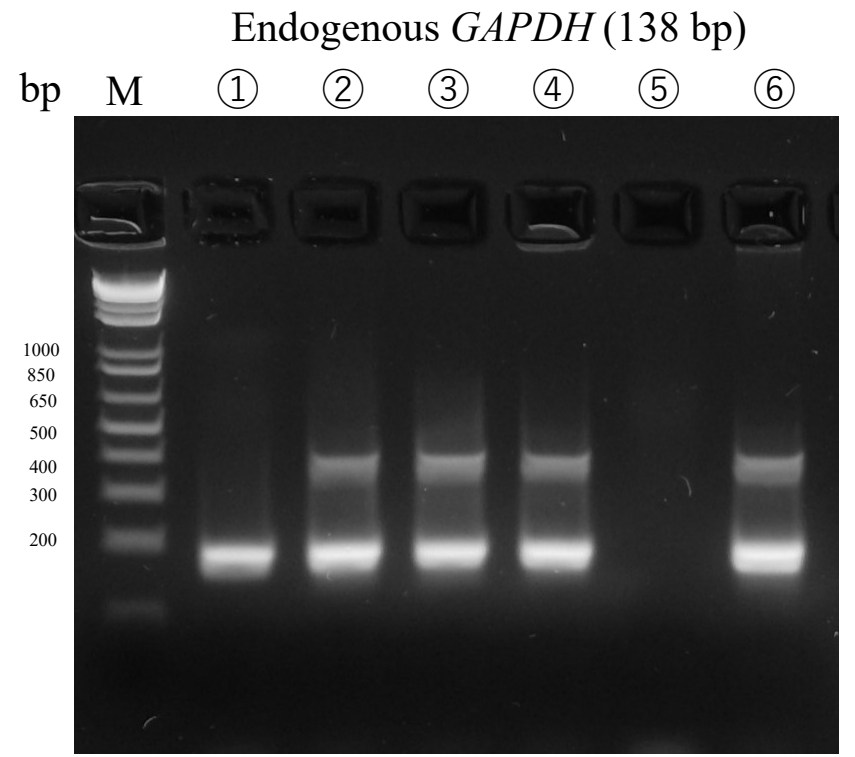
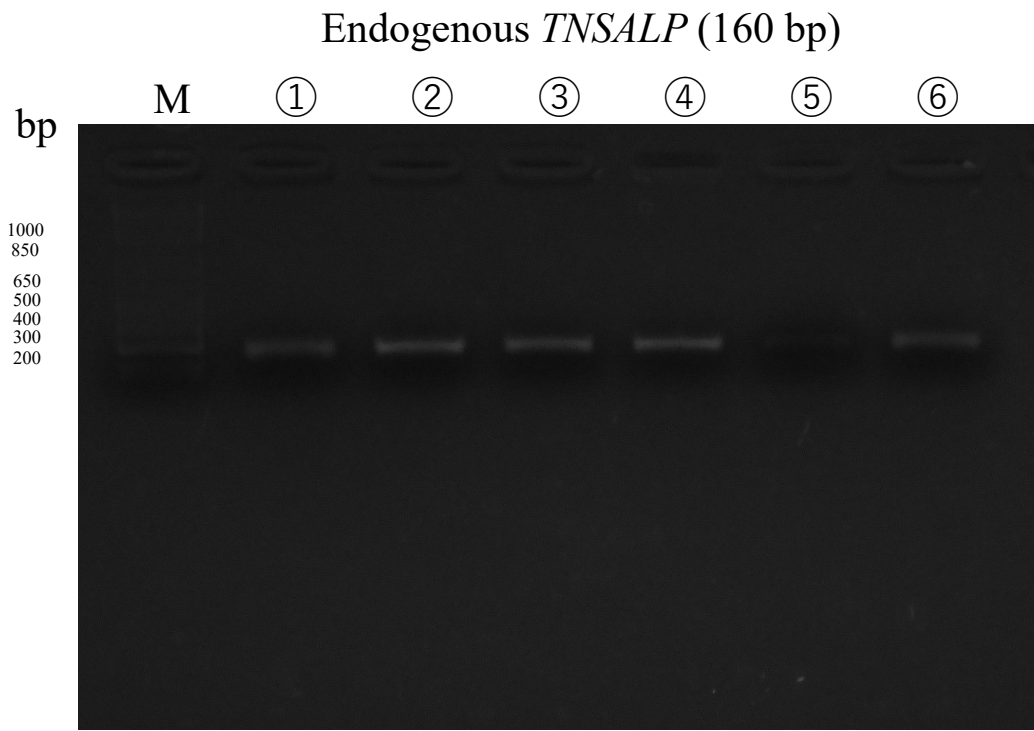


Figure S4

Table S1: Primer sets used for RT-PCR analysis

| Gene          | Forward Primer (5'-3') | Reverse Primer (5'-3') | Product Size (bp) | Reference |
|---------------|------------------------|------------------------|-------------------|-----------|
| <i>OCT3/4</i> | ATTTCACCAGGCCCGGCT     | GCTGATCTGCTGCAGTGTGGGT | 822               | Ref. 11   |
| <i>SOX2</i>   | AGGACCAGCTGGGCTACCCG   | GGCGCCGGGAGATACATGC    | 320               | Ref. 11   |
| <i>NANOG</i>  | TTGGAAGCTGCTGGGGAAG    | GATGGGAGGAGGGAGAGGA    | 193               | Ref. 27   |
| <i>KLF4</i>   | CGTGCTGAAGCGTCGCTGA    | GGGTGCACGAAGAGACCGCC   | 173               | Ref. 28   |
| <i>TNSALP</i> | TGGCCCCATGCTGAGTGACAC  | TGGCGCAGGGGCACAGCAGAC  | 160               | Ref. 29   |
| <i>GAPDH</i>  | GCACCGTCAAGGCTGAGAAC   | TGGTGAAGACGCCAGTGGGA   | 138               | Ref. 27   |