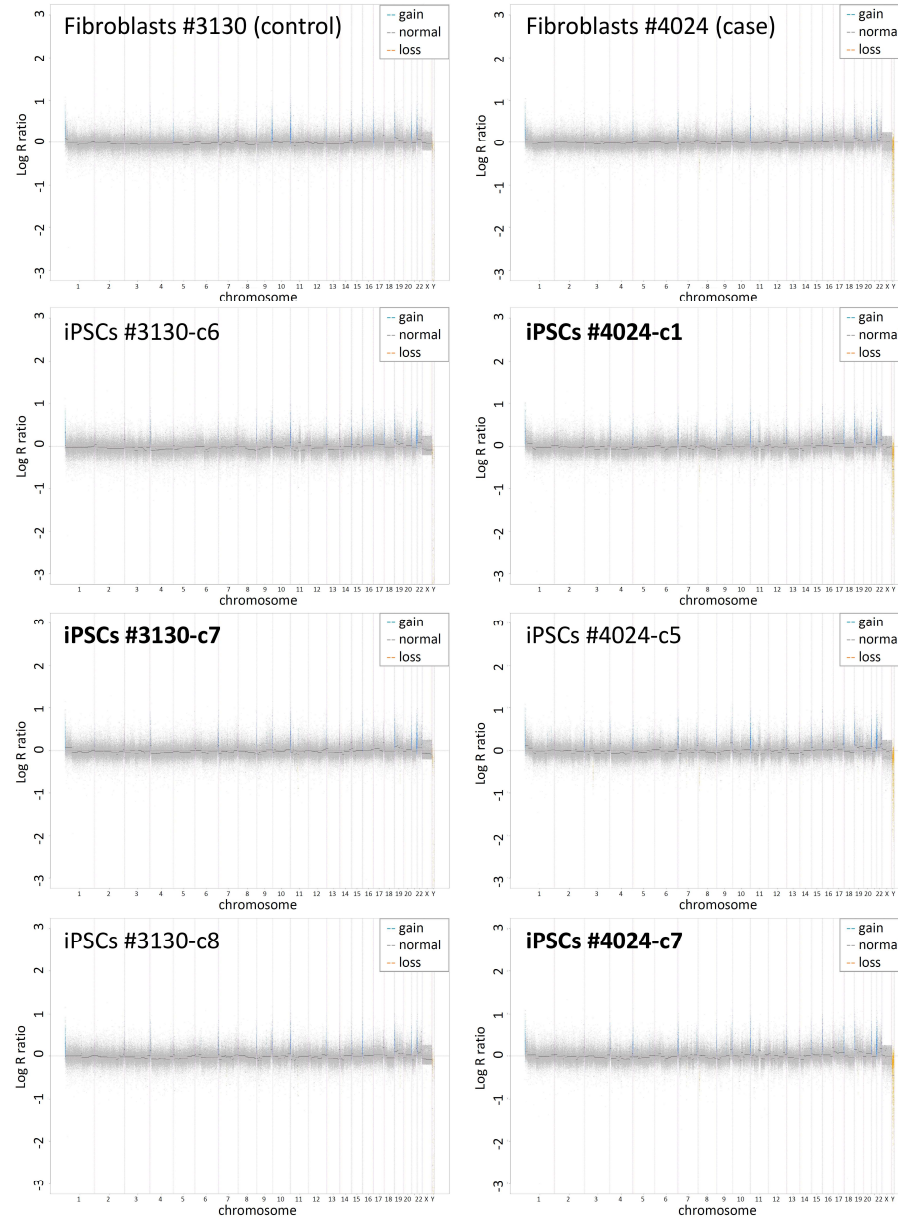


A

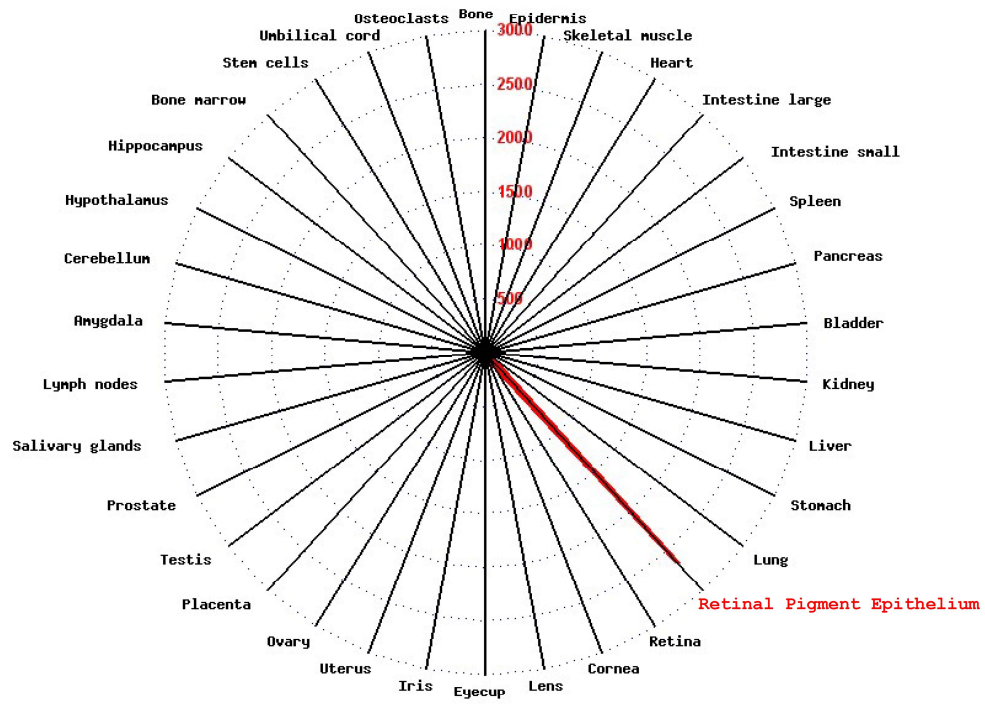
| Samples             | Ratio | Results      |
|---------------------|-------|--------------|
| #3130-c6n (control) | 0.5   | < 0.9 myco - |
| #3130-c7 (control)  | 0.4   | < 0.9 myco - |
| #4024-c1 (case)     | 0.3   | < 0.9 myco - |
| #4024-c7 (case)     | 0.5   | < 0.9 myco - |
| negative control    | 0.1   | < 0.9 myco - |
| positive control    | 26.0  | > 1.2 myco + |

B

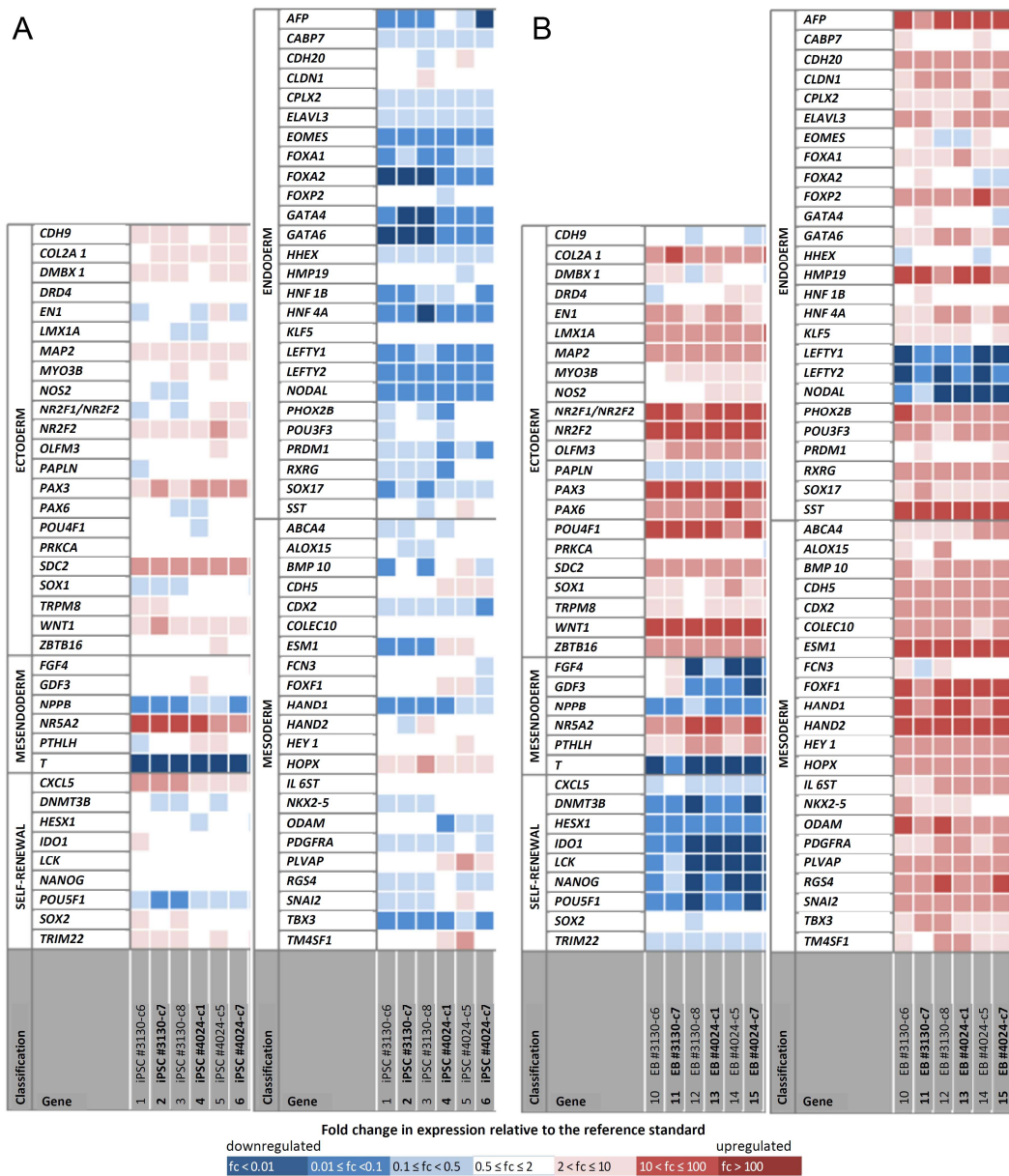


**Figure S1. (A)** Absence of mycoplasma in iPSC lines; **(B)** Copy number variation plot analysis of fibroblasts versus iPSCs. Copy number aberrations are represented in Log R ratio plots as gain (i.e. duplication or amplification) or loss (deletion) in copy number relative to the baseline. Individual Log R ratios in normal regions tend to be near zero. Calculation of Log R ratio is made by comparing experimental data to canonical genotype clusters. iPSC clones used in the experiments are shown in bold.

# Slc16a8



**Figure S2.** Restricted expression of *Slc16a8* in mouse tissues. .



**Figure S3.** Scorecard analysis expression pattern plot for iPSCs (A) and EBs (B) relative to an undifferentiated reference set of nine undifferentiated pluripotent stem cell lines.

**Table S1:** List of RT-PCR primers used.

| Target        | 5'-3' Forward primer    | 5'-3' Reverse primer           | Amplicon length |
|---------------|-------------------------|--------------------------------|-----------------|
| SeV           | GGATCACTAGGTGATATCGAGC* | ACCAGACAAGAGTTTAAGAGATATGTATC* | 181 bp          |
| KOS           | ATGCACCGCTACGACGTGAGCGC | ACCTTGACAATCCTGATGTGG          | 528 bp          |
| KLF4          | TTCCTGCATGCCAGAGGAGCCC  | AATGTATCGAAGGTGCTCAA*          | 410 bp          |
| C-MYC         | TAACTGACTAGCAGGCTTGTCG* | TCCACATACAGTCCTGGATGATGATG     | 532 bp          |
| 18S           | GAGGATGAGGTGGAACCTGT    | TCTTCAGTCGCTCCAGGTCT           | 166 bp          |
| LIN28A        | GTCTGGAATCCATCCGTGTC    | GCTTCTGCATGCTCTTTCCT           | 87 bp           |
| POU5F1        | GAAGGATGTGGTCCGAGTGT    | GCCTCAAAATCCTCTCGTTG           | 90 bp           |
| RPE65         | AAAGATCCCACCACTGCAAG    | GATGGCTTGAATCGGTCACT           | 93 bp           |
| BEST1         | AAGACTGTGAGTTCTGGGGC    | ACTCCACAGTTTTCTCCTCAC          | 109 bp          |
| MITF          | CTCGAGCTCATGGACTTTCC    | TGATGATCCGATTACACAAA           | 72 bp           |
| MCT3 splicing | TCATGCTAGCCATGCTCTACG   | CAAAGCGGGTCACGAGGATG           | 687 bp          |

\* Primer containing SeV genome sequences. Pairing of these primers with transgene-specific primers allows for the specific detection of transgenes carried by the vectors from the CytoTune® 2.0 Sendai reprogramming kit.

**Table S2.** List of antibodies used for immunocytochemistry analyses.

| <b>Antigen</b>    | <b>Species</b>       | <b>Dilution for Immuno-Fluorescence</b> | <b>Dilution for Western Blotting</b> | <b>Reference</b>                  |
|-------------------|----------------------|-----------------------------------------|--------------------------------------|-----------------------------------|
| BESTROPHIN        | Mouse monoclonal     | 1:100                                   | 1:1,000                              | Abcam, ab2182                     |
| EZRIN             | Mouse monoclonal     | 1:250                                   |                                      | Sigma, E8897                      |
| MCT1              | Rabbit polyclonal    | 1:100                                   |                                      | Millipore Chemicon, AB3538P       |
| MCT3              | Rabbit C-ter peptide | 1:1,000                                 | 1:5,000                              | Nancy J. Philp                    |
| MITF              | Mouse monoclonal     | 1:200                                   |                                      | DAKO, M3621                       |
| NANOG             | Rabbit monoclonal    | 1:200                                   |                                      | Cell Signaling, #4903             |
| OCT-4A            | Rabbit monoclonal    | 1:150                                   |                                      | Cell Signaling, #2840             |
| RPE65             | Rabbit monoclonal    |                                         | 1:1,000                              | Abcam, ab175936                   |
| SSEA-4            | Mouse monoclonal     | 1:100                                   |                                      | ThermoFischer Scientific, 41-4000 |
| TRA1-81           | Mouse monoclonal     | 1:100                                   |                                      | ThermoFischer Scientific, 41-1100 |
| $\alpha$ -TUBULIN | Mouse monoclonal     |                                         | 1:2,000                              | Sigma, T6199                      |
| ZO-1              | Rabbit polyclonal    | 1:250                                   |                                      | ThermoFischer Scientific, 61-7300 |
| ZO-1              | Mouse monoclonal     | 1:100                                   |                                      | ThermoFisher Scientific, 33-9100  |