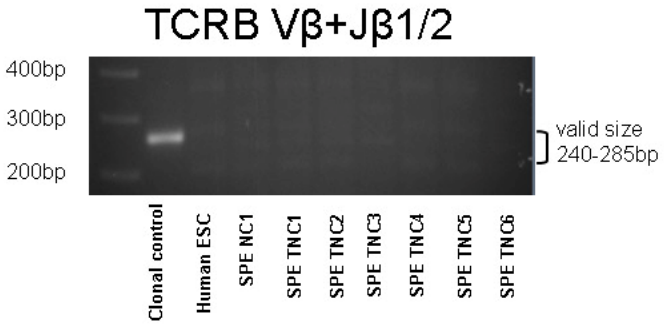
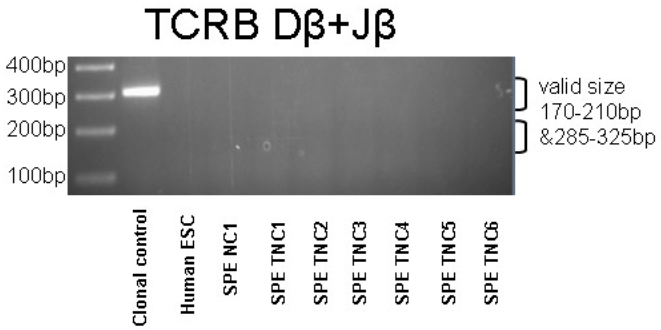
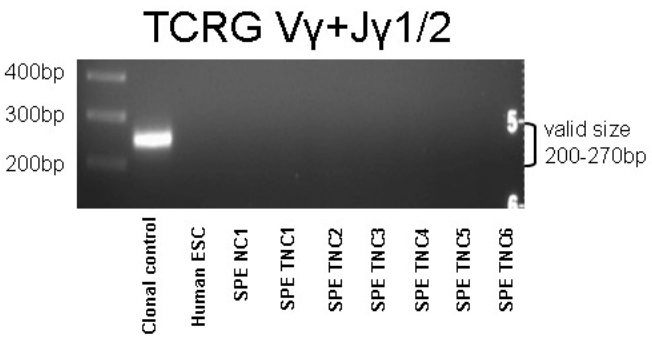
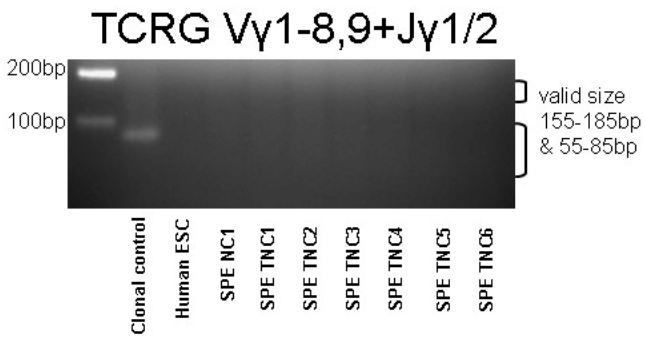
A

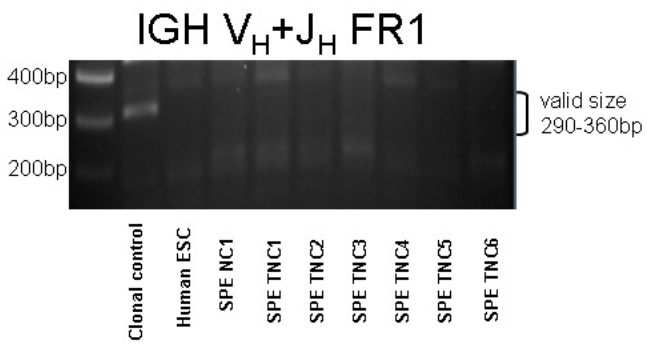

TCRB Vβ+Jβ1/2
400bp
300bp
200bp
valid size
240-285bp
Clonal control
Human ESC
SPE NC1
SPE TNC1
SPE TNC2
SPE TNC3
SPE TNC4
SPE TNC5
SPE TNC6

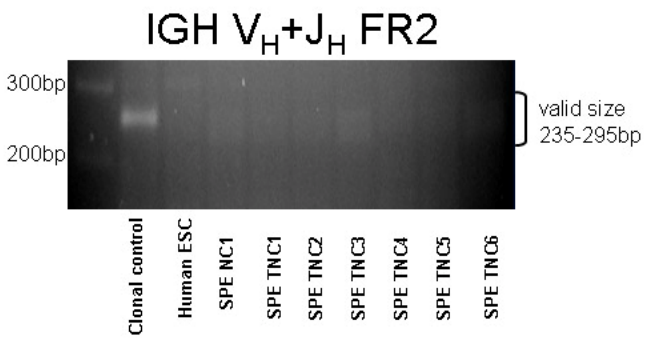

TCRB Dβ+Jβ
400bp
300bp
200bp
100bp
valid size
170-210bp
&285-325bp
Clonal control
Human ESC
SPE NC1
SPE TNC1
SPE TNC2
SPE TNC3
SPE TNC4
SPE TNC5
SPE TNC6

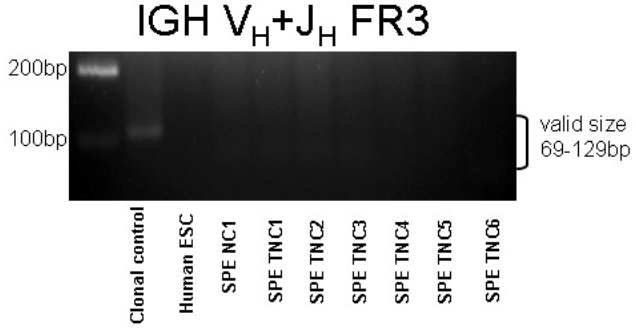

TCRG Vγ+Jγ1/2
400bp
300bp
200bp
valid size
200-270bp
Clonal control
Human ESC
SPE NC1
SPE TNC1
SPE TNC2
SPE TNC3
SPE TNC4
SPE TNC5
SPE TNC6


TCRG Vγ1-8,9+Jγ1/2
200bp
100bp
valid size
155-185bp
& 55-85bp
Clonal control
Human ESC
SPE NC1
SPE TNC1
SPE TNC2
SPE TNC3
SPE TNC4
SPE TNC5
SPE TNC6

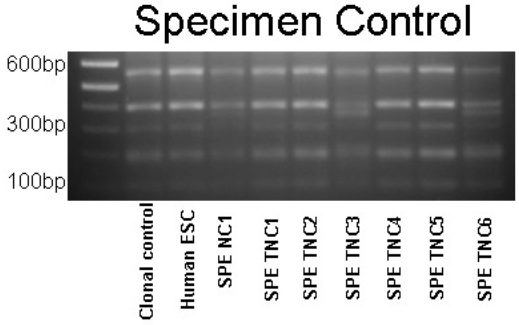
B


IGH VH+JH FR1
400bp
300bp
200bp
valid size
290-360bp
Clonal control
Human ESC
SPE NC1
SPE TNC1
SPE TNC2
SPE TNC3
SPE TNC4
SPE TNC5
SPE TNC6


IGH VH+JH FR2
300bp
200bp
valid size
235-295bp
Clonal control
Human ESC
SPE NC1
SPE TNC1
SPE TNC2
SPE TNC3
SPE TNC4
SPE TNC5
SPE TNC6


IGH VH+JH FR3
200bp
100bp
valid size
69-129bp
Clonal control
Human ESC
SPE NC1
SPE TNC1
SPE TNC2
SPE TNC3
SPE TNC4
SPE TNC5
SPE TNC6

C


Specimen Control
600bp
300bp
100bp
Clonal control
Human ESC
SPE NC1
SPE TNC1
SPE TNC2
SPE TNC3
SPE TNC4
SPE TNC5
SPE TNC6

Supplementary information, Figure S12 Six iPSC lines we derived from PB MNCs lack any detectable somatic mutations associated with committed T cells and B cells.

(A) Four sets of PCR primers were used to detect the presence of T cell receptor (TCR) VDJ re-arrangements at TCR beta (TCRB) and TCR gamma (TCRG) loci**.** Genomic DNA from a clonal human T cell line is provided as a positive control, while a human ESC line (H1) serves as a negative control. Equal amounts of genomic DNA isolated from 6 iPSC lines established from the donor SCD003 PB MNC-derived erythroblasts (SPE) were used. None of these SPE iPSCs showed any positive signal of TCR rearrangements. (**B**) Three sets of PCR primers were used to detect any evidence of IGH re-arrangements occurring in committed B cells. A clonal control was included as a positive control. None of six SPE iPSCs showed any positive signal of IGH re-arrangement, nor did the human ESCs. (**C**) Quality controls of genomic DNA isolated from human ESCs and the six iPSCs. Mixed primers can readily amplify various genomic regions by PCR and generate multiple products from 100 bp to 550 bp.