

Supplementary Figures

The Maintenance of Telomere Length in CD28+ T Cells During T Lymphocyte Stimulation

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SUPPLEMENTAL FIGURE LEGENDS

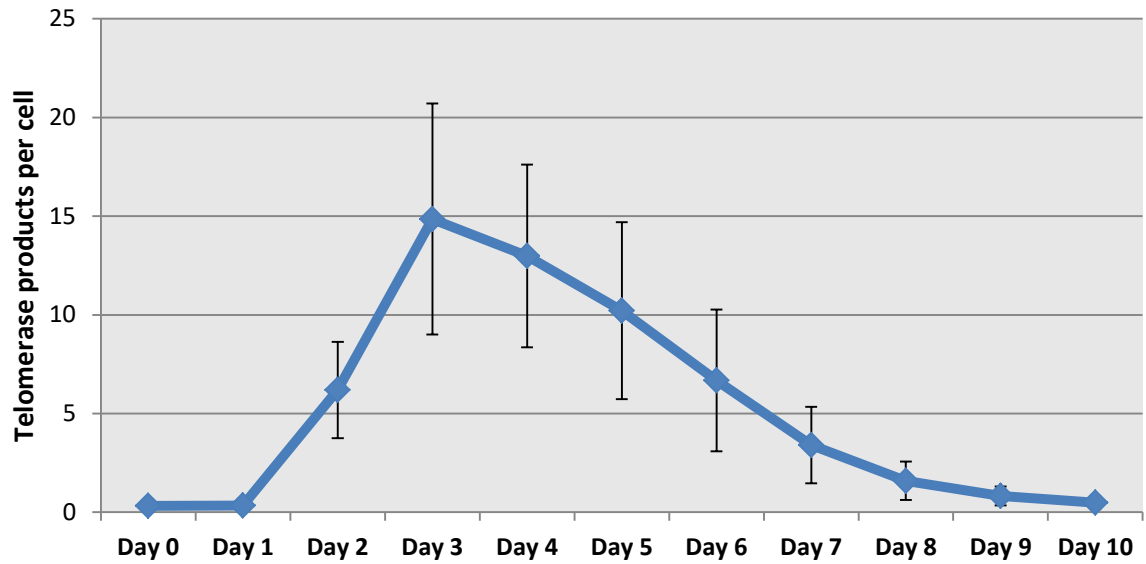
Supplement Figure 1. Telomerase activity (ddTRAP) in PBMCs from 10 healthy donors stimulated over a period of ten days with anti-CD3 and anti-CD28 coated beads.

Supplement Figure 2. Single cell telomerase activity measurement in stimulated T cells from two additional healthy donors (A and B) showing the same trends as in Figure 4. (C) Telomerase activity in CD28 positive and CD28 negative T cells from 3 healthy donors.

Supplement Figure 3. (A). Diagram illustrating the exons and introns of human telomerase (hTERT). Functional telomerase is derived from the full length TERT transcript containing all 16 exons. Most of TERT transcripts are alternative spliced to inactive isoforms. (B). Using specific primers that amplify various TERT splicing forms, we profiled the full length and alternatively spliced variants of TERT in two healthy donors. In general, the TERT transcripts that incorporate both exons 7 and 8 peak between days 3-4 of stimulation and correlate with functional enzyme activity.

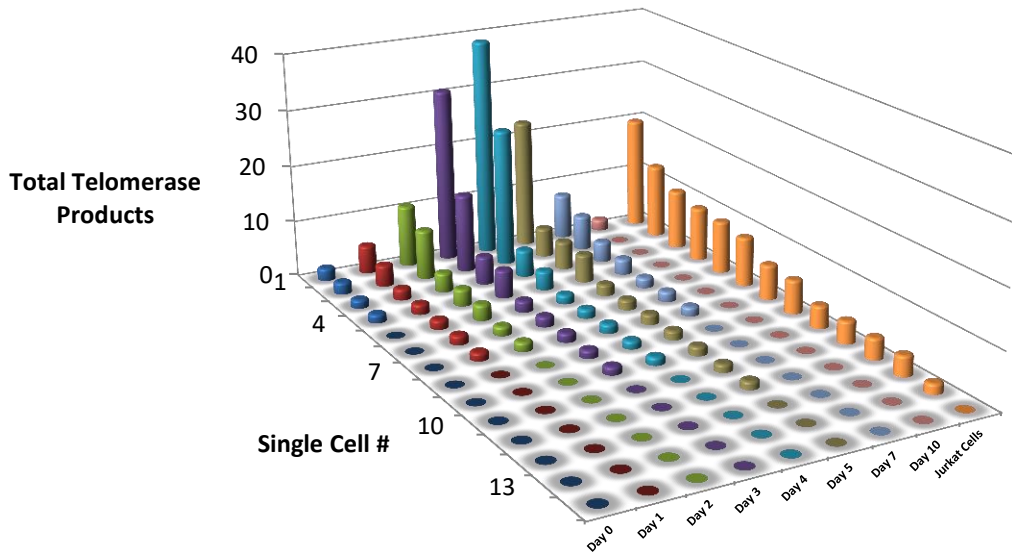
Supplementary Figure 1

Average Telomerase Activity in CD3/CD28-Stimulated PBMCs
(n=10)

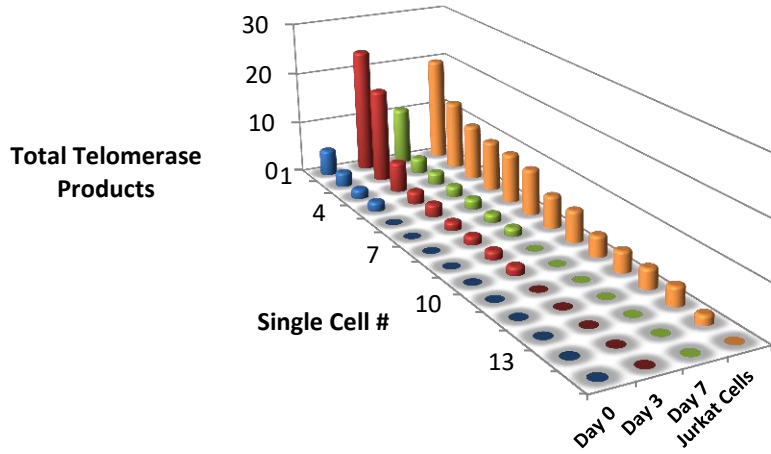


Supplementary Figure 2

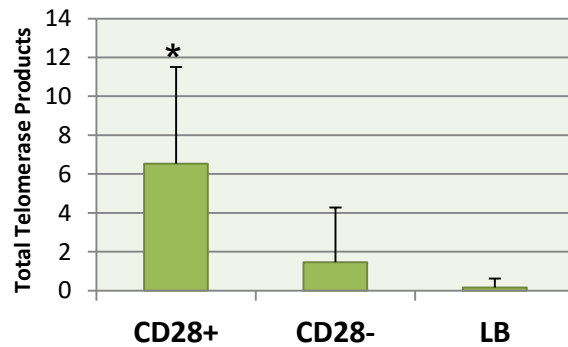
A



B

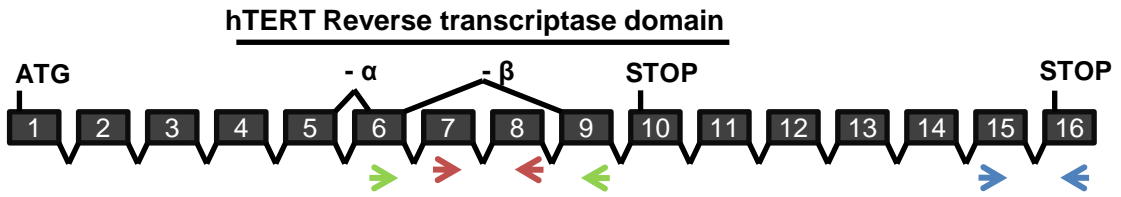


C



Supplementary Figure 3

A



B

