

**Supplementary Figure:** DNA binding assay to measure binding of *Tetrahymena* telomerase to human telomeric DNA. The indicated concentrations of biotinylated human telomeric oligonucleotide (Bio-TTAGGG<sub>3</sub>) or 250 nM nontelomeric control (Bio-PBR) were incubated with <sup>35</sup>S-labelled full-length recombinant *Tetrahymena* telomerase (TERT + RNA) and recovered on NeutrAvidin beads. 'Input' represents 40% of the starting material in the bound lanes. LC: <sup>33</sup>P-labelled PBR48-Bio oligonucleotide, used as a loading and recovery control.