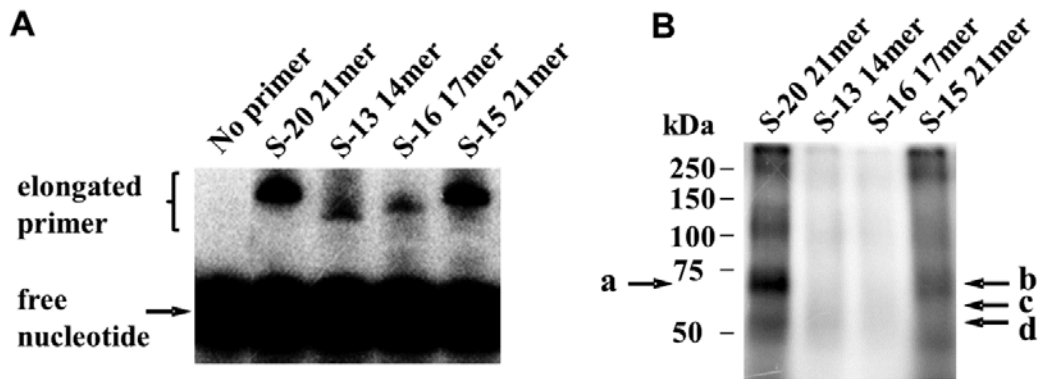
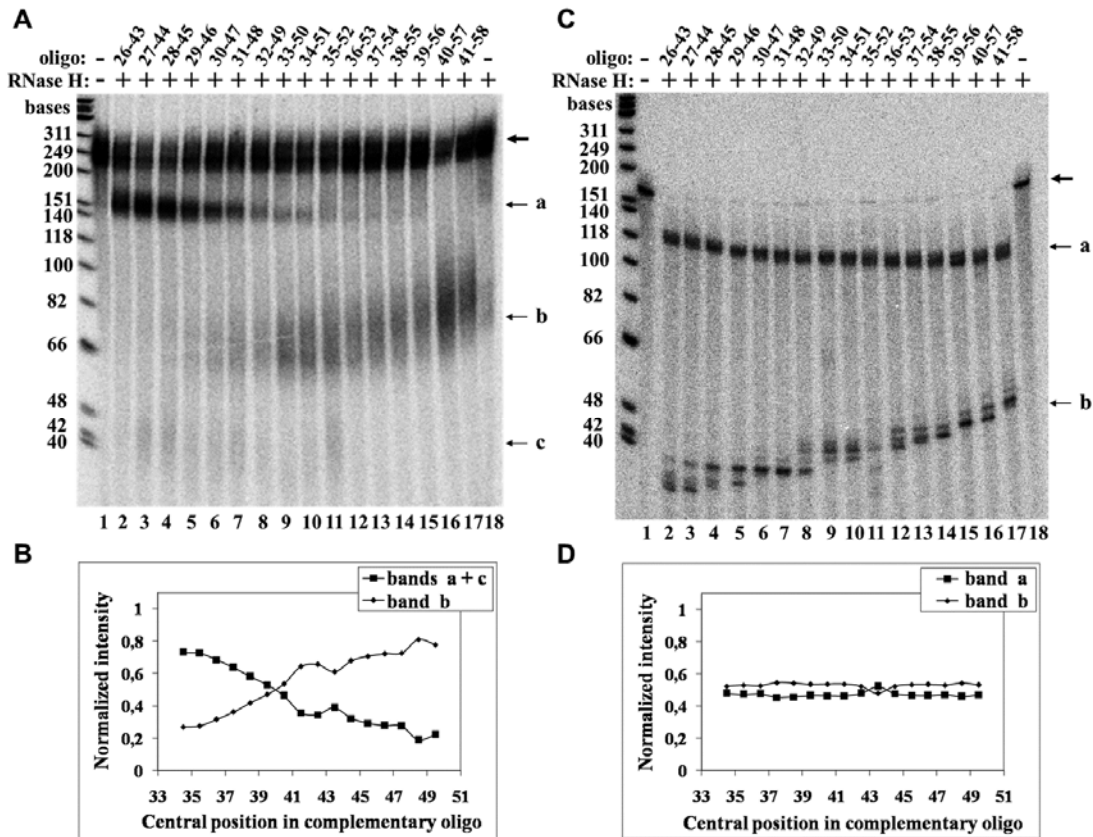


Supplementary data for the article by Goldin et al.



**Figure S1: Telomerase activity and cross-linking assays of non-telomeric and telomeric primers**

A. Telomerase activity assays. The indicated DNA primers, whose sequences are shown in the Materials and Methods section of the article, were extended with the *Tetrahymena* telomerase holoenzyme by a single  $^{32}\text{P}$ -labeled G residue. The products were analyzed by electrophoresis in 16% long range gels containing 7M urea, as previously described (22). B. DNA cross-linking assays. Cross-linking assays were carried out with the *Tetrahymena* telomerase holoenzyme and the indicated DNA primers, as illustrated in Fig. 2 of this article. The cross-linked products were analyzed by SDS-PAGE, as described in Materials and Methods. The arrows a and b denote the bands containing the RNA molecules cross-linked to the primers S-20 21mer and S-15 21mer, respectively. The arrows c and d denote the bands containing the RNA molecules cross-linked to the primers S-16 17mer and S-13 14mer, which could only be clearly seen after much longer exposure.



**Figure S2: High resolution mapping of the cross-link between the primer S-15 21mer and TER**

A. Mapping of the cross-link site of the primer S-15 21mer was performed as illustrated in Fig. 3 and described in the legend to Fig. 5. The band denoted as c contains fragments generated by secondary cleavage of the fragments in the band a by RNase H, as illustrated in the drawings shown in Fig. 3A. Lane 1: No RNase H, no complementary oligo. Lane 2: Oligo complementary to the region of TER spanned by the nucleotides 26-43. Lane 3: Oligo complementary to the region of TER spanned by the nucleotides 27-44. Lanes 4-17: Overlapping oligos of the same series: 28-45, ..., 41-58. Lane 18: No oligo. B. A plot of the data shown in A. C. RNase H cleavage assays of hybrids formed between the overlapping oligos used for the assays shown in A and uniformly labeled TER molecules synthesized *in vitro*. D. A plot of the data shown in C.