SULLPEMENTAL FIGURE LEGENDS

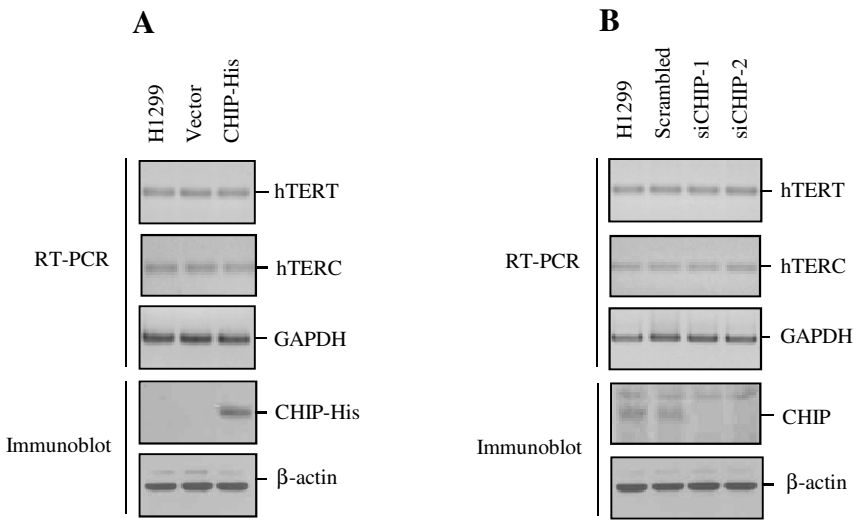
Supplemental FIGURE 1. **Representative results of reverse transcription-PCR analysis for the expression of hTERT mRNA and hTERC transcript.** *A*, reverse transcription-PCR products were obtained from H1299 cells transfected with CHIP-His or the empty vector. The CHIP-His protein levels were measured by immunoblotting with anti-His antibody. *B*, reverse transcription-PCR products were obtained from H1299 cells transfected with scrambled or CHIP siRNA (siCHIP-1 or siCHIP-2). The protein levels of endogenous CHIP were measured by immunoblotting with anti-CHIP antibody.

Supplemental FIGURE 2. **Overexpression of CHIP inhibits nuclear localization of endogenous hTERT.** HeLa S3 cells transfected with CHIP-His, H260Q-His, or K30A-His were treated with 10 μM MG132 for 2 hr and subjected to indirect immunofluorescence with anti-hTERT (green) or anti-His (red) antibodies, followed by fluorescent microscopic observation. The nuclei were stained with 4,6-diamino-2-phenylindole (blue).

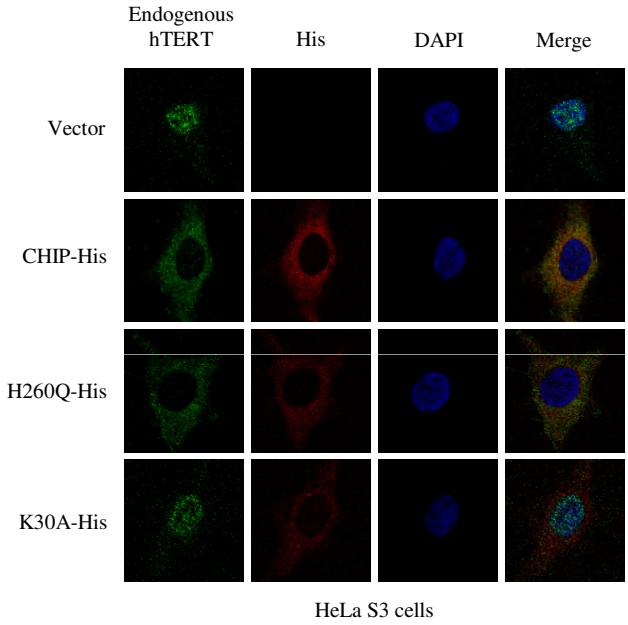
Supplemental FIGURE 3. **Telomerase activity was not detected in the cytoplasmic extracts.** Cytoplasmic and nuclear extracts were separately collected from H1299 (*A*) and HeLa S3 cells (*B*) and analyzed for telomerase activity by the TRAP assay as specified. Duplicate blots were immunolabeled with anti-tubulin (for cytoplasmic fraction) and anti-lamin (for nuclear fraction) antibodies to confirm the absence of the cross contamination in each fraction.

Supplemental FIGURE 4. **CHIP knockdown does not affect telomerase activity and telomere length.** *A*, H1299 cells were repeatedly transfected with scrambled or siRNA (siCHIP-1 or siCHIP-2) for 2 weeks. The protein levels of endogenous CHIP and hTERT were measured by immunoblotting in samples taken at days 2 and 14 after initial siRNA treatment. Actin was used as loading control. *B*, H1299 cells were repeatedly transfected with scrambled or siRNA for 2 weeks, and lysates taken at days 2 and 14 were analyzed for telomerase activity by the TRAP assay. To test RNA-dependent extension, RNase A (0.25 mg/ml) was added to the extracts before the primer extension reaction. *C*, H1299 cells were repeatedly transfected with scrambled or siRNA for 2 weeks. Genomic DNA was isolated at day 14 after initial siRNA treatment and then subjected to telomere length measurement by TRF analysis.

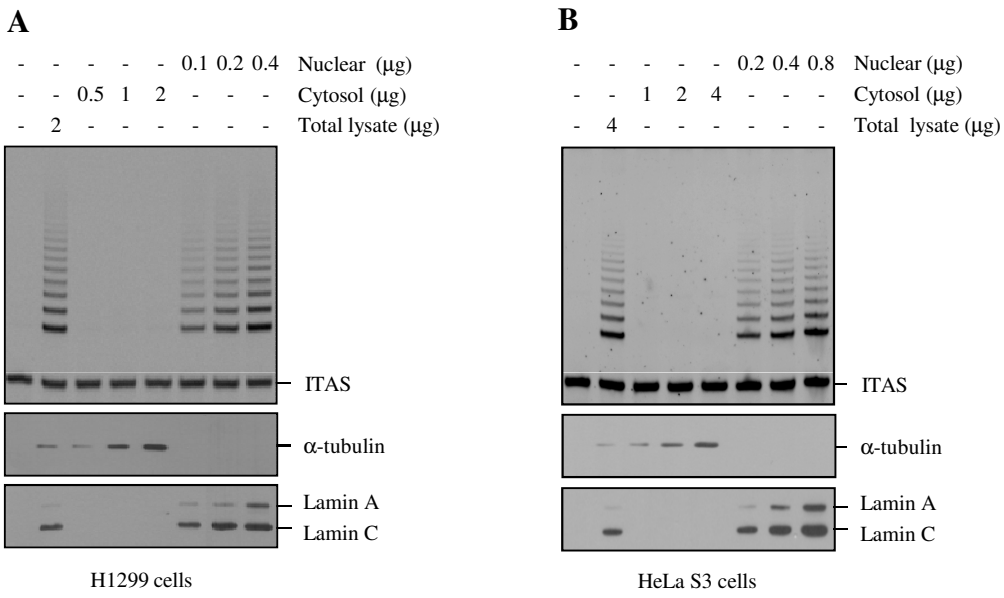
Supplemental FIGURE 5. **The levels of hTERT mRNA and hTERC transcript were not changed during cell cycle progression.** HeLa S3 cells were synchronized by double thymidine block and harvested at 2 hr intervals over a 10 hr time course after release. The synchronized cells were analyzed by the reverse transcription-PCR analysis for the expression of hTERT mRNA and hTERC transcript. Immunoblot for PCNA was used for an independent maker of S phase.



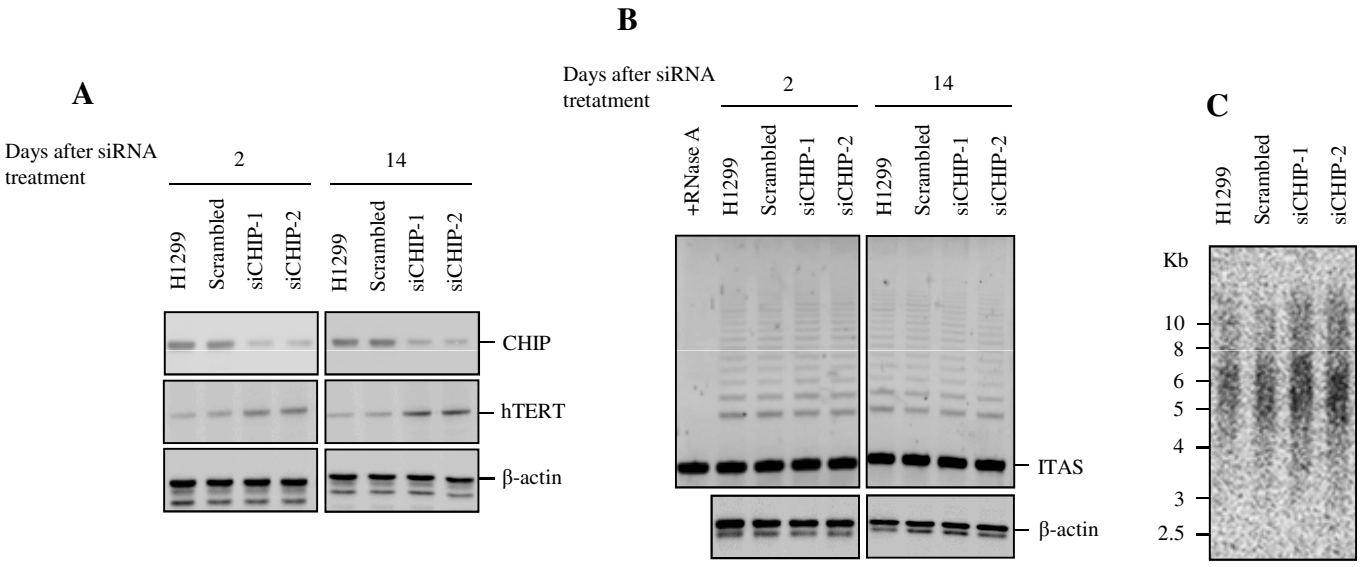
Supplemental Figure 1, Lee et al.



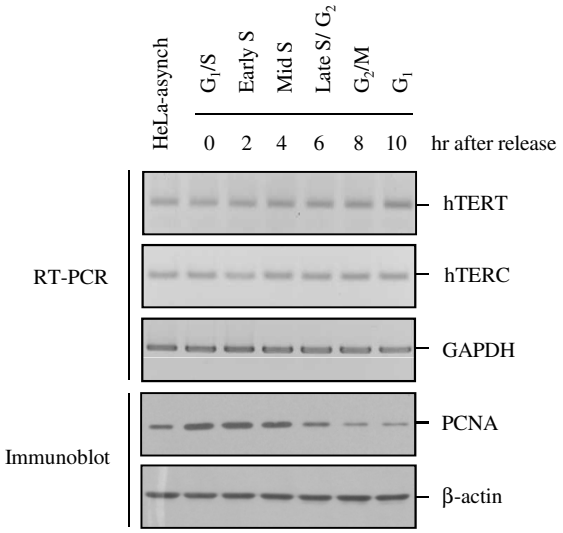
Supplemental Figure 2, Lee et al.



Supplemental Figure 3, Lee et al.



Supplemental Figure 4, Lee et al.



Supplemental Figure 5, Lee et al.