



Supplemental Figure S2. Protein expression detected on infrared Western blots. **(a)** Anti-TERT antibody (clone Y182) staining of fibroblast lysate harvested 24 h after start of treatment with 1 μ g/ml TERT mRNA. The size of the band observed here approximates 120 kDa which is consistent with the estimated size of human TERT of 127 kDa(62). Note that like the MRC5 cells measured here, other human fibroblast cells with little or no endogenous telomerase activity such as WI 38 and BJ fibroblasts also exhibit an endogenous 120 kDa protein on Western blots stained with a different TERT antibody(64). **(b)** The GM847 human fibroblast line employs the alternative lengthening of telomeres (ALT) mechanism and has little TERT protein, and served as a negative control. Untreated GM847 cells exhibited a 120 kDa band, as found previously(67) and treatment of GM847 cells with 0.2 or 1.0 ug/ml of TERT mRNA results in increased intensity of the band in a dose-dependent manner. **(c)** 293T cells, which are known to express TERT(46), served as positive controls for the antibody. **(d)** Fibroblasts treated with 1 ug/ml of either CI or WT TERT-3xFLAG mRNA expressed similar amounts of protein detected by anti-FLAG antibody (clone M2), consistent with the similar transfection efficiencies of both CI and WT TERT mRNA measured by RT-qPCR (Supplementary Figure S1d).