Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: Recruiting LSD1^{ΔIDR} to telomeres without siTERRA. Movie for Fig. 4b. Left: composite of LSD1^{ΔIDR} (red) and TRF1 (green), middle: mCh-eDHFR-LSD1, right: Halo-GFP-TRF1. TFH was added to cells after the first time point to induce dimerization.

File Name: Supplementary Movie 2

Description: Recruiting LSD1^{ΔIDR} to telomeres in HeLa1.3 cells. Movie for Supplementary Fig. 5f. Left: composite of LSD1^{ΔIDR} (red) and TRF1 (green), middle: mCh-eDHFR-LSD1, right: Halo-GFP-TRF1. TFH was added to cells after the first time point to induce dimerization.

File Name: Supplementary Movie 3

Description: Recruiting GFP-eDHFR-LSD1^{IDR} to telomeres. Halo-TRF1 is co-transfected. Movie for Supplementary Fig. 5a. TFH was added to cells after the first time point to induce dimerization.

File Name: Supplementary Movie 4

Description: Recruit GFP-eDHFR-LSD1^{ΔIDR} to telomeres. Halo-TRF1 is transfected. Movie for Supplementary Fig. 5a. TFH was added to cells after the first time point to induce dimerization.

File Name: Supplementary Movie 5

Description: Recruiting LSD1^{ΔIDR} to telomeres with siTERRA (100 nM, 24 hr). Movie for Fig. 4b. Left: composite of LSD1^{ΔIDR} (red) and TRF1 (green), middle: mCh-eDHFR-LSD1^{ΔIDR}, right: Halo-GFP-TRF1. TFH was added to cells after the first time point to induce dimerization.

File Name: Supplementary Movie 6

Description: Recruiting LSD1 $^{\Delta IDR, 3KE}$ to telomeres. Movie for Fig. 4c. Left: composite of LSD1 (red) and TRF1 (green), middle: mCh-eDHFR-LSD1 $^{\Delta IDR, 3KE}$, right: Halo-GFP-TRF1. TFH was added to cells after the first time point to induce dimerization.