Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: **ZNF827 colocalizes with RPA.** Live cell imaging of HaloTag-ZNF827 (red) and GFP-RPA32 (green) in U-2 OS cells.

File Name: Supplementary Movie 2

Description: **ZNF827 tracks with the replication machinery.** Live cell imaging of HaloTag-ZNF827 (red) and PCNA chromobodies (green) in U-2 OS cells.