**SUPPLEMENTARY VIDEOS**

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**Supplementary Video 1.** 3-D structure of cap shown in Figure 3A. RPE-1<sup>hTERT</sup> expressing EGFP-PML IV were treated for 24 hours with doxorubicin and analyzed by live-cell SIM. “Volume” 3-D model was prepared from 28 layers using ImageJ 3D viewer plugin.

**Supplementary Video 2.** 3-D structure of fork shown in Figure 3B. RPE-1<sup>hTERT</sup> expressing EGFP-PML IV were treated for 24 hours with doxorubicin and analyzed by live-cell SIM. “Volume” 3-D model was prepared from 30 layers using ImageJ 3D viewer plugin.

**Supplementary Video 3.** 3-D structure of circle shown in Figure 3C. RPE-1<sup>hTERT</sup> expressing EGFP-PML IV were treated with doxorubicin for 24 hours and analyzed by live-cell SIM. “Volume” (left position) and “orthoslice” (right position) 3-D model was prepared from 54 layers using ImageJ 3D viewer plugin.

**Supplementary Video 4.** Genesis of EGFP-PML IV cap#1 as shown in Figure 4A captured between 4.5 and 5.5 hours after doxorubicin addition.

**Supplementary Video 5.** Genesis of EGFP-PML IV cap#2 as shown in Figure 4A captured between 9.5 and 10.5 hours after doxorubicin addition.

**Supplementary Video 6.** Genesis of EGFP-PML IV cap#3 as shown in Figure 4A captured between 43 and 44 hours after doxorubicin addition.

**Supplementary Video 7.** Genesis of EGFP-PML IV cap#4 as shown in Figure 4A captured between 63 and 64 hours after doxorubicin addition.

**Supplementary Video 8.** Transition EGFP-PML IV “cap to fork” presented in Figure 4C captured between 36 and 44 hours after doxorubicin addition.

**Supplementary Video 9.** Transition EGFP-PML IV “cap to circle” presented in Figure 4C captured between 16 and 18 hours after doxorubicin addition.

**Supplementary Video 10.** Transition EGFP-PML IV “fork to circle” presented in Figure 4C captured between 34 and 40 hours after doxorubicin addition.

**Supplementary Video 11.** Transition EGFP-PML IV “circle to fork” presented in Figure 4C captured between 40 and 45 hours after doxorubicin addition.

**Supplementary Video 12.** Genesis of PML-NDS from fork presented in Figure 5A captured between 2 and 5.2 hours after doxorubicin washout. EGFP-PML IV (green) and RFP-B23 (red).

**Supplementary Video 13.** Persistence of PML-NDS presented in Figure 5C captured between 3.3 and 13.8 hours after doxorubicin washout. EGFP-PML IV (green) and RFP-B23 (red).

**Supplementary Video 14.** Fusion of PML-NDS with nucleolus presented in Figure 5D captured between 2.8 and 5.7 hours after doxorubicin washout. EGFP-PML IV (green) and RFP-B23 (red).

**Supplementary Video 15.** Stripping of PML from PML-NDS with persistence of B23 presented in Figure 5E captured between 27.8 and 32.3 hours after doxorubicin washout. EGFP-PML IV (green) and RFP-B23 (red).
Supplementary Video 16. Fusion of PML-NDS with fork-like PNA presented in Figure 5F captured between 12 and 14.6 hours after doxorubicin washout. EGFP-PML IV (green) and RFP-B23 (red).

Supplementary Video 17. Whole sequence of genesis of PML-NDS (cap – fork – PML-NDS) presented in Supplementary Figure 7C captured between 3.5 and 6.4 hours after doxorubicin washout. EGFP-PML IV (green) and RFP-B23 (red).