

Supplementary information

Chromatin compartmentalization regulates the response to DNA damage

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SI guide

Chromatin compartmentalization regulates the response to DNA damage

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Legends of Supplementary Videos 1-6

Legend of Supplementary Figure 1

Supplementary Video 1: Live-imaging using random illumination microscopy (RIM) in 53BP1-GFP DlvA cells. Example 1

3D Time-series super-resolved movie by RIM microscopy around a small nuclear volume ($8\mu\text{m} \times 6\mu\text{m} \times 2\mu\text{m}$) of 53BP1-GFP reconstructed at 40-s intervals during 34min.

Supplementary Video 2: Live-imaging using random illumination microscopy (RIM) in 53BP1-GFP DlvA cells. Example 2

3D Time-series super-resolved movie by RIM microscopy around a small nuclear volume ($5\mu\text{m} \times 5\mu\text{m} \times 2\mu\text{m}$) of 53BP1-GFP reconstructed at 40-s intervals during 21min and 20s.

Supplementary Video 3: Live-imaging using random illumination microscopy (RIM) in 53BP1-GFP DlvA cells. Example 3

3D Time-series super-resolved movie by RIM microscopy around a small nuclear volume ($4\mu\text{m} \times 4.5\mu\text{m} \times 2.5\mu\text{m}$) of 53BP1-GFP reconstructed at 40-s intervals during 32min.

Supplementary Video 4: Live-imaging using random illumination microscopy (RIM) in 53BP1-GFP DlvA cells. Example 4

3D Time-series super-resolved movie by RIM microscopy around a small nuclear volume ($5\mu\text{m} \times 5\mu\text{m} \times 3.5\mu\text{m}$) of 53BP1-GFP reconstructed at 40-s intervals during 40min.

Supplementary Video 5: Live-imaging using random illumination microscopy (RIM) in 53BP1-GFP DlvA cells. Example 5

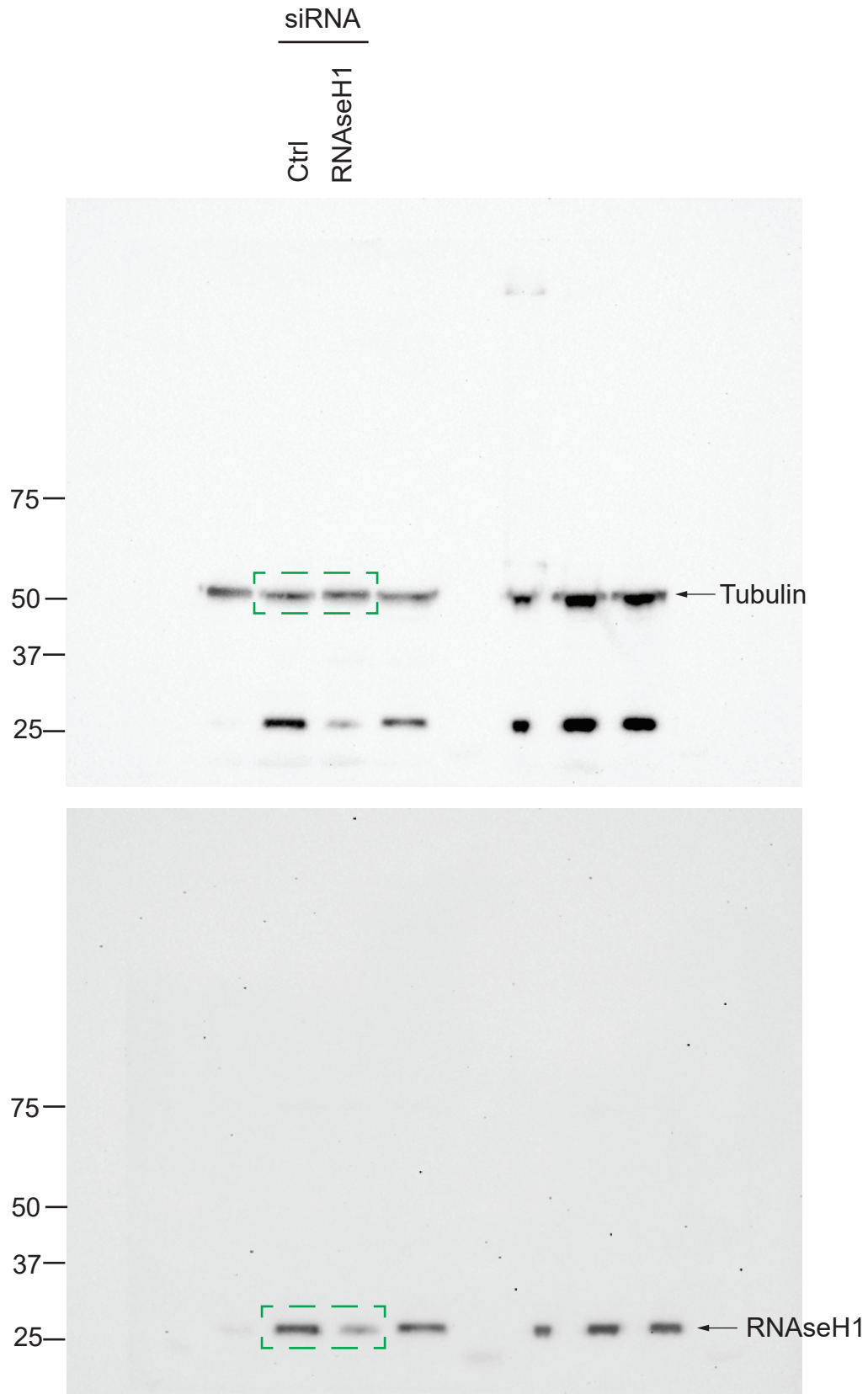
3D Time-series super-resolved movie by RIM microscopy around a small nuclear volume ($6\mu\text{m} \times 5\mu\text{m} \times 3.5\mu\text{m}$) of 53BP1-GFP reconstructed at 40-s intervals during 40min.

Supplementary Video 6: Live-imaging using random illumination microscopy (RIM) in 53BP1-GFP DlvA cells. Example 6

3D Time-series super-resolved movie by RIM microscopy around a small nuclear volume (4*2.5*3.5 μ m) of 53BP1-GFP reconstructed at 40-s intervals during 38min and 40s.

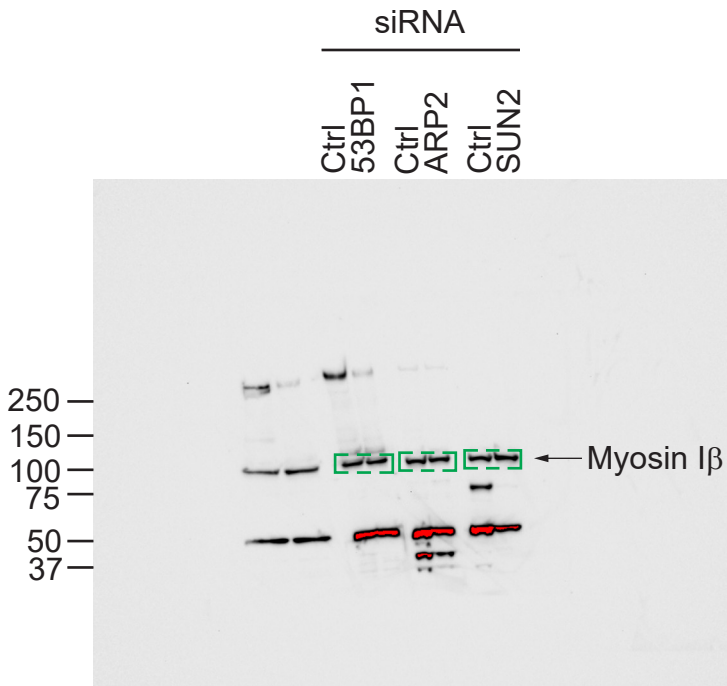
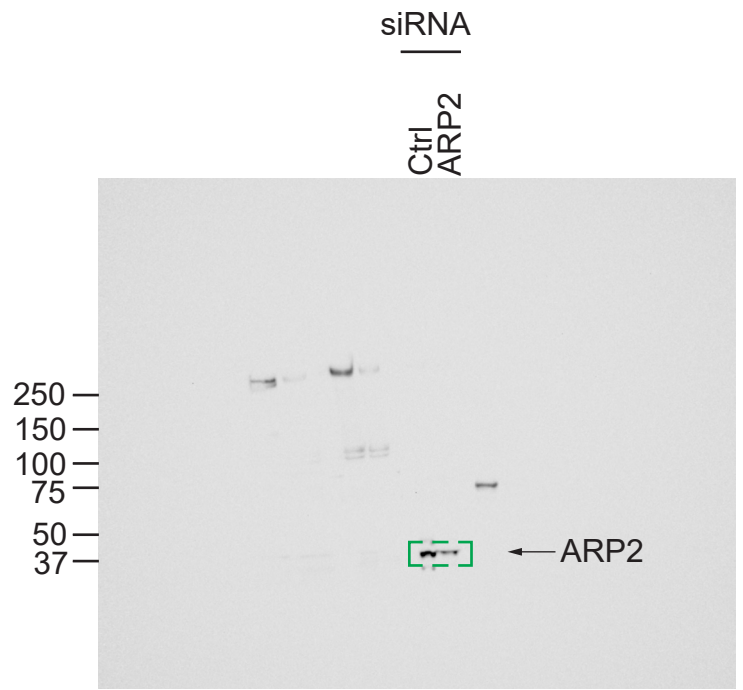
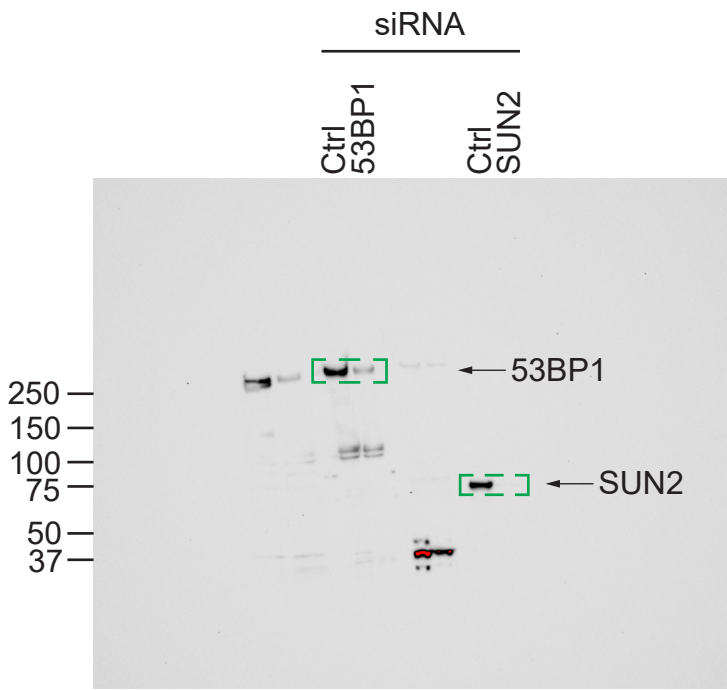
Supplementary Figure 1: uncropped gels for Extended Data Fig. 7c, Extended Data 8a-b

Extended data Fig. 7c



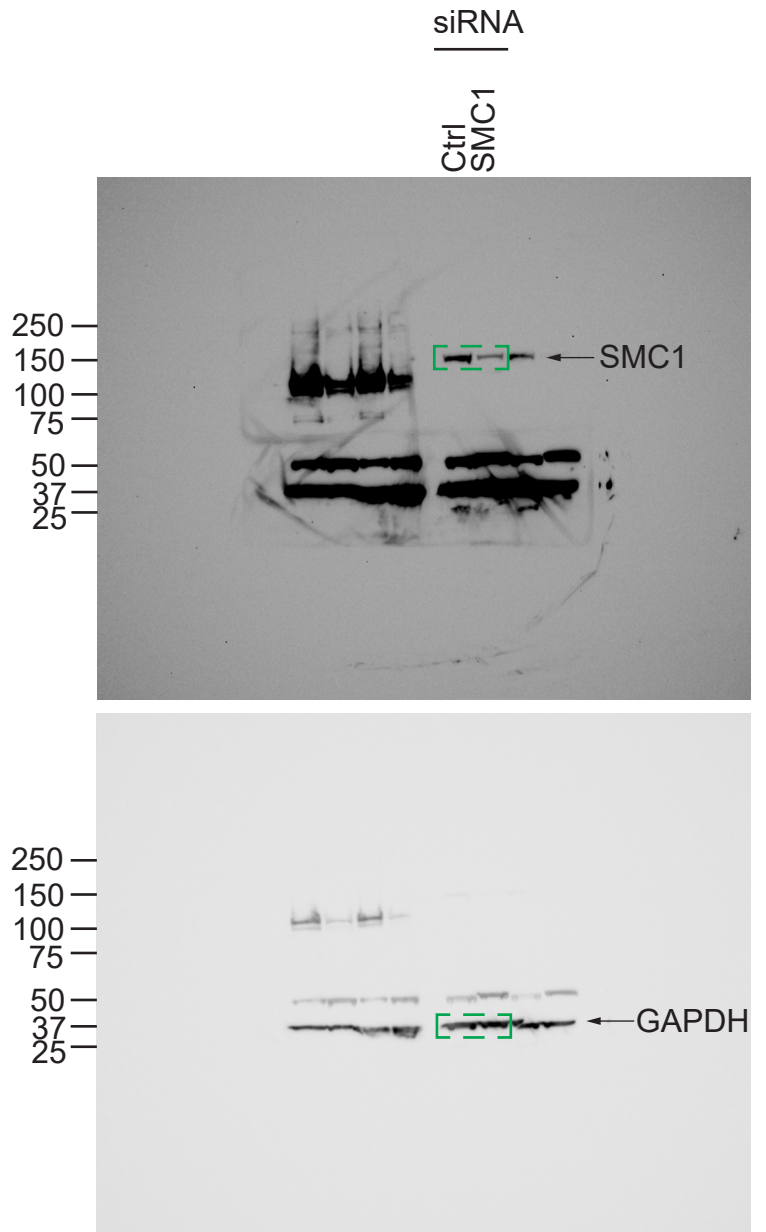
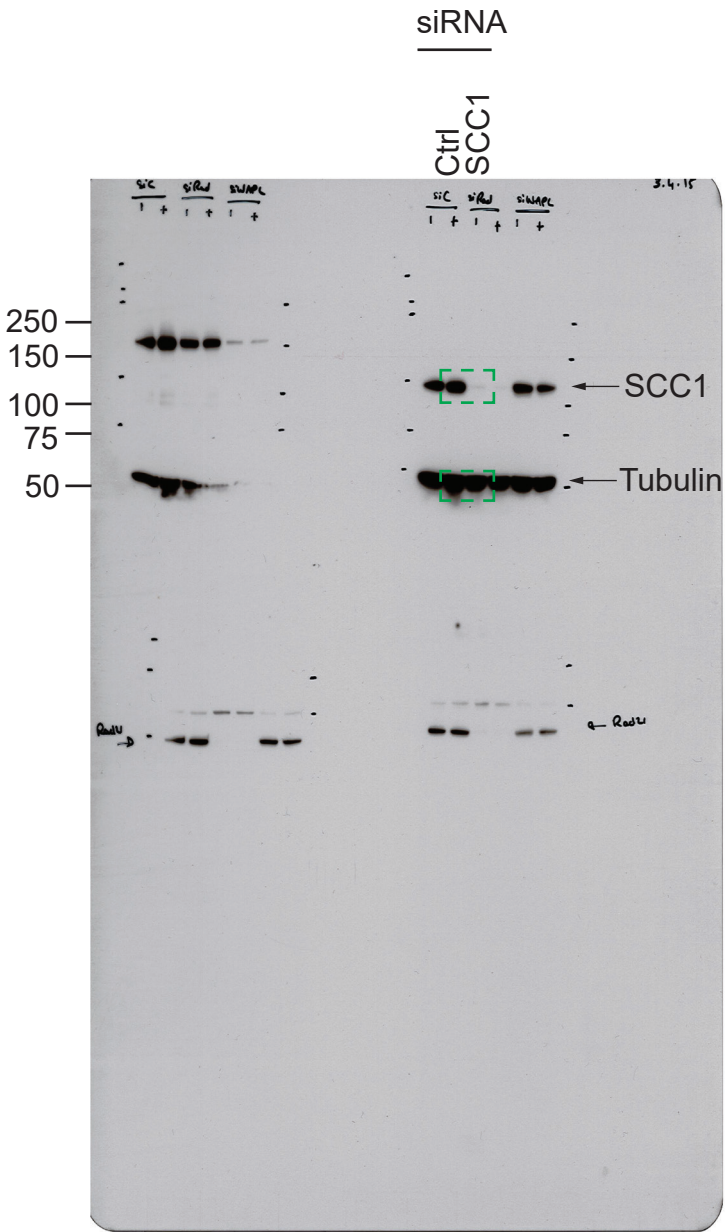
Supplementary Figure 1. Uncropped Western blots images with size marker indications (page 1)
Validation of the efficiency of the siRNA against RNaseH1 by Western Blot. Green boxes indicate cropped versions found in the Extended data Figure 7c.

Extended data Fig. 8a



Supplementary Figure 1. Uncropped Western blots images with size marker indications (page 2)
Validation of the efficiency of the siRNA against 53BP1 or SUN2 (top left panel) or ARP2 (top right panel) by Western Blot. Green boxes indicate cropped versions found in the Extended data Figure 8a.

Extended data Fig. 8b



Supplementary Figure 1. Uncropped Western blots images with size marker indications (page 3)

Validation of the efficiency of the siRNA against SCC1 (left panel) or SMC1 (right panel) by Western Blot. Green boxes indicate cropped versions found in the Extended data Figure 8b.