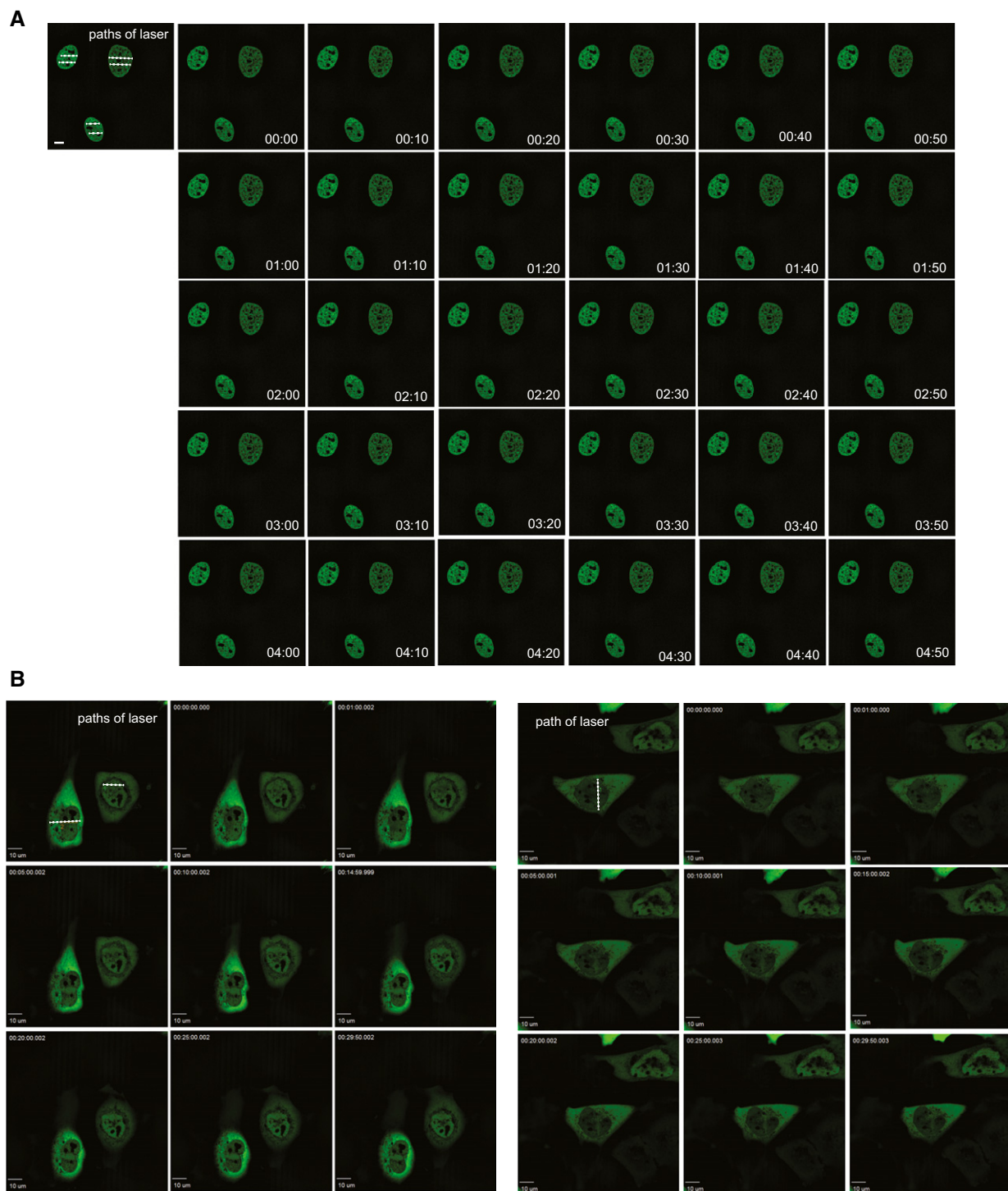


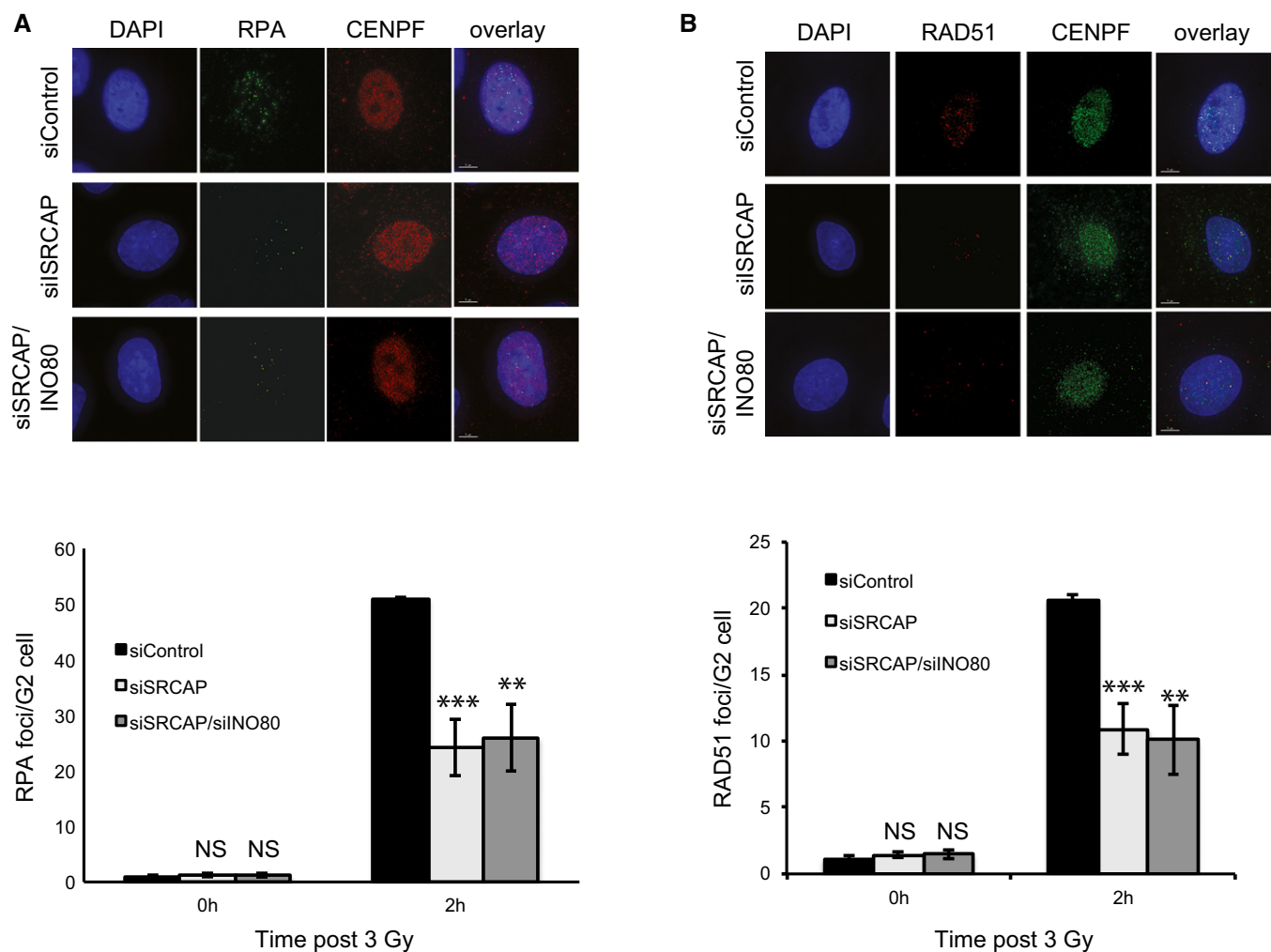
## Expanded View Figures



**Figure EV1. Histone dynamics at damaged chromatin.**

A, B U2OS cells transfected with GFP-tagged H2B (A) or EGFP-tagged RuvBL2 (B) were laser micro-irradiated and monitored by live cell imaging. Representative images taken at indicated time points are shown.

Data information: Scale bars represent 10  $\mu\text{m}$ .



### Figure EV2. Cells lacking SRCAP have a resection defect.

**A** IR induced RPA focus formation in A549 cells treated with siControl, siSRCAP or siSRCAP/siINO80. Upper panel: representative images. Lower panel: quantification of foci. When compared with control cells at 2 h, siSRCAP and siSRCAP/siINO80 are significantly different ( $***P = 0.0009$  and  $**P = 0.002$ , respectively).

**B** IR induced RAD51 focus formation in cells as in (A). Upper panel: representative images. Lower panel: quantification of foci as in (A). When compared with control cells at 2 h, siSRCAP and siSRCAP/siINO80 are significantly different ( $***P = 0.00098$  and  $**P = 0.00248$ , respectively).

Data information: Scale bars represent 5  $\mu$ m. Data represent the mean of 3 independent assays  $\pm$  SD. NS, not significant by Student's *t*-test.