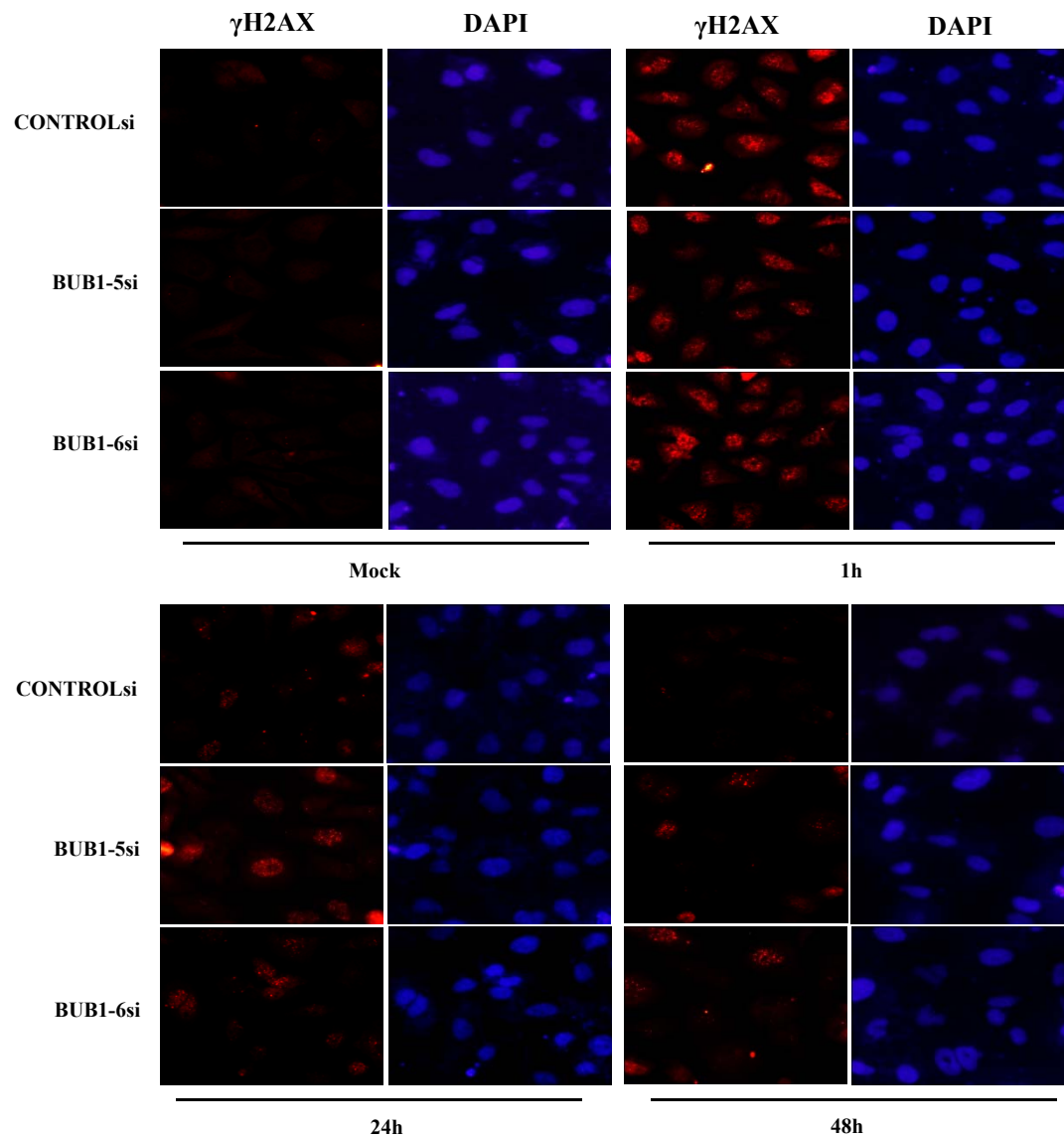


Supplemental Figures

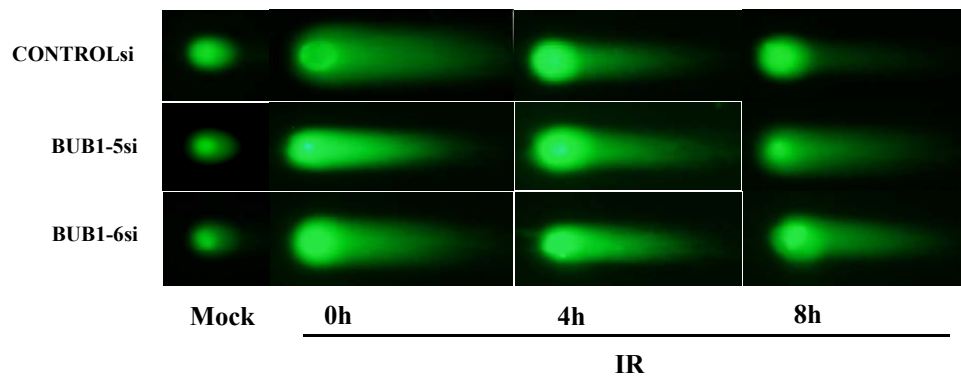
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Supplemental Table S1. Statistical analysis of surviving fractions

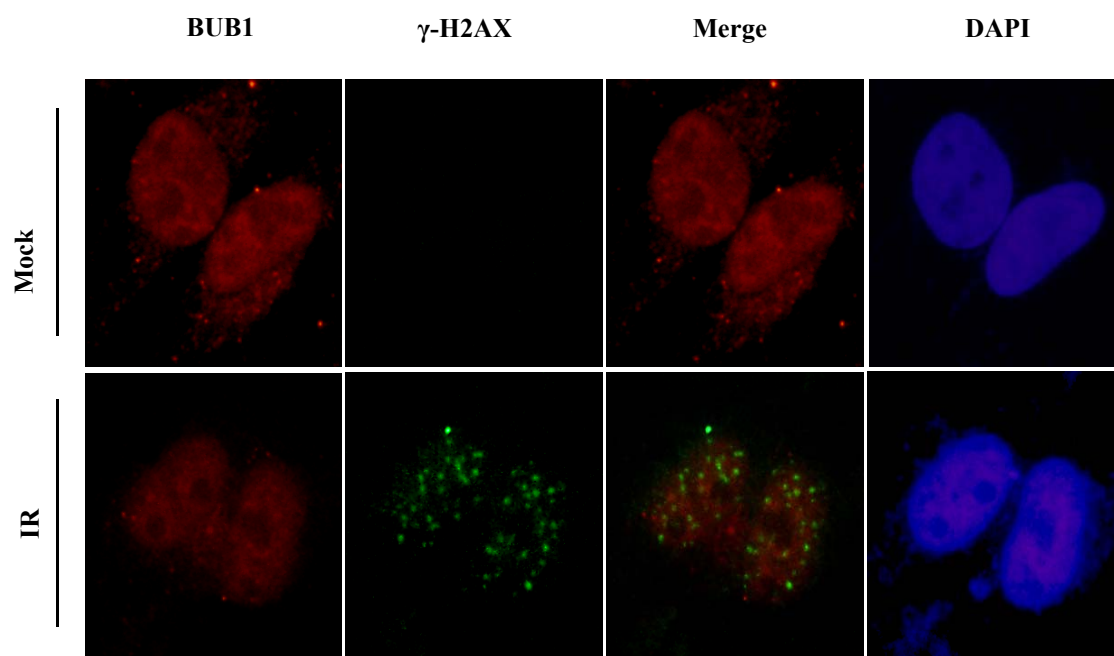
Dose	Groups	P value
2Gy	BUB1-5si VS CONTROL	0.019934
	BUB1-6si VS CONTROL	0.049021
4Gy	BUB1-5si VS CONTROL	0.000494
	BUB1-6si VS CONTROL	0.004088
6Gy	BUB1-5si VS CONTROL	0.002536
	BUB1-6si VS CONTROL	0.00439



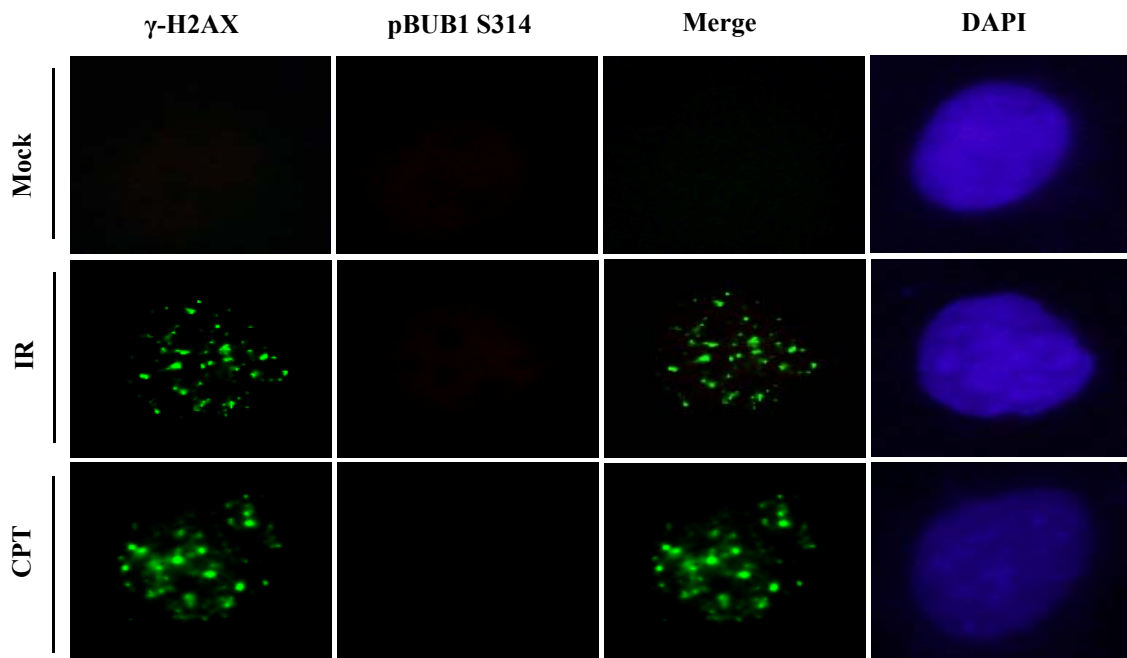
Supplemental Figure S1. HeLa cells transfected with control or Bub1 siRNA were irradiated with 0 (Mock) or 4 Gy (IR), and harvested at indicated points before immunofluorescence microscopy was used to detect radiation-induced γ -H2AX foci.



Supplemental Figure S2. The single cell electrophoresis assay in HeLa cells transfected with control or Bub1 siRNAs.

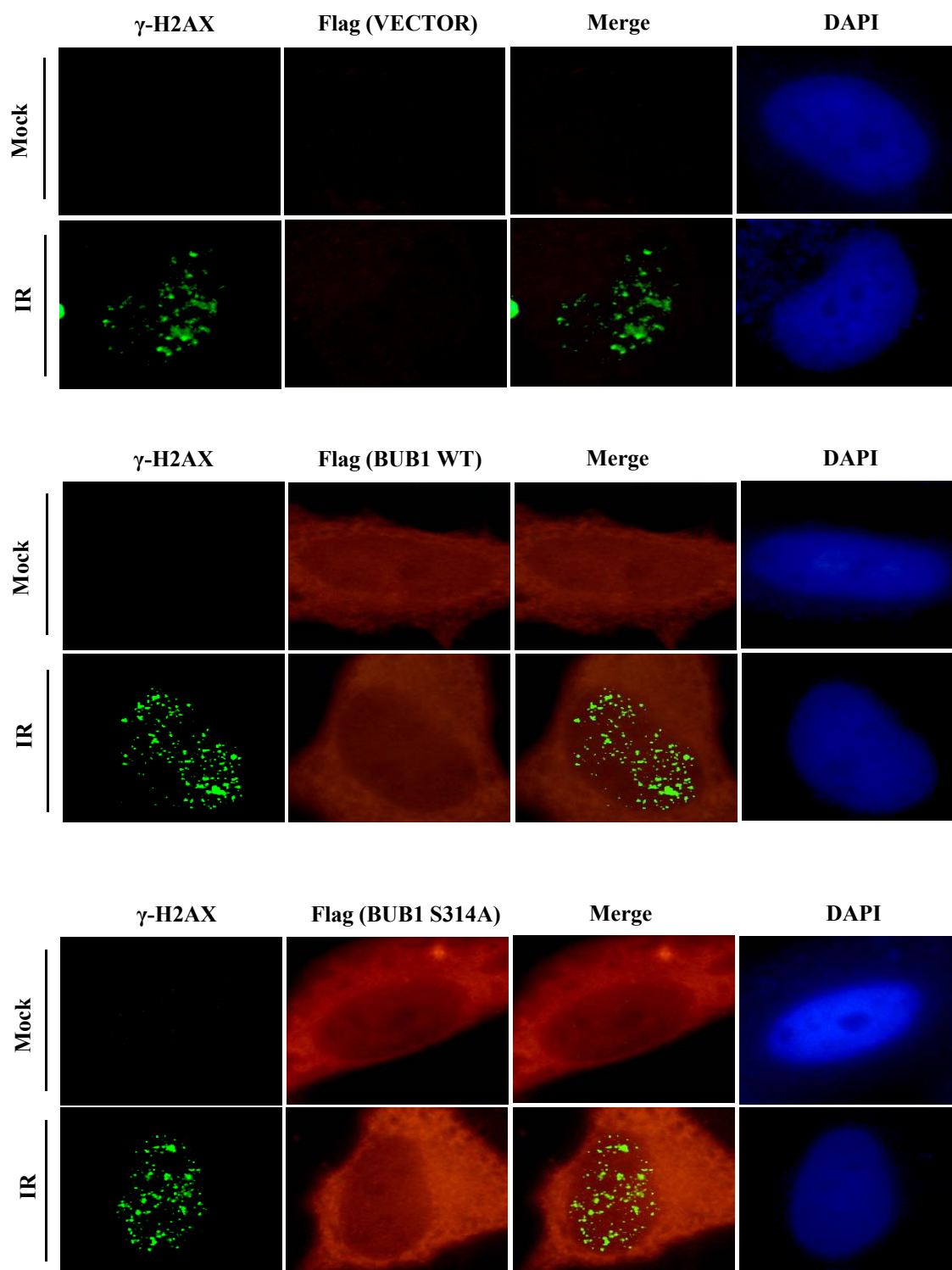


Supplemental Figure S3. Localization of Bub1 in the absence or presence of IR-induced DNA damage. HeLa cells were treated with mock or IR (4Gy). 2h after treatment cells were stained with indicated antibodies and images from immunofluorescence microscopy are shown.



Bub1 Knock-down

Supplemental Figure S4. HeLa cells transfected with siRNA-Bub1 were treated with mock, IR or CPT. 2h after treatment cells were stained with indicated antibodies and images from immunofluorescence microscopy are shown.



Supplemental Figure S5. Localization of S314A Bub1 in the absence and presence of IR-induced DNA damage. HeLa cells transfected with vector or flag-tagged wild-type or S314A Bub1 were treated with mock or IR (4Gy). 2h after treatment cells were stained with indicated antibodies and images from immunofluorescence microscopy are shown.