

Table S2: Summary of Results and Statistics

Fig.	Experiment	Cells	Rc (nm)	ΔRc	95% CI [low, high]	p-value
1B	WT	14	480 \pm 30	120	[30, 220]	0.01*
	WT +40Gy	12	580 \pm 40			
1C	<i>rad51</i> Δ	10	500 \pm 30	10	[-110, 170]	0.9
	<i>rad51</i> Δ +40Gy	14	500 \pm 50			
2B	<i>rad52</i> Δ	23	480 \pm 30	40	[-20, 100]	0.2
	<i>rad52</i> Δ +40Gy	26	490 \pm 20			
2C	<i>rad51</i> Δ <i>rad52</i> Δ	20	580 \pm 50	-10	[-130, 110]	0.9
	<i>rad51</i> Δ <i>rad52</i> Δ +40Gy	28	600 \pm 40			
3A	WT +Caffeine	11	500 \pm 40	-80	[-260, 80]	0.2
	WT +40Gy +Caffeine	6	450 \pm 50			
3B	-LacOx256 +Gal	12	480 \pm 50	230	[50, 520]	0.001***
	+LacOx256 +Gal	11	640 \pm 90			
3B	+LacOx256	10	460 \pm 40	290	[50, 560]	0.008**
	+LacOx256 +Gal	11	640 \pm 90			
3B	+LacOx256 +Gal	11	640 \pm 90	-330	[-600, -120]	0.001**
	+LacOx256 +Gal +Caffeine	13	400 \pm 20			
3C	<i>rad51</i> Δ <i>rad52</i> Δ	20	580 \pm 50	-170	[-330, -40]	0.01*
	<i>rad51</i> Δ <i>rad52</i> Δ +Caffeine	16	410 \pm 40			
4A	WT	14	480 \pm 30	110	[10, 260]	0.03*
	<i>rad51-II3A</i> +40Gy	16	580 \pm 60			
4A	<i>rad51-II3A</i>	15	510 \pm 40	100	[-20, 230]	0.09 [†]
	<i>rad51-II3A</i> +40Gy	16	580 \pm 60			
4A	WT	14	480 \pm 30	20	[-70, 140]	0.7
	<i>rad51-II3A</i>	15	510 \pm 40			
4B	<i>rad52</i> Δ ₄₀₉₋₄₁₂	17	490 \pm 40	-30	[-130, 90]	0.6
	<i>rad52</i> Δ ₄₀₉₋₄₁₂ +40Gy	32	490 \pm 30			
4C	<i>rad51</i> Δ <i>rad52</i> Δ ₄₀₉₋₄₁₂	30	480 \pm 30	30	[-70, 130]	0.5
	<i>rad51</i> Δ <i>rad52</i> Δ ₄₀₉₋₄₁₂ +40Gy	26	510 \pm 40			
S1A	-LacOx256	10	450 \pm 30	10	[-70, 140]	0.7
	-LacOx256 +Gal	12	480 \pm 50			
S1C	<i>rad51-S192A</i>	15	480 \pm 40	30	[-80, 120]	0.5
	<i>rad51-S192A</i> +40Gy	10	500 \pm 40			
S1D	<i>rad51-S192E</i>	14	500 \pm 40	-40	[-140, 60]	0.4
	<i>rad51-S192E</i> +40Gy	11	480 \pm 50			