

Supplementary Information

***rad-51* downregulation redirects DNA repair and preserves genome stability in FANCD2-deficient *Caenorhabditis elegans* (Alessandra Masullo et al.)**

Strain	genotype	Source
N2	Wild type, Bristol	CGC
NB105	<i>fcd-2(tm1298)IV</i>	CGC
	<i>rad-51[knu isoform A deletion] (IV) = rad-51(A⁻)</i>	A. Adamo
DR102	<i>dpy-5(e61);unc-29(e403)I</i>	CGC
BC3217	<i>unc-60(m35) dpy-11(e224)V</i>	CGC
AV630	<i>mels8 [pie-1p::GFP::cosa-1 + unc-119 (+)] II</i>	CGC
AV276	<i>syp-2(ok307) V/nT1 [unc-?(n754) let-? qIs 50] (IV;V)</i>	M. Colaiacovo
AV308	<i>him-14(it21)/mnCI [dpy-10(e128) unc-52 (e444) II</i>	CGC
	<i>3xFLAG::fcd-2 IV</i>	A. Adamo
	<i>rad-51(A⁻)IV;GFP::COSA-1 II</i>	This study
	<i>fcd-2(tm1298); rad-51(A⁻) IV</i>	This study
	<i>rad-51 (A⁻)IV; dpy-5(e61);unc-29(e403)I</i>	This study
	<i>rad-51(A⁻)IV; unc-60(m35) dpy-11(e224)V</i>	This study
	<i>rad-51(A⁻)IV; mels8 [pie-1p::GFP::cosa-1 + unc-119 (+)] II</i>	This study
	<i>fcd-2 (tm1298)IV; mels8 [pie-1p::GFP::cosa-1 + unc-119 (+)] II</i>	This study
	<i>fcd-2 (IV);syp-2(ok307)V /nT1 [unc-?(n754) let-? qIs 50] (IV;V)</i>	A. Adamo
	<i>him-14(it21)/ mnCI [dpy-10(e128) unc-52 (e444) II</i>	A. Adamo
	<i>rad-51 (A⁻)fcd-2 (IV);syp-2(ok307)V /nT1 [unc-?(n754) let-? qIs 50] (IV;V)</i>	This study
	<i>rad-51 (A⁻)fcd-2 (IV); him-14(it21)/ mnCI [dpy-10(e128) unc-52 (e444) II</i>	This study
	<i>3xFLAG::fcd-2 rad-51(A⁻) IV</i>	This study

Table S1. List of all strains used in this study

PRIMER	GENE	SEQUENCE (5'-3')
Upper-rad-51	<i>rad-51 (F)</i>	TATGGGACAATCTTGGGG
Upper-rad-51(A ⁻)	<i>rad-51[in rad-51(A⁻) strain] (F)</i>	ACGAAGTTATGGCTGCTCG
Lower- rad-51	<i>rad-51(R)</i>	ACGAAGTTATGGCTGCTCG
Upper-fcd-2	<i>fcd-2</i>	TCGCTCCGCCCTCTTTTCTA
Lower-fcd-2	<i>fcd-2</i>	CGACGAGCAGCTAACAACATTGG
Upper-GFP	<i>gfp [in AV630 strain] (F)</i>	GCCCGAAGGTTATGTACAGG
Lower-GFP	<i>gfp [in AV630 strain] (R)</i>	CCCGGGCATTGTATAGTTC
Upper-3xFLAG- fcd-2	<i>fcd-2</i>	TTCCCGCCATGGAGCATG
Lower-3xFLAG-fcd-2	<i>3xFLAG [in FLAG::fcd-2]</i>	GTGGCCATCATCAGGATC

Table S2. List of all primers used in this study