

APPENDIX

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Appendix Table S1: Age-dependent X-chromosome NDJ in oocytes is suppressed by feeding mothers the Sirt1 activator, SRT1720

Condition	% NDJ	% Diplo (#)	% Nullo (#)	N (fertility)	P-value
Replicate 1					
Aged, DMSO	15.26	7.07 (57)	8.19 (66)	1489 (37.2)	7.78 x 10 ⁻⁶
Non-Aged, DMSO	7.83	4.18 (31)	3.64 (27)	1424 (39.6)	
Aged, SRT1720	12.79	6.01 (46)	6.79 (52)	1434 (35.9)	0.126
Non-Aged, SRT 1720	10.19	4.13 (30)	6.06 (44)	1378 (34.5)	
Replicate 2					
Aged, DMSO	15.12	8.21 (38)	6.91 (32)	856 (23.8)	5.35 x 10 ⁻⁴
Non-Aged, DMSO	8.02	4.16 (27)	3.86 (25)	1245 (31.1)	
Aged, SRT1720	11.43	5.87 (37)	5.56 (35)	1188 (27.0)	0.109
Non-Aged, SRT 1720	8.70	5.36 (37)	3.34 (23)	1320 (33.0)	
Replicate 3					
Aged, DMSO	15.42	8.57 (35)	6.85 (28)	754 (18.9)	2.48 x 10 ⁻³
Non-Aged, DMSO	8.51	3.40 (16)	5.11 (24)	900 (22.5)	
Aged, SRT1720	9.56	3.74 (18)	5.82 (28)	916 (22.9)	0.232
Non-Aged, SRT 1720	7.43	2.18 (12)	5.25 (29)	1063 (26.6)	

In all three experiments, the genotype of mothers was: *y w/y w; + : mtrm^{KG} smc1Δ / +*.

indicates number of progeny recovered for each category.

N equals the total number of progeny scored.

Fertility equals the number of progeny per female.

P-values were calculated for pairs using the calculator developed by Gilliland and colleagues (Zeng et al, 2010).

Appendix Table S2. Fly Stocks and Genotypes

Genotype	Hairpin	Abbreviation	Source	Bickel Stock #
$y^1 sc^1 v^1$; $P\{y^{+7.7} v^{+1.8} = TRiP$. HMJ21708 = Sirt1 ^{V20} }attP40; +	SH022-B06 Valium 20	<i>Sirt1</i> ^{SH022-B06}	BL #36614	H-087 H-213 [#]
y ; $P\{y^{+7.7} v^{+1.8} = TRiP$. HMJ21708 = Sirt1 ^{V20} }attP40; +	SH022-B06 Valium 20	<i>Sirt1</i> ^{SH022-B06}	Bickel lab derivative of H-087	I-554
$y^1 sc^* v^1$; +; $P\{y^{+7.7} v^{+1.8} = TRiP$ HMS00484 = Sirt1 ^{V20} }attP2	SH00806 Valium 20	<i>Sirt1</i> ^{SH00806}	BL #32481	H-084 H-214 [#]
y ; +; $P\{y^{+7.7} v^{+1.8} = TRiP$ HMS00484 = Sirt1 ^{V20} }attP2	SH00806 Valium 20	<i>Sirt1</i> ^{SH00806}	Bickel lab derivative of H-084	I-543
y sc cv v f car /FM7a/B ^S Y; +; mtrm ^{KG0805} $P\{w^{+mC} = mata4$ -GAL4-VP16}V37/TM3,Sb(Ser)		$y sc cv v f car$; <i>mtrm</i> ^{KG} <i>mata</i>	Bickel Lab (Perkins et al, 2016)	M-834
y sc cv v f car /FM7a/B ^S Y; +; mtrm ^{KG0805} /TM3,Sb(Ser)		$y sc cv v f car$; <i>mtrm</i> ^{KG}	Bickel Lab (Perkins et al., 2016)	M-835
$C(1)RM, y^2, su(w^a) w^a / X^AY, v f B$		X^AY, Bar	BL #700	C-200
$y^1 Df(1)w^{67c23}$; +; +		$y w$		A-062
w^* ; +; $P\{w^{+mC} = mata4$ -GAL4-VP16}V37		<i>mata</i>	BL #7063	T-273
+; sirt1 ^{5.26} cn^1 ; +		<i>sirt1</i> ^{5.26}	BL #32657 (Newman et al, 2002)	B-193
+; sirt1 ^{4.5} cn^1 /SM6b, $P\{ry^{+7.2} = eve$ -lacZ8.0}SB1; +		<i>sirt1</i> ^{4.5}	BL #32568 (Newman et al., 2002)	B-194
$y w$; +; $FRT82B cu sr$ smc1Δ ^{ex46} /TM3 Sb			Hawley Lab	M-744
y^1 ; +; $P\{y^{+mDint2} w^{BR.E.BR} = SUPorP\}$ Exo70 ^{KG08051} mtrm ^{KG0805} ry^{506} /TM3,Sb ¹ Ser ¹			BL #14932	M-755
$y w / B[S]Y$; +; mtrm ^{KG0805} <i>Sr</i> smc1Δ ^{ex46} /TM3, Sb, Ser		<i>mtrm</i> ^{KG} <i>smc1Δ</i>	Bickel lab derivative of M-744 and M-755	M-822

BL = Bloomington Drosophila Stock Center

[#]Over the course of this study, stock was reordered from Bloomington and given a new Bickel Stock #

REFERENCES for APPENDIX

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