

Supplemental Table 1: Effects of mutations on salivary gland nucleoli.

Locus	Encoded Protein/Molecular Function	Alleles Tested	Refs.	# Nucleoli		
				Mean \pm SD	Range	^c P values
Wild type ^a				1 \pm 0	1	NA
<i>Su(var)3-9</i>	H3K9 methyltransferase	1699 (missense), 6 and 17 (nulls)	1,2	2.7 \pm 1.4 N = 54	1 to 9 (null); 1 to 12 (1699)	<0.001
<i>Su(var)2-5 / HP1</i>	chromodomain/ binds H3K9me	transheterozygous 1009/1209 (nulls)	1	2.8 \pm 0.83 N = 21	1 to 4	<0.001
<i>Su(var)2-10 / dPIAS</i>	Protein Inhibitor of Activated STAT / SUMOylation	transheterozygous 02/Pex14A (nulls)	3	multiple ^b	N.D. ^b	
<i>Su(TDA-PEV) 1650</i>	??	1650	1	3.6 \pm 1.6 N = 35	1 to 8	<0.001
<i>Su(var)3-7</i>	zinc Finger/ DNA binding	234	1	1 ^b		
<i>l(3)73Ah</i>	ubiquitin ligase	1044	1	1 ^b		
<i>Su(TDA-PEV) 1025</i>	??	1025	1	1 ^b		
<i>Su(TDA-PEV) 1260</i>	??	1260	1	1 ^b		
<i>Su(TDA-PEV) 1128</i>	??	1128	1	1 ^b		
<i>Su(var)4-20</i>	H4K20 methyltransferase	BG00814 and EY07422 P insertions (hypomorphic)	4	1 ^b		
<i>dSIR2</i>	NAD-dependent histone deacetylase	17 (null)	5	1 ^b		
<i>Pc</i>	PcG complex	1 and 7 (nulls)	6,7	1 ^b		
<i>Ph</i>	PcG complex	410 (null)	8	1 ^b		
<i>Lig4</i>	DNA ligase	29 and 57 (nulls)	9	1 ^b		
<i>Lig4; Su(var)3-9</i>	N.A.	double transheterozygous mutant		1.7 \pm 0.8 N = 83	1 to 4	<0.001 ^d
<i>Ago2</i>	siRNA loading	51B (null)	10	2.5 \pm 1.3 N = 79	1 to 5	0.001
<i>Aub</i>	RNAi complex	QC42 (?)	11	1.1 \pm 0.4 N = 85	1 to 3	0.004
<i>hls / Spn-E</i>	RNA helicase (of RNAi complex)	Δ 215 (null) and 1 (hypomorph)	12,13	1.1 \pm 0.3 N = 40 and 1.6 \pm 0.8 N = 78	1 to 4	0.083 and <0.001

<i>piwi</i>	mRNA binding (of RNAi complex)	06843 (null)	14	1.8± 1.0 N = 102	1 to 5	<0.001
<i>dcr-2</i>	RNase III-like endonuclease and helicase for siRNA production	L811fsx (hypomorph) and P insertion (null)	15	3.4± 1.9 N = 60	1 to 6	<0.001

^a heterozygous for *Su(var)*

^b evaluated qualitatively from multiple images

^c p values reflect comparisons of the mean # nucleoli in wild type versus mutant

^d p values reflect comparisons of the mean # nucleoli in the double mutant versus wild type, and separately versus *Su(var)3-9^{null}* mutant

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