TABLE S2

***CycY* and *Eip63E* mutants display variable expressivity[a]**

Genotype[b]		L1	w. L3	P1	P3	P4	P5	P14	P15	A
CycY^{E8}/+	n	180	152	152	152	152	152	151	150	150
	%	100	84	84	84	84	84	84	83	83
CycY^{E8}	n	180	162	162	162	158	110	74	23	15[c]
	%	100	90	90	90	88	61	41	13	8
CycY^{E8}/+; *P{CycY}*	n	200	180	180	180	180	180	180	180	180[d]
	%	100	90	90	90	90	90	90	90	90
CycY^{E8}; P{CycY}	n	200	185	185	185	185	185	185	177	177[e]
	%	100	93	93	93	93	93	93	89	89
CycY^{E8}/+ and	n	200	187	187	187	187	187	187	174	174[f]
Df(2L)Exel6030/+	%	100	94	94	94	94	94	94	87	87
CycY^{E8}/Df(2L)Exel6030	n	200	186	186	186	182	144	88	31	19[g]
	%	100	93	93	93	91	72	44	16	10
CycY^{E8}/+; *P{CycY}* and	n	200	178	178	178	178	178	178	177	177[h]
Df(2L)Exel6030/+; *P{CycY}*	%	100	89	89	89	89	89	89	89	89
CycY^{E8}/Df(2L)Exel6030	n	200	179	179	179	179	179	179	176	176[i]
; *P{CycY}*	%	100	90	90	90	90	90	90	88	88
Eip63E^{GN50}/+ and	n	180	164	164	164	164	164	164	162	162
Eip63E^{81}/+	%	100	91	91	91	91	91	91	90	90
Eip63E^{GN50}/Eip63E^{81}	n	180	135	129	129	76	59	0	0	0
	%	100	75	72	72	42	33	0	0	0

[a] 180 or 200 newly eclosed first instar larvae (L1) from each genotype were followed and the number that reached each stage, including wandering third instar larvae (w. L3), pupal stages (P1-P5, P14, and P15), and adults (A), was recorded.

[b] *P{CycY}* represents a genomic *CycY* transgene (Figure 1). In *CycY^{E8}*/+ and *Df(2L)Exel6030*/+, "+" stands for an *Act5C-GFP*-marked *CyO* balancer chromosome presumed to be wild type for *CycY*. In *Eip63E^{81}*/+ and *Eip63E^{GN50}*/+, "+" stands for an *Act5C-GFP*-marked *TM3, Ser* balancer chromosome presumed to be wild type for *Eip63E*.

[c] 13 out of the 15 *CycY^{E8}* adults that eclosed had leg and wing defects and died quickly, while the remaining two were much smaller than their heterozygous siblings and died within two days.

[d] 3 out of the 180 *CycY^{E8}/+; P{CycY}* adults were found dead on the food surface with the wing still folded and without other obvious morphological defects.

[e] 18 out of the 177 *CycY^{E8}; P{CycY}* adults were found dead on the food surface with the wing still folded and without other obvious morphological defects.

[f] One out of the 174 *CycY^{E8}*/+ and *Df(2L)Exel6030*/+ adults was found dead on the food surface with the wing still folded and without other obvious morphological defects.

[g] All of the 19 *CycY^{E8}/Df(2L)Exel6030* adults that eclosed had leg and wing defects and died quickly.

[h] 6 out of the 177 *CycY^{E8}/+; P{CycY}* and *Df(2L)Exel6030/+; P{CycY}* adults were found dead on the food surface with the wing still folded and without other obvious morphological defects.

[i] 13 out of the 176 *CycY^{E8}/Df(2L)Exel6030; P{CycY}* adults were found dead on the food surface with the wing still folded and without other obvious morphological defects.