

**TABLE S2****Complementation tests of 24 randomly selected FRT40A Bruinfly lines with *lgl*[4]**

Kyoto ID	Bruinfly ID	insertion site	annotated gene disrupted	single fly crosses that fail to complement <i>lgl</i> [4]
111624	14733	023E01_	CG3347	0 of 8
111512	13053	35D04	gliotactin	10 of 10
111516	13097	026B05	Kruppel homolog 1	10 of 10
111066	20404	035F01	Cropped	0 of 4
111067	10363	029E04-029E06	raw	0 of 4
111079	10386	033A01-033A02	crooked legs	0 of 4
111083	10391	038B03-038B05	nebbish	0 of 4
111097	10435	031D01	no mitochondrial derivative	0 of 4
111106	10451	024E01_	turtle	5 of 10
111108	10453	030A02-030A06	taiman	0 of 4
111111	10457	023B06	overgrown hematopoietic organs	0 of 4
111122	10473	025C01	viking	0 of 10
111275	10959	022C01	CG31672	0 of 4
111278	10965	023F03	Pdsw	0 of 4
111334	11115	036A11	cytochrome C proximal	0 of 4
111356	11166	021C02	ebi	0 of 4
111366	11212	024C05	lethal (2) k16918	0 of 4
111369	11218	034A04	Target of rapamycin	0 of 4
111429	12169	021E02_	dribble	0 of 4
111431	12173	035B08	moladietz	0 of 4
111462	12309	033A01-033A02	unknown	0 of 4
111463	12310	023D01-023D02,029A03-029A05	unknown	0 of 4
111558	13692	032F02	CG6509	7 of 10
111564	13853	038A01	Lar leukocyte antigen related	8 of 8

Initially, 4-6 male flies were individually tested from each stock. For stocks that exhibited some failure to complement *lgl*, additional single fly crosses were performed to assay a total of 10 chromosomes from each stock. The gliotactin, Kr-H1, and Lar insertions were 100% *lgl*, whereas the turtle and CG6509 insertions were 50-70% *lgl*.