Supplemental Table S1. Name, location, homologous recombination efficiency, and phenotype classification of the 105 targeted lncRNAs.

	lncRNA name	Chromosomal location	Target length (bp)	HR efficiency (100%)	Knockout phenotype
Class 1 novel lncRNAs predicted using bioinformatics	lncRNA:TS1	2L:20,551,151..20,551,400	250	5.56%	male fertility decreased by 60%-100%
	lncRNA:TS2	2L:3,586,751..3,588,150	1400	3.70%	male fertility decreased by 30%-60%
	lncRNA:TS3	3L:20,557,301..20,557,600	300	16.67%	male fertility decreased by 30%-60%
	lncRNA:TS4	2L:2,639,301..2,639,600	350	8.33%	no/minor phenotype
	lncRNA:TS5	3R:6,106,079..6,106,378	300	6.06%	no/minor phenotype
	lncRNA:TS6	2L:4,655,551..4,656,200	650	47.06%	no/minor phenotype
	lncRNA:TS7	3L:3,619,701..3,620,150	450	14.55%	no/minor phenotype
	lncRNA:TS8	2L:11,403,551..11,403,950	400	10.00%	no/minor phenotype
	lncRNA:TS9	2L:12,774,451..12,774,900	450	5.41%	no/minor phenotype
	lncRNA:TS10	2L:13,126,751..13,127,050	300	3.70%	no/minor phenotype
	lncRNA:TS11	2L:2,625,501..2,625,700	200	14.29%	no/minor phenotype
	lncRNA:TS12	3R:23,672,529..23,672,878	200	20.00%	no/minor phenotype
	lncRNA:TS13	2L:2,632,551..2,632,850	300	9.52%	no/minor phenotype
	lncRNA:TS14	3R:7,326,879..7,327,078	300	18.00%	no/minor phenotype
	lncRNA:TS15	2L:3,397,551..3,397,900	650	6.25%	male fertility decreased by 30%-60%
	lncRNA:TS16	3R:16,801,429..16,801,828	650	16.67%	no/minor phenotype
	lncRNA:TS17	2R: 15,048,746..15,049,145	400	16.13%	male fertility decreased by 30%-60%
	lncRNA:TS18	2R:8,310,859..8,311,295	437	8.00%	male fertility decreased by 0%-30%
	lncRNA:TS19	2L:2,625,701..2,629,900	400	7.84%	no/minor phenotype
	lncRNA:TS20	3R:5,970,879..5,971,212	334	15.79%	no/minor phenotype
	lncRNA:TS21	2L:2,626,701..2,626,900	350	11.76%	no/minor phenotype
	lncRNA:TS22	3R:26,770,429..26,770,878	450	3.23%	no/minor phenotype
	lncRNA:TS23	3R:30,865,779..30,866,028	250	18.52%	male fertility decreased by 30%-60%
	lncRNA:TS24	3R:10,944,579..10,945,028	450	6.25%	no/minor phenotype
	lncRNA:TS25	3R:11,307,629..11,307,928	300	3.13%	no/minor phenotype
	lncRNA:TS26	3R: 13,541,779..13,542,328	550	14.29%	male fertility decreased by 0%-30%
	lncRNA:TS27	3R:28,000,279..28,000,628	200	9.38%	male fertility decreased by 30%-60%
	CR45302	2L:14,885,105..14,885,411	307	8.57%	no/minor phenotype
	CR45727	2L:14,876,832..14,877,136	305	5.45%	male fertility decreased by 0%-30%
	CR44949	3R:25,823,706..25,825,211	1506	30.67%	no/minor phenotype
	CR44776	2L:6,551,854..6,552,436	583	7.69%	no/minor phenotype
	CR44967	3R:13,085,478..13,085,976	499	40.00%	no/minor phenotype
	CR45557	3R:32,015,941..32,026,928	10988	2.78%	no/minor phenotype
	CR45242	3L:10,269,482..10,270,353	871	6.45%	no/minor phenotype
	CR44874	2L:10,051,362..10,052,289	927	1.89%	no/minor phenotype
	CR45418	3L:6,608,770..6,609,238	469	12.50%	no/minor phenotype
	CR44278	2R:8,768,296..8,768,795	500	15.63%	no/minor phenotype
	CR45670	3L:4,107,143..4,107,470	328	17.86%	male fertility decreased by 0%-30%
	CR45054	3R:10,083,381..10,090,525	7145	1.41%	no/minor phenotype
	CR44455/CR44456	2R:23,127,604..23,128,477	874	10.75%	male infertility
	CR44943	3R:14,375,399..14,377,344	1946	5.33%	no/minor phenotype
	CR44401	3R:20,485,778..20,486,679	902	36.36%	no/minor phenotype
	CR45283	2L:12,316,272..12,317,313	1042	6.38%	no/minor phenotype
	CR43356	2L:12,174,090..12,174,638	549	2.86%	male fertility decreased by 0%-30%
	CR44805	2R:23,840,577..23,840,777	201	19.05%	no/minor phenotype
	CR45630	3R:16,406,641..16,407,107	467	4.17%	no/minor phenotype
	CR43764	2L:15,295,636..15,297,699	2064	7.55%	no/minor phenotype
	CR43701	3L:1,488,739..1,488,831	93	12.00%	no/minor phenotype
	CR44371	2R:15,330,395..15,331,195	801	7.14%	male fertility decreased by 60%-100%
	CR42657	X:9,688,189..9,689,295	1107	22.41%	no/minor phenotype
	CR45187	3R:4,402,429..4,402,928	500	1.75%	no/minor phenotype
	CR43859	2L:11,205,528..11,206,092	565	2.38%	no/minor phenotype
	CR43492	X:18,586,223..18,587,219	997	6.94%	no/minor phenotype

Class 2 annotated lncRNAs highly and/or specifically expressed in fly testis (Flybase)	CR45722/CR45723/CR43839	2L:19,469,126..19,471,627	2502	2.17%	male fertility decreased by 30%-60%
	CR45608	X:18,310,502..18,311,349	848	1.25%	no/minor phenotype
	CR45174	3L:23,690,626..23,691,668	1043	10.34%	no/minor phenotype
	CR44585	2L:11,338,551..11,339,200	650	15.91%	male fertility decreased by 60%-100%
	CR45542	X:9,589,818..9,590,767	950	2.50%	male fertility decreased by 30%-60%
	CR17567	2L:19,183,092..19,183,613	522	6.25%	no/minor phenotype
	CR32661	X:11,917,806..11,918,678	872	9.86%	no/minor phenotype
	CR9284	2R:21,803,402..21,804,338	937	7.35%	no/minor phenotype
	CR42858	3R:9,824,085..9,824,864	780	15.07%	male fertility decreased by 30%-60%
	CR43823	2L:3,588,485..3,590,301	1817	7.14%	no/minor phenotype
	CR43484	3L:3,688,786..3,689,409	624	9.38%	male fertility decreased by 0%-30%
	CR43862	X:20,686,819..20,687,653	835	8.00%	male fertility decreased by 0%-30%
	CR43608	2L:20,607,043..20,607,847	805	14.29%	no/minor phenotype
	CR43852	2L:2,646,030..2,646,281	252	11.54%	male fertility decreased by 0%-30%
	CR43718	2L:396,120..396,571	452	3.57%	no/minor phenotype
	CR43282	3R:19,920,597..19,921,310	714	6.52%	male fertility decreased by 60%-100%
	CR42859	2L:2,245,230..2,247,383	2154	7.84%	male fertility decreased by 30%-60%
	CR43416	2R:16,357,737..16,358,481	745	4.84%	male fertility decreased by 60%-100%
	CR43631/CR43632/CR43633/CR43634/CR43847	3R:25,791,642..25,797,778	6137	9.09%	male fertility decreased by 30%-60%
	CR42645	2R:24,498,083..24,498,669	587	11.54%	no/minor phenotype
	CR43705/CR43706	3L:20,795,019..20,796,502	1484	5.71%	no/minor phenotype
	CR43848	3R:13,574,825..13,575,479	655	10.14%	male fertility decreased by 0%-30%
	CR43835	X:7,500,443..7,501,383	941	10.71%	no/minor phenotype
	CR43304	2L:17,541,854..17,542,383	530	5.80%	no/minor phenotype
	CR43802	2L:17,042,481..17,043,165	685	2.56%	male fertility decreased by 0%-30%
	CR43414	2L:20,296,643..20,297,299	657	2.94%	male fertility decreased by 0%-30%
	CR43306	3L:18,294,604..18,295,800	1197	18.99%	male fertility decreased by 0%-30%
	CR43807	2L:10,862,194..10,864,697	2504	16.13%	no/minor phenotype
	CR43655	3R:22,964,038..22,964,630	593	5.71%	no/minor phenotype
	CR43753	2L:2,271,319..2,279,714	8396	6.74%	male fertility decreased by 60%-100%
	CR43434	3R:26,428,590..26,429,173	584	12.90%	no/minor phenotype
	CR43486/CR43487	3R:6,126,476..6,127,955	1480	25.29%	no/minor phenotype
	CR43622	2R:15,049,775..15,050,355	581	41.67%	no/minor phenotype
	CR43625	3L:15,437,201..15,437,713	513	1.56%	no/minor phenotype
	CR43627	3L:4,929,295..4,931,138	1844	10.00%	no/minor phenotype
	CR43682	2L:15,277,797..15,279,497	1701	3.70%	no/minor phenotype
	CR45006	2L:1,345,965..1,346,331	367	7.27%	no/minor phenotype
	CR44852	2L:14,532,484..14,533,471	988	20.59%	no/minor phenotype
	CR44670/CR44671	3L:18,456,399..18,457,550	1152	1.75%	no/minor phenotype
	CR44420	2R:18,246,127..18,246,763	637	19.75%	male fertility decreased by 60%-100%
	CR44413	2L:17,625,098..17,625,690	593	20.83%	no/minor phenotype
	CR44412	2L:17,606,465..17,607,260	796	11.70%	male fertility decreased by 60%-100%
	CR44344	2R:17,386,841..17,389,081	2240	3.28%	male fertility decreased by 30%-60%
	CR44337	3R:7,331,500..7,332,002	503	1.98%	no/minor phenotype
	CR44324	3R:23,485,481..23,486,085	605	11.43%	no/minor phenotype
	CR44279	2R:8,542,796..8,543,542	747	12.20%	no/minor phenotype
	CR44256	3R:17,371,271..17,371,757	487	18.75%	no/minor phenotype
	CR44131	2R:6,068,795..6,069,795	1001	3.61%	no/minor phenotype
	CR44081	2L:6,812,640..6,813,110	470	24.56%	no/minor phenotype
	CR43939	3L:21,576,033..21,577,219	1187	9.28%	no/minor phenotype
	CR43819	2L:17,085,650..17,086,419	770	4.55%	no/minor phenotype
	CR43721	2L:11,307,753..11,308,038	286	24.24%	no/minor phenotype