

Table S1. Expression of *mlt-10p::gfp-pest* in *let-7(mg279) mir-84(tm1304)* adults upon RNAi against genes implicated in molting

RNAi	Fluorescent (n)	Total (n)	% Fluorescent	Control Value	% Fluorescent (Normalized)	Chi-square	P-value
vector 1	30	55	55	55	100	N.A.	N.A.
vector 2	35	54	65	65	100	N.A.	N.A.
vector 3	19	25	76	76	100	N.A.	N.A.
vector 4	23	25	92	92	100	N.A.	N.A.
vector 5	81	99	82	82	100	N.A.	N.A.
vector 6	40	59	68	68	100	N.A.	N.A.
<i>gfp</i> 1	0	73	0	55	0	52.01	0.001
<i>gfp</i> 2	0	35	0	92	0	23.20	0.001
<i>gfp</i> 3	0	68	0	68	0	67.29	0.001
<i>rpl-27</i>	1	10	10	68	15	11.85	0.001
<i>rpl-32</i>	6	45	13	82	16	72.77	0.001
<i>rpl-31</i>	13	88	15	82	18	83.77	0.001
<i>nhr-23</i>	13	66	20	82	24	62.34	0.001
<i>nhr-23</i>	16	73	22	55	40	14.50	0.001
<i>Y37D8A.21</i>	38	106	36	82	44	44.42	0.001
<i>vha-9</i>	19	65	29	65	45	15.07	0.001
<i>bli-1</i>	17	55	31	65	48	12.56	0.001
<i>ZK430.8</i>	16	46	35	65	54	8.97	0.010
<i>pod-2</i>	14	36	39	65	60	5.85	0.025
<i>nhr-25</i>	7	15	47	76	61	3.55	0.100
<i>pan-1</i>	26	61	43	65	66	5.66	0.025
<i>acn-1</i>	20	40	50	76	66	4.33	0.050
<i>nas-36</i>	29	79	37	55	67	4.19	0.050
<i>ran-4</i>	24	52	46	65	71	3.74	0.100
<i>Y48B6A.3</i>	30	65	46	65	71	4.14	0.050
<i>vha-16</i>	54	92	59	82	72	12.30	0.001
<i>stc-1</i>	44	94	47	65	72	4.47	0.050
<i>rps-6</i>	43	72	60	82	73	10.21	0.010
<i>lrp-1</i>	13	32	41	55	74	1.57	1.000
<i>rme-8</i>	24	48	50	65	77	2.29	0.200
<i>unc-52</i>	29	58	50	65	77	2.51	0.200
<i>F40G9.1</i>	29	57	51	65	78	2.21	0.200
<i>rps-32</i>	25	42	60	76	78	1.89	0.200
<i>F53B8.1</i>	29	56	52	65	80	1.92	0.200
<i>F20G4.1</i>	22	42	52	65	81	1.51	1.000
<i>Y51H1A.3</i>	53	79	67	82	82	5.12	0.025
<i>vha-8</i>	20	26	77	92	84	2.19	0.200
<i>mlt-10</i>	19	41	46	55	84	0.63	1.000
<i>kin-2</i>	27	42	64	76	85	1.00	1.000
<i>mlt-9</i>	11	17	65	76	85	0.63	1.000
<i>lir-1</i>	30	54	56	65	85	0.97	1.000
<i>Y65B4A.6</i>	32	44	73	82	89	1.52	1.000
<i>lrp-1</i>	69	94	73	82	90	1.97	0.200
<i>K04A8.6</i>	31	50	62	68	91	0.40	1.000
<i>fbn-1</i>	49	82	60	65	92	0.35	1.000
<i>F53G12.4</i>	32	63	51	55	92	0.17	1.000
<i>let-805</i>	38	63	60	65	93	0.25	1.000
<i>nhr-6</i>	24	47	51	55	93	0.12	1.000
<i>est-1</i>	48	63	76	82	93	0.75	1.000
<i>mlt-11</i>	45	63	71	76	94	0.19	1.000
<i>Y54E10BR.5</i>	44	57	77	82	94	0.49	1.000
<i>imb-3</i>	55	71	77	82	94	0.49	1.000
<i>C23G10.10</i>	42	54	78	82	95	0.36	1.000
<i>Y47D3B.1</i>	40	51	78	82	96	0.25	1.000
<i>R06A4.9</i>	15	23	65	68	96	0.05	1.000
<i>ntl-1</i>	45	72	63	65	96	0.07	1.000
<i>F49C12.12</i>	24	27	89	92	97	0.14	1.000
<i>ifc-2</i>	36	49	73	76	97	0.06	1.000
<i>M03F4.7</i>	38	51	75	76	98	0.02	1.000
<i>mec-7</i>	63	78	81	82	98	0.03	1.000
<i>ptr-23</i>	39	60	65	65	100	0.00	1.000
<i>C23F12.1</i>	16	21	76	76	100	0.00	1.000
<i>alg-1</i>	26	34	76	76	101	0.00	1.000
<i>ptr-4</i>	39	51	76	76	101	0.00	1.000
<i>adt-2</i>	36	47	77	76	101	0.00	1.000

<i>dmd-5</i>	33	50	66	65	102	0.02	1.000
<i>Y53F4B.22</i>	99	118	84	82	102	0.16	1.000
<i>nsf-1</i>	22	39	56	55	103	0.03	1.000
<i>W03F9.10</i>	82	97	85	82	103	0.26	1.000
<i>F38A1.8</i>	29	37	78	76	103	0.05	1.000
<i>mlt-8</i>	35	52	67	65	104	0.07	1.000
<i>bli-5</i>	34	43	79	76	104	0.09	1.000
<i>lin-66</i>	47	55	85	82	104	0.33	1.000
<i>let-92</i>	24	30	80	76	105	0.13	1.000
<i>vrs-2</i>	65	75	87	82	106	0.74	1.000
<i>D1054.15</i>	84	104	81	76	106	0.28	1.000
<i>C37C3.3</i>	38	47	81	76	106	0.23	1.000
<i>T25B9.10</i>	45	51	88	82	108	1.03	1.000
<i>crs-2</i>	30	41	73	68	108	0.33	1.000
<i>F25H8.6</i>	53	60	88	82	108	1.20	1.000
<i>lev-11</i>	38	43	88	82	108	0.95	1.000
<i>M03F8.3</i>	41	50	82	76	108	0.38	1.000
<i>npp-20</i>	36	49	73	68	108	0.41	1.000
<i>T23F2.1</i>	23	28	82	76	108	0.30	1.000
<i>qua-1</i>	81	115	70	65	108	0.54	1.000
<i>npp-6</i>	26	31	84	76	110	0.54	1.000
<i>F56C9.12</i>	39	43	91	82	111	1.81	0.200
<i>skp-1</i>	60	71	85	76	111	0.92	1.000
<i>noah-2</i>	29	34	85	76	112	0.82	1.000
<i>T19A5.3</i>	23	30	77	68	113	0.76	1.000
<i>nas-37</i>	24	28	86	76	113	0.81	1.000
<i>bli-4</i>	18	29	62	55	113	0.44	1.000
<i>pas-7</i>	80	86	93	82	113	5.12	0.025
<i>psa-1</i>	44	57	77	68	114	1.28	1.000
<i>pas-1</i>	28	36	78	68	114	1.09	1.000
<i>bli-3</i>	53	84	63	55	115	1.01	1.000
<i>gei-16</i>	94	98	96	82	117	9.87	0.010
<i>noah-1</i>	39	60	65	55	118	1.31	1.000
<i>T01C3.1</i>	61	67	91	76	120	3.63	0.100
<i>K12H4.4</i>	52	57	91	76	120	3.47	0.100
<i>mua-6</i>	12	13	92	76	121	1.51	1.000
<i>emo-1</i>	48	57	84	68	124	4.27	0.050
<i>ZC13.3</i>	33	39	85	68	124	3.50	0.100
<i>pbs-5</i>	59	69	86	65	132	7.20	0.010
<i>nhr-41</i>	29	38	76	55	139	4.59	0.050

Populations of GR1348 (*let-7(mg279) mir-84(tm1304) mgl549(mlt-10p::gfp pest)*) animals were synchronized as L1 larvae, fed *E. coli* OP50 until the 4th larval stage, and then fed bacteria expressing dsRNA corresponding to the indicated genes. As a control, worms were fed bacteria not expressing dsRNA against a worm gene. Animals were examined for any detectable fluorescence approximately 18 hours later, when the majority of control animals expressed GFP. Values represent combined results from two independent experiments. Clones that yielded $\leq 80\%$ normalized fluorescence with a *P*-value >0.001 were tested again (not shown). Only RNAi of *nhr-25* significantly suppressed ($P\leq 0.001$) both GFP expression and lethality in the additional test.