

Table S2. Identification of genes required for DTC plexus formation in an L1 RNAi experiment.

Sequence Name	Gene ID	Total Scored	DTC Plexus Defect	Other Phenotypes Observed
Y77E11A.7	<i>Y77E11A.7</i>	6	+++	
Y48G1C.7	<i>Y48G1C.7</i>	8	+++	fgcs, large nuclei
C15F1.4	<i>ppp-1</i>	6	+++	fgcs
B0491.5	<i>B0491.5</i>	7	+++	
Y48G1A.4	<i>Y48G1A.4</i>	11	+++	fgcs, Rbs
F10C2.6	<i>dars-2</i>	13	+++	fgcs
C33H5.9	<i>sec-10</i>	8	+++	large nuclei
W02B12.9	<i>W02B12.9</i>	9	+++	Rbs
Y66H1A.4	<i>Y66H1A.4</i>	7	+++	Sick
W07E6.2	<i>W07E6.2</i>	12	+++	fgcs
F26F4.11	<i>rpb-8</i>	10	+++	fgcs
C39E9.14	<i>dli-1</i>	5	+++	Egl
M18.5	<i>ddb-1</i>	13	+++	
F20H11.3	<i>mdh-2</i>	21	+++	
F22D6.5	<i>prpf-4</i>	17	+++	fgcs
ZC64.3	<i>ceh-18</i>	12	+++	large nuclei
W01G7.3	<i>rpb-11</i>	22	+++	fgcs
Y38E10A.24	<i>Y38E10A.24</i>	16	+++	
F23B12.7	<i>F23B12.7</i>	13	+++	
K04A8.6	<i>dre-1</i>	20	+++	fgcs
C16A3.5	<i>C16A3.5</i>	21	++	
H35B03.2	<i>H35B03.2</i>	14	++	
F52D10.3	<i>ftt-2</i>	11	++	Rup, Egl
R02D3.5	<i>fnta-1</i>	20	++	
F43G6.9	<i>patr-1</i>	21	++	
R06C1.2	<i>fdps-1</i>	17	++	no oocytes
Y41E3.11	<i>Y41E3.11</i>	13	++	
F42G8.10	<i>F42G8.10</i>	13	++	
C17H12.14	<i>vha-8</i>	22	++	
F10G8.3	<i>npp-17</i>	19	++	fgcs, increased sperm
M106.1	<i>mix-1</i>	20	++	differentiating gcs, fgcs, Mig
C37C3.6	<i>mig-6</i>	5	++	Mig
T27C4.4	<i>lin-40</i>	21	++	
T22H9.1	<i>T22H9.1</i>	16	++	Rup
Y55F3AM.15	<i>csn-4</i>	17	++	Sick
C09F9.2	<i>C09F9.2</i>	17	++	
T05H10.6	<i>T05H10.6</i>	23	++	
F21H12.5	<i>fbf-2</i>	18	++	
F10E9.4	<i>F10E9.4</i>	18	++	fgcs
F29B9.10	<i>F29B9.10</i>	18	++	
Y48E1B.5	<i>Y48E1B.5</i>	19	++	

C09H10.3	<i>nuo-1</i>	26	++	fgcs
Y49E10.6	<i>his-72</i>	20	++	
C04C3.3	<i>C04C3.3</i>	20	++	
T04A8.11	<i>T04A8.11</i>	20	++	fgcs , Muv, Mig
Y73C8B.4	<i>lag-2</i>	133	+	fgcs

Penetrance of DTC defect observed was scored as follows: +++, $\geq 30\%$ penetrance defect; ++, $\geq 15\%$ defect; +, $\geq 5\%$ defect. As a positive control, *lag-2* RNAi was examined and showed a low penetrance defect (10/133 animals). Phenotypes reported were observed in ≥ 3 animals. Animals were scored as 1-1.5-day-adults following exposure to RNAi from the L1 larval stage. **fgcs** (fewer germ cells), Rbs (Reduced brood size), Ste (Sterile), Egl (Egg-laying defective), Rup (ruptured through the vulva), Mig (DTC migration defective), Muv (Multivulva). Germ cell phenotypes are bolded. Sick animals were small and sluggish.