

Table S3. Primary data from transgenic rescue experiments demonstrating rescue or absence of rescue of *cwn-2* (top), *cam-1* (middle) and *cfz-2* (bottom)

	Background	Penetrance (%)	Anterior nerve ring (n)	Normal nerve ring (n)	Total (n)
<i>cwn-2</i> rescue experiments					
<i>cwn-2</i> genomic	With transgene	0.0	0	48	48
	Without transgene	14.9	7	40	47
<i>myo-3::cwn-2</i>	With transgene	0.0	0	26	26
	Without transgene	54.3	25	21	46
<i>myo-2::cwn-2</i>	With transgene	7.1	5	65	70
	Without transgene	70.4	50	21	71
<i>elt-2::cwn-2</i>	With transgene	10.0	1	9	10
	Without transgene	83.3	15	3	18
<i>slt-1::cwn-2</i>	With transgene	0.0	0	27	27
	Without transgene	48.4	15	16	31
<i>cam-1</i> rescue experiments					
<i>cam-1</i> genomic DNA (pDM109)	With transgene	1.1	1	87	88
	Without transgene	15.8	3	16	19
<i>cam-1A::cam-1A</i>	With transgene	6.3	4	59	63
	Without transgene	42.9	9	12	21
<i>cam-1B::cam-1B</i>	With transgene	20.3	14	55	69
	Without transgene	51.1	23	22	45
<i>cam-1C::cam-1C</i>	With transgene	23.8	20	64	84
	Without transgene	20.0	9	36	45
<i>cam-1A::cam-1C</i>	With transgene	13.6	9	57	66
	Without transgene	41.9	49	68	117
<i>unc-119::cam-1A</i>	With transgene	3.8	2	51	53
	Without transgene	36.8	21	36	57
<i>ceh-24::cam-1A</i>	With transgene	11.3	6	47	53
	Without transgene	42.7	35	47	82
<i>cwn-2::cam-1A</i>	With transgene	27.9	17	44	61
	Without transgene	30.2	16	37	53
<i>mig-1::cam-1A</i>	With transgene	7.9	3	35	38
	Without transgene	22.7	15	51	66
<i>nsy-5::cam-1A</i>	With transgene	23.9	21	67	88
	Without transgene	32.8	41	84	125
<i>ncs-1::cam-1A</i>	With transgene	37.7	29	48	77
	Without transgene	30.8	32	72	104
<i>opt-3::cam-1A</i>	With transgene	44.1	15	19	34
	Without transgene	29.4	15	36	51
<i>cfz-2</i> rescue experiments					
<i>ceh-24::cfz-2</i> line 1	With transgene	30.6	19	43	62
	Without transgene	17.8	18	83	101
<i>ceh-24::cfz-2</i> line 2	With transgene	26.5	18	50	68
	Without transgene	17.5	11	52	63

For presentation in Fig. 3D and Fig. 6B, the data were normalized such that the defects in the animals without the transgene were comparable for all genotypes (100%). See Materials and methods for details.