

**Table S1. Genetic interaction experiments for *tutI* and *trc***

Genotype	<i>n</i>	Mean	s.e.m.
<b>Class I (ddaE): termini per neuron*</b>			
<i>tutI</i> <sup>23</sup> /+	21	29.0	0.9
<i>trc</i> <sup>1</sup> /+	32	26.8	0.8
<i>tutI</i> <sup>23</sup> /+; <i>trc</i> <sup>1</sup> /+	28	27.9	0.7
<b>Class IV (ddaC): crossing points per 1000 μm of dendritic length†</b>			
<i>tutI</i> <sup>23</sup> /+	10	7.5	0.4
<i>trc</i> <sup>1</sup> /+	11	5.8	0.4
<i>tutI</i> <sup>23</sup> /+; <i>trc</i> <sup>1</sup> /+	14	8.1	0.5

Double heterozygotes for *trc* and *tutI* have no enhanced branching defects (class I) or self-avoidance defects (class IV) compared with *tutI* heterozygotes alone.

*n*, number of neurons examined; s.e.m., standard error of the mean.

\*There is no significant difference between any two of the three genotypes listed (ANOVA, Tukey, *P*=0.18).

†*tutI*<sup>23</sup>/+; *trc*<sup>1</sup>/+ double heterozygotes are not significantly different from *tutI*<sup>23</sup>/+, but *trc*<sup>1</sup>/+ heterozygotes and *tutI*<sup>23</sup>/+ heterozygotes are different from one another (ANOVA, Tukey, *P*=0.0022).