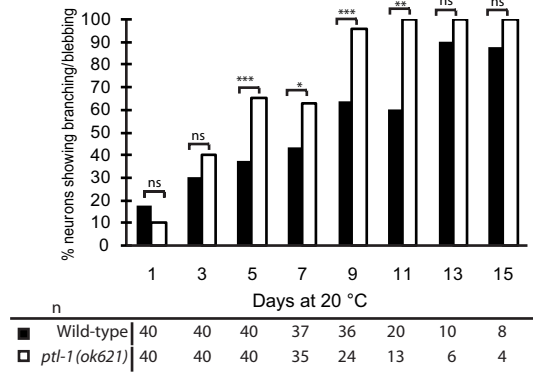
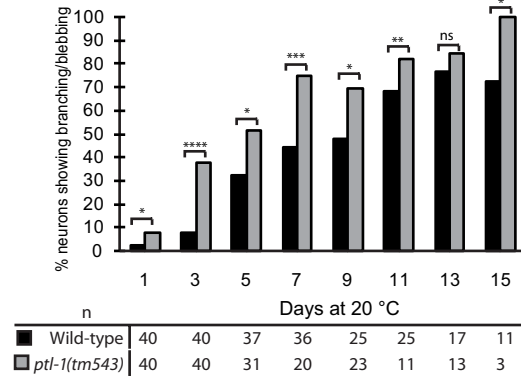


**Fig. S1. *ptl-1(ok621)* mutant animals display a higher frequency of abnormal neuronal structures in touch neurons compared with wild-type.** Anterior touch receptor neuron imaging assay for individual animals, showing the neuron of a representative **A**) wild-type, and **B**) *ptl-1(ok621)* worm. Neurons were visualised using the *Pmec-4::gfp* reporter. Worms were imaged every day until death.

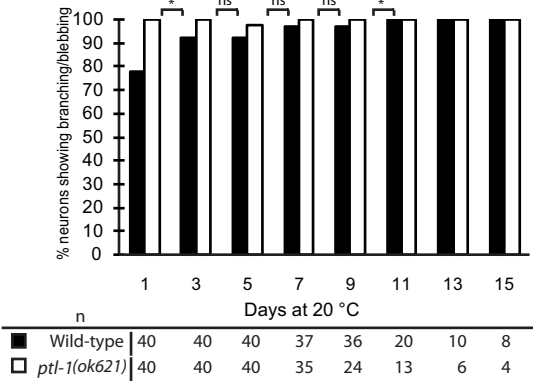
### A Anterior touch neurons



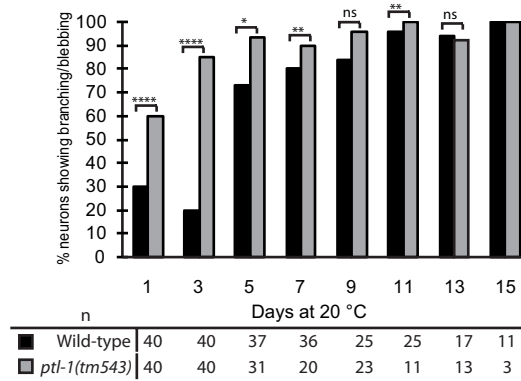
### B Anterior touch neurons



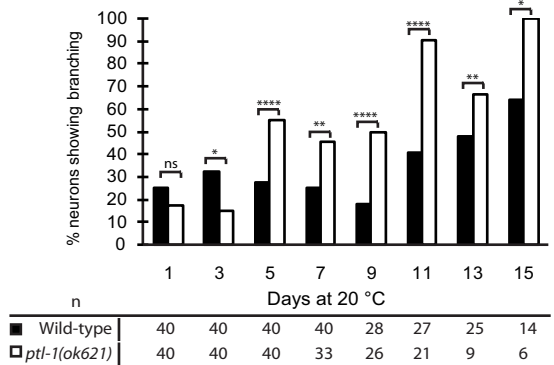
### C Posterior touch neurons



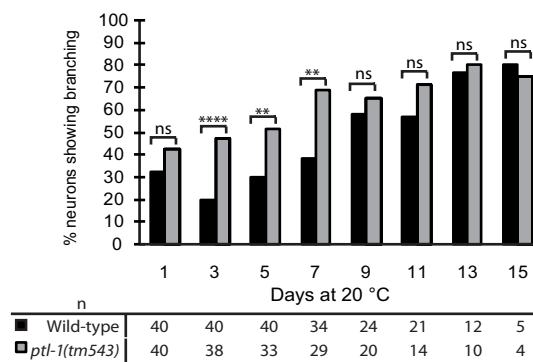
### D Posterior touch neurons



### E GABAergic neurons



### F GABAergic neurons



**Fig. S2. *ptl-1(ok621)* and *ptl-1(tm543)* mutant animals display a higher frequency of abnormal neuronal structures in touch neurons and GABAergic neurons compared with wild-type.** Neurons were visualised using the *Pmec-4::gfp* reporter for touch receptor neurons, or the *Punc-47::gfp* reporter for GABAergic neurons. Worms were imaged every second day from day 1 to day 15. Sample sizes are indicated below graphs. **A,C,E)** Data for *ptl-1(ok621)* animals. **B,D,F)** Data for *ptl-1(tm543)* animals. For all assays, the  $\chi^2$  test for independence was used to analyse differences between genotypes. p value is indicated by ns = no significance, \* <0.05, \*\* <0.01, \*\*\* <0.001, \*\*\*\*<0.0001.