

TIAM-1 differentially regulates dendritic and axonal microtubule organization in patterning neuronal development through its multiple domains

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Different regions of TIAM-1 regulate the development of distinct neuronal subcompartments

PVD neuron of *tiam-1* mutants show dramatic loss of dendritic branches and over-extension of the axon (the first panel). Expressing different TIAM-1 fragment, including TIAM-1A (the second panel), TIAM-1B (the third panel), TIAM-1C (the fourth panel), and TIAM-1N539 (the bottom panel) in *tiam-1* null mutants restore different subcompartments of PVD neuron. These results suggest that axonal growth and dendritic development are respectively controlled by different regions of TIAM-1.

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