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Cell death in neural precursor cells and neurons before neurite formation prevents the emergence of abnormal neural structures in the *Drosophila* optic lobe

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Abstract

Programmed cell death is a conserved strategy for neural development both in vertebrates and invertebrates and is recognized at various developmental stages in the brain from neurogenesis to adulthood. To understand the development of the central nervous system, it is essential to reveal not only molecular mechanisms but also the role of neural cell death (Pinto-Teixeira et al., 2016). To understand the role of cell death in neural development, we investigated the effect of inhibition of cell death on optic lobe development. Our data demonstrate that, in the optic lobe of *Drosophila*, cell death occurs in neural precursor cells and neurons before neurite formation and functions to

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