

Interaction between sensory dendrite and epithelial cells in *Drosophila*

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Abstract

Contact-mediated self-avoidance/repulsion restricts dendrite in a 2D space. Defect in dendrite-extracellular matrix (ECM) adhesion disrupts the confinement and results in self-crossings in 3D space. In this study, epithelial genes underlying dendrite-ECM affecting larval dendrite patterning were identified through genetic screen using mutants and RNAi knockdown. In-vitro and in-vivo assays were performed to characterize the epithelial gene function. To understand their mechanism, further in-depth study is required to elucidate their roles in coordinating sensory dendrite arborization.

Keywords: Dendrite; epithelial cells; *Drosophila*

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