



CDB SEMINAR

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Thursday, September 21

13:00~14:00 A7F CDB Conference Room

Regulation of neural stem cells in the embryonic brain by Notch signaling

Summary

During brain development neurons and glia are generated from proliferating cells in a germinal area called the ventricular zone (VZ). Prior work has suggested that the VZ is a heterogeneous pool, including multipotent neural stem cells (NSCs) and more restricted neuroblast progenitors. Currently, nothing is known about the signaling events that distinguish these two fundamentally different proliferative neural cell types. Here we show that Notch signaling, through the canonical effector C-promoter binding factor (CBF1), is differentially utilized by NSCs and neuroblasts in the telencephalic VZ. This work provides the first evidence of signaling heterogeneity between NSCs and neuroblasts, and shows that these cell types can be separated prospectively.

Host:

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