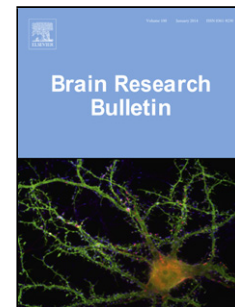


Accepted Manuscript

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PII: S0361-9230(17)30377-5
DOI: <http://dx.doi.org/doi:10.1016/j.brainresbull.2017.07.001>
Reference: BRB 9251

To appear in: *Brain Research Bulletin*

Received date: 1-12-2016
Revised date: 21-6-2017
Accepted date: 3-7-2017

Please cite this article as: Jiong Zhang, Stephanie Griemsmann, Zhou Wu, Radoslaw Dobrowolski, Klaus Willecke, Martin Theis, Christian Steinhäuser, Peter Bedner, Connexin43, but not connexin30, contributes to adult neurogenesis in the dentate gyrus, Brain Research Bulletin <http://dx.doi.org/10.1016/j.brainresbull.2017.07.001>

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Connexin43, but not connexin30, contributes to adult neurogenesis in the dentate gyrus

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Highlights

- Adult neurogenesis in the dentate gyrus requires Cx43 but not Cx30
- The point mutation Cx43G138R entails uncoupling of astrocytes and RG-like cells
- The point mutations reduces proliferation and neurogenesis in the adult dentate gyrus
- Cx43 influences neurogenesis through channel-dependent functions

Abstract

The subgranular zone of the dentate gyrus represents a niche in which radial glia (RG)-like cells generate new neurons throughout postnatal life in the mammalian brain. Previous data showed that RG-like cells are coupled through gap junction channels, primarily formed by connexin43 (Cx43) and Cx30, and that the expression of these proteins is required for adult

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