Supporting Information

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Fig. S1. NG2 cells with complex morphology in adult brains. Example micrograph of NG2 immunoreactivity (green) from cortex. Note multiple-process morphology at different developmental stages (P7, P27, P50, and P144). (Scale bar, 20 μm.)



Fig. S2. NG2 daughter cells with complex morphology. Example micrograph of NG2 immunoreactivity (red) and BrdU⁺ (green) from P25 cortex after 8 h of BrdU pulse-labeling. Note multiple-process morphology of all daughter cells. (Scale bar, 20 μm.)

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Fig. S3. Identification of 2 daughter cells after completion of cytokinesis. (A) Whole-cell recording of daughter cell 1. Note the dye of Alexa Fluor 568 was loaded from pipette and only one cell was labeled. (B) Dye signal of daughter cell 1 with the electrode pulled out. (C) Whole-cell recording of daughter cell 2. Pipette was loaded with the dye of Alexa Fluor 568. (D) The dye signal in cell 1 became weaker 20 min later.

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Table S1. Properties of NG2 daughter cells

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	Nondividing cells	Dividing cells
/ _A (at +40)		
Mean (μ), pA	1478.6	1226.3
Standard deviation (σ), pA	841.3	500.2*
Number	22 (cell)	10 (5 pairs)
<i>Cυ</i> , <i>σ</i> /μ	0.569	0.408
I _K (at +40)		
Mean (μ), pA	1,587.8	939.8
Standard deviation (σ), pA	552.2	186.5*
Number	22 (cell)	10 (5 pairs)
C υ, σ/μ	0.348	0.198
Length of processes		
Mean (μ), μ m	944.3	466.3
Standard deviation (σ), μ m	280.9	79.7*
Number	19 (cell)	18 (9 pairs)
C υ, σ/μ	0.297	0.171

The coefficient of variations ($Cv = \sigma/\mu$) of I_{A} , I_{K} , and the length of processes in 2 daughter cells are smaller than those in nondividing cells. It strongly suggests that NG2 cells primarily divide symmetrically.

*The standard deviation (σ) of dividing cells is the mean value of all σ_{pair-n} , which was obtained from every pair of daughter cells: $\sigma_{dividing cell} = [(\sigma_{pair-1} + \sigma_{pair-2} + \sigma_{pair-3} + ... + \sigma_{pair-n})/n]$. σ of nondividing cells is the standard deviation of all the nondividing cells. If $Cv_{nondividing cells} > Cv_{dividing cells}$, we define the property in 2 daughter cells as being "the same," which indicates that they divide symmetrically. If $Cv_{nondividing cells} < Cv_{dividing cells}$, we define the property of 2 daughter cells as being "different," which indicates that they divide asymmetrically. The value of the length of processes was obtained from 20 μ m Z projection images. The table only includes the data of NG2 cells with clearly visible soma. Data were analyzed by using Image-pro Plus 5.0.